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Regional Economic Outlook

Asia and Pacific

Building a Sustained Recovery

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Definitions

In this *Regional Economic Outlook: Asia and Pacific*, the following groupings are employed:

- “Emerging Asia” refers to China, India, Hong Kong SAR, Korea, Singapore, Taiwan Province of China, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam.
- “Industrial Asia” refers to Japan, Australia, and New Zealand.
- “Asia” refers to emerging Asia plus industrial Asia.
- “Newly industrialized economies” (NIEs) refers to Hong Kong SAR, Korea, Singapore, and Taiwan Province of China.
- “ASEAN-4” refers to Indonesia, Malaysia, the Philippines, and Thailand
- “ASEAN-5” refers to Indonesia, Malaysia, the Philippines, Thailand, and Vietnam.
- “G-2” refers to the euro area and the United States
- “G-3” refers to the euro area, Japan, and the United States
- “G-7” refers to Canada, France, Germany, Italy, Japan, United Kingdom, and the United States.
- “G-20” refers to Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, and the United States.
- “TED Spreads” refers to the difference between the interest rates on interbank loans and short-term government debt.

The following abbreviations are used:

ASEAN	Association of Southeast Asian Nations
BoJ	Bank of Japan
CPI	consumer price index
DEA	domestically oriented Asia
EEA	export-dependent emerging Asia
EM	emerging markets
FCL	Flexible Credit Line
FDI	foreign direct investment
GDP	gross domestic product
GIMF model	Global Integrated Monetary and Fiscal model
GMM	generalized method of moments
IPO	initial public offering
IT	information technology

JGBs	Japanese government bonds
LIC	low-income countries
MNC	multinational corporation
NIE	newly industrialized economy
NPL	nonperforming loan
OECD	Organization for Economic Cooperation and Development
P/E	price-earnings
REER	real effective exchange rate
REO	<i>Regional Economic Outlook</i>
SAAR	seasonally adjusted at an annual rate
SDR	Special Drawing Right
SITC	Standard International Trade Classification
SME	small and medium-sized enterprise
SOE	state-owned enterprises
UN	United Nations
WEO	<i>World Economic Outlook</i>

The following conventions are used:

- In tables, a blank cell indicates “not applicable,” ellipsis points (. . .) indicate “not available,” and 0 or 0.0 indicates “zero” or “negligible.” Minor discrepancies between sums of constituent figures and totals are due to rounding.
- An en dash (–) between years or months (for example, 2007–08 or January–June) indicates the years or months covered, including the beginning and ending years or months; a slash or virgule (/) between years or months (for example, 2007/08) indicates a fiscal or financial year, as does the abbreviation FY (for example, FY2008).
- An em dash (—) indicates the figure is zero or less than half the final digit shown.
- “Billion” means a thousand million; “trillion” means a thousand billion.
- “Basis points” refer to hundredths of 1 percentage point (for example, 25 basis points are equivalent to ¼ of 1 percentage point).

As used in this report, the term “country” does not in all cases refer to a territorial entity that is a state as understood by international law and practice. As used here, the term also covers some territorial entities that are not states but for which statistical data are maintained on a separate and independent basis.

This *Regional Economic Outlook: Asia and Pacific* was prepared by a team coordinated by Joshua Felman and Roberto Cardarelli of the IMF’s Asia and Pacific Department, under the overall direction of Anoop Singh and Mahmood Pradhan. The team included Steven Barnett, Ran Bi, Varapat Chensavasdiyai, Leif Lybecker Eskesen, Roberto Guimarães, Sonali Jain-Chandra, Sanjay Kalra, Kenneth Kang, Meral Karasulu, Erik Lueth, Malhar Nabar, Papa N’Diaye, Nathan Porter, Uma Ramakrishnan, Marta Ruiz Arranz, Martin Sommer, Chad Steinberg, Murtaza Syed, Suchanan Tambunlertchai, Kiichi Tokuoka, and Olaf Unteroberdoerster. To-Nhu Dao, Souvik Gupta, Ioana Hussiada, Shuda Li, Adil Mohommad, and Fritz Pierre-Louis provided research assistance; Livia Tolentino and Lesa Yee provided production assistance. Sean Culhane and Martha Bonilla of the IMF’s External Relations Department edited the volume and coordinated its publication and release. This report includes comments from other departments and some executive directors.

Executive Summary

Asia is rebounding fast from the depths of the global crisis. Initially, the region was hit extremely hard, with output in most countries contracting by more than even those nations at the epicenter of the crisis. But now Asia is leading as the world pulls out of recession. What explains this remarkable comeback? And what challenges does the recovery pose to Asian policymakers?

Asia's impressive recovery from the global downturn, even as output elsewhere remains sluggish, has prompted some observers to revive the notion that the region has "decoupled" from the rest of the world. But, as Chapter 1 explains, careful consideration of the forces behind the rebound reveals that the primary driver of Asia's recovery has been a return toward normalcy following the abrupt collapse in global trade and finance at the end of 2008. Just as the U.S. downturn triggered an outsized fall in Asia's GDP because international trade and finance froze, now their normalization is generating an outsized Asian upturn. For this reason, the rebound in economic activity has been fastest in the export-dependent Asian economies that were hit most severely at the end of 2008.

The other key driver of Asia's recovery has been the region's rapid, forceful, and comprehensive policy response. This vigorous reaction was made possible by Asia's relatively strong initial conditions: in many countries, government fiscal positions were sounder, monetary policies more credible, and corporate and bank balance sheets sturdier than at any time in the past. These conditions gave Asia the space to cut interest rates sharply and adopt large fiscal stimulus packages. As a result, overall domestic demand has held up remarkably well, despite weak private demand.

What lies ahead for the region? Global conditions are expected to continue to improve in 2010. But the recovery is expected to be a sluggish one. According to the IMF's latest forecasts, output in the large G-7 economies is forecast to grow by just 1¼ percent next year, recouping only half of the loss estimated for 2009. In essence, the problem is that private demand in these countries remains hobbled by the legacy of the crisis. Households will find it difficult to spend and banks to provide credit since they must focus instead on repairing their balance sheets after the sizable destruction of wealth that occurred during the recession. G-7 consumption is consequently likely to remain weak for some time, limiting external demand for Asia's products. As a result, the region's GDP growth is forecast at 5¾ percent in 2010, well below the 6⅔ percent average recorded over the past decade.

Overall in Asia, policymakers consequently face two major challenges. In the near term, they will need to manage a balancing act, providing support to economies until it is clear that the recovery is sufficiently robust and self-sustaining, while ensuring that it is not maintained for so long that it ignites inflationary pressures or concerns about fiscal sustainability. Striking the right balance will be difficult. But the key is clear: policymakers will need to assess the state of private demand and the extent to which it can substitute for a withdrawal of public sector demand. As discussed in Chapter 2, Japan's experience with the crisis in the 1990s shows that a durable recovery may emerge only when "green shoots" spread from industrial production and exports to employment and private

REGIONAL ECONOMIC OUTLOOK: ASIA AND PACIFIC

domestic demand. So far, private demand remains weak, and the outlook far from encouraging, both in Asia and abroad. Consequently, Asian countries will likely need to maintain policy support for some time.

The other major policy challenge will be to devise a way to return to sustained, rapid growth in a new global environment of softer G-7 demand. In this “new world,” Asia’s longer-term growth prospects may be determined by its ability to recalibrate the drivers of growth to allow domestic sources to play a more dynamic role. This type of successful rebalancing will require action on a broad front. Better social safety nets will be needed to reduce private precautionary savings and, as discussed in Chapter 3, continued efforts at financial sector and corporate governance reforms would also allow households to offset higher corporate saving by increasing consumption. At the same time, structural reforms could raise productivity and allow for a smooth reallocation of resources across the economy to compensate for the lower momentum from exports. Finally, Asia will need to be willing to live with smaller current account surpluses and more flexible exchange rate management.

I. Asia's Recovery in the Global Context

Asia has rebounded fast from the depth of the global crisis. Initially, the region was hit extremely hard, with output in most countries shrinking by more than even those nations at the epicenter of the crisis. But starting in February, Asia's economy began to revive. Exports and industrial production began to increase again, first slowly, then at a rapid rate. Now Asia is leading as the world pulls out of recession (Figure 1.1).

Indeed, the "green shoots" of recovery appear more firmly rooted in Asia than in other regions (Figure 1.2). Not only are they more prevalent, but they have also appeared earlier (in April in many

Figure 1.1. Current Recession: Real GDP Growth (In percent)

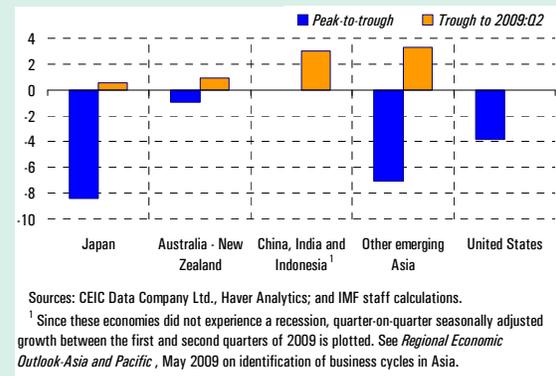


Figure 1.2. Assessing Global Growth Momentum¹



Sources: Haver Analytics; Bloomberg LP; and IMF, Global Data Source database and staff calculations.

¹ The above chart is based on the four economic indicators, including industrial production, real retail sales, merchandise exports, and purchasing managers index (PMI). Some of the ratings—particularly for recent months—are based on both actual data as well as projections of the underlying variables.

Note: The main authors of this chapter are Roberto Cardarelli, Leif Lybecker Eskesen, Meral Karasulu, Uma Ramakrishnan, Marta Ruiz Arranz, Romuald Semblat, Olaf Unteroberdoerster, and Harm Zebregs, with assistance from Souvik Gupta.

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cases), and have progressed further. The progress made by China, in particular, is striking. Alone among major countries, its key growth indicators were expanding in August at rates that are above their long-term trend. In contrast, indicators in key Western economies, such as the United States and Germany, suggest that output was only stabilizing in August after months of severe contraction.

Global conditions are expected to continue to improve in 2010, with Western economies progressing from stabilization to recovery. But the recovery is expected to be a sluggish one. Output in the large G-7 economies is forecast to grow by just 1¼ percent next year, insufficient to compensate even for half of the 3½ percent contraction estimated for 2009 (Figure 1.3). Essentially, the problem is that private demand remains hobbled by the legacy of the crisis. Households will find it difficult to spend and banks to provide credit, since they must focus instead on repairing their balance sheets after the sizable destruction of wealth that occurred during the recession. The problems are particularly acute in the United States, where household wealth declined by about US\$14 trillion at the trough, an amount nearly equivalent to that country's GDP.¹ Aggravating the problem, U.S. unemployment has risen sharply, by more than

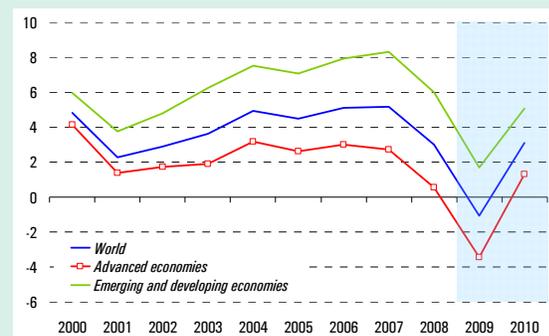
4 percentage points over the past year, to a 26-year high of 9¾ percent in September, undermining households' current income and increasing risks to their future income as well. In the face of these difficulties, household saving rates have shot up and are forecast to continue doing so over the medium term, rising eventually by about 6 percentage points of GDP compared with a precrisis (April 2008 *World Economic Outlook*) baseline. With saving rates rising, U.S. consumption will remain subdued for some time.

The weak global outlook has significant implications for Asia. Not only is the region highly dependent on exports, but it is particularly dependent on U.S. consumption, which is responsible for about one-fourth of Asia's export value added. Put simply, over the past decade, Asia has boomed as America's consumption outpaced its income. If over the coming decade U.S. consumption slows dramatically, the impact on Asia's growth could be sizable.

Is it possible that the threat from a weak global economy is overstated? After all, Asia's quick rebound from recession seems to suggest that it has "decoupled" from the rest of the world. But careful consideration of the forces behind the rebound reveals that the opposite is true.

In fact, the primary driver of Asia's recovery has been a return to normalcy following the abrupt collapse of global trade and finance at the end of 2008. Just as the U.S. downturn triggered an outsized fall in Asia's GDP because international trade froze, now trade normalization is generating an outsized Asian upturn (Figure 1.4). Similarly, Asia's recovery has been aided by a thawing of international capital markets, which has restored firms' access to critical long-term debt and equity financing. In fact, Asia began to recover before other economies largely because trade and finance started to normalize in February/March 2009, well before overall economic activity stabilized in the West. Another reflection of this same phenomenon is that the rebound in economic activity has been fastest in the export-dependent Asian economies

Figure 1.3. World Growth
(Year-on-year; in percent)



Source: IMF WEO database.

¹ With the stock market recovering, a portion of this wealth has now been recouped—an estimated total of US\$4 trillion during the second and third quarters of 2009.

I. ASIA'S RECOVERY IN THE GLOBAL CONTEXT

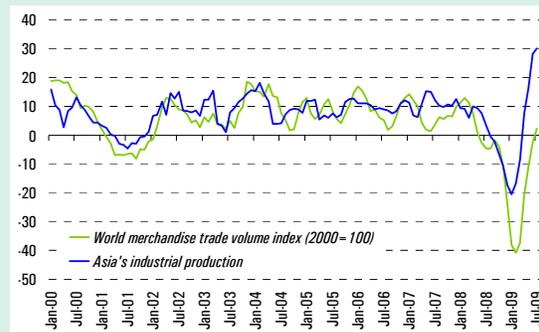
that were hit most severely at the end of 2008 (Figure 1.5). In sum, the events of the past year, far from demonstrating decoupling, actually show that Asia's fortunes remain closely linked to those of the global economy.

This is not to say that external factors have been the only driver of Asia's recovery. To the contrary, the region's aggressive countercyclical response has also played a significant role. The response—both on the monetary and on the fiscal side—has been substantially stronger than in past recessions and in some respects greater than in other regions. In large part, this response has been dictated by the size of the policy challenge: for most countries, late 2008/early 2009 brought the worst recession they had seen in the post–World War II era. Equally important, the response was made possible by Asia's relatively strong initial conditions: fiscal positions have been sounder, monetary policies more credible, and corporate and bank balance sheets sturdier than at any time in the past. These conditions have given Asia the space to cut interest rates sharply and adopt large fiscal stimulus packages. As a result, overall domestic demand has held up remarkably well, despite weak private demand.

Against this background, Asian policymakers face two major challenges:

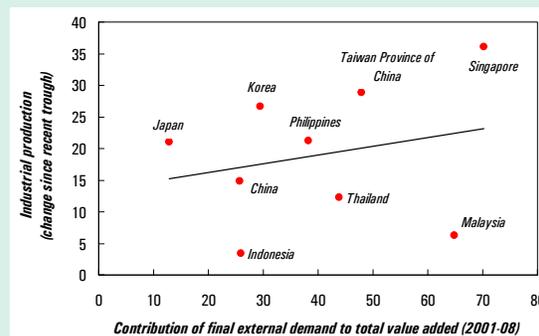
- In the near term, the key issue will be to maintain policy stimulus until the recovery becomes self-sustaining, but not long enough that it begins to threaten macroeconomic stability. Striking the appropriate balance will be difficult. But the key is clear: policymakers will need to assess the state of private demand, and the extent to which it can substitute for a withdrawal of public sector demand. So far, private sector demand remains weak and the outlook uncertain, both in Asia and abroad. Consequently, Asian countries will need to maintain policy stimulus for some time.
- The other major policy challenge will be to devise a way to return to sustained, rapid growth. With the external environment likely to

Figure 1.4. World Trade and Asia's Industrial Production
(3-month percent change of 3-month moving average, SAAR)



Sources: CPB Netherlands Bureau for Economic Policy Analysis; and IMF staff calculations.

Figure 1.5. Selected Asia: Industrial Production and Contribution of Final External Demand to Total Value Added
(In percent)



Sources: CEIC Data Company Ltd.; and IMF staff estimates.

remain weak for some time, Asia's growth prospects may be determined by its ability to diversify drivers of growth to allow domestic sources to play a more dynamic role. This type of rebalancing will require action across a broad range of areas—and a broad range of countries. Financial sector reforms and better social safety nets will be needed to boost private consumption, while structural reforms would raise productivity and substitute for the lost growth momentum from exports. Also crucial will be a willingness to live with smaller current account surpluses and more flexible exchange rate management.

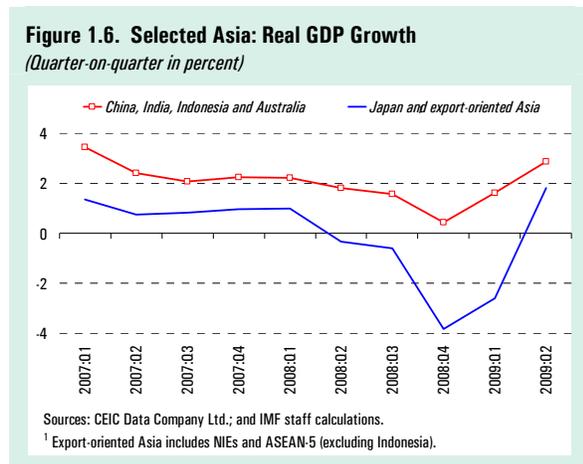
This chapter examines the outlook for Asia. It first elaborates on the main factors that have led to the region's fast economic rebound, and then considers

the outlook for the remainder of this year and 2010. Finally, it turns to the key policy challenges.

What Has Been Driving Asia's Recovery?

Asia's economic landscape has changed significantly since the May 2009 Asia and Pacific *Regional Economic Outlook*. Throughout the region, industrial production has rebounded, financial pressures have eased, and confidence has largely been restored. The extent of this recovery, however, has varied significantly across countries.

- Japan and the export-oriented emerging Asian economies have thus far staged a V-shaped turnaround from the sharp decline in economic activity (Figure 1.6). But even with this rebound, output remains well below potential.



- Meanwhile, Australia and the three economies with larger domestic markets in emerging Asia—namely, China, India, and Indonesia—experienced smaller downturns and are now returning to their earlier, relatively high growth rates.
- China's recovery has been particularly impressive, as during the global boom the economy had relied on exports and associated investments as the motors of its expansion. When exports collapsed, however, the authorities were able to compensate for the loss of external demand by stimulating domestic

demand through the lifting of credit restraints and an exceptionally large fiscal stimulus.

- Finally, Asian low-income countries have generally weathered the global crisis better than emerging markets in the region, partly because of their smaller exposure to advanced manufacturing exports (Box 1.1).

In addition to varying across countries, the strength of the recovery has also varied across four key economic dimensions: trade, public demand, financial, and private domestic demand (Figure 1.7).

Trade Normalization

To understand why trade has played such a large role in Asia's recovery, it is necessary to take a step back and recall why the impact of the global crisis on Asia was so sharp. As discussed in the May 2009 Asia and Pacific *Regional Economic Outlook*, the global financial dislocation in September 2008 led to a near-complete paralysis in the production and trade of big-ticket, high-technology consumer durables—motor vehicles, electronic goods, and capital machinery—precisely the goods on which many Asian economies have built a comparative advantage.

The inventory cycle amplified this pattern. As demand fell and finance dried up, overseas importers decided to start running down their inventories, causing Asia's export orders to collapse. As a result, industrial production in export-dependent emerging Asia (EEA) plunged a record 22 percent in January 2009 (Figure 1.8). In contrast, industrial production in emerging Asian economies with larger domestic markets (DEA) fell only by about 2 percent.

In recent months, this dynamic has shifted into reverse, sparking a nascent recovery. Industrial production in EEA has regained on average about 90 percent of the ground lost since September 2008, even returning to precrisis levels in a few countries. This rebound seems to have been driven by an equally sharp rebound in export volumes (Figure 1.9). Strikingly, however, the recovery in export values has been less pronounced—on

Box 1.1 How Have Low-Income Countries in Asia Fared Amid the Global Crisis?

Asian low-income countries (LICs) have generally weathered the global downturn quite well.¹ Although their growth rates have moderated, the declines have been much less severe than in the emerging economies of Asia, and in line with LICs in other regions. In part, Asian LICs have been shielded by their relatively limited integration into the global economy. In addition, proactive monetary and fiscal policy measures have also played an important role in supporting economic activity.

Looking ahead, growth prospects for Asian LICs are generally favorable. However, the global environment remains highly uncertain, and a further round of adverse effects remains possible. In addition, overly accommodative policies in many countries could pose risks to their fiscal and external positions. To ensure long-term sustainable growth, Asian LICs will need to preserve macroeconomic stability by pursuing sound policies.

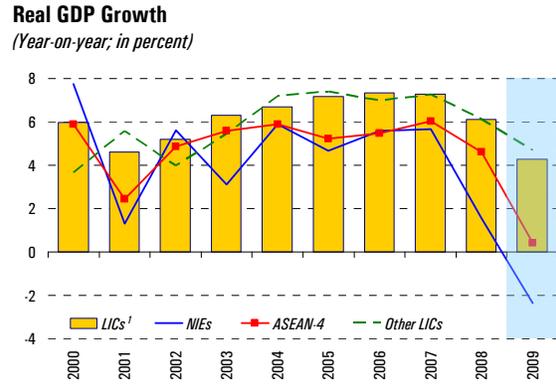
Trade Impact

When the export performance of Asian LICs is compared with that of emerging markets (EMs) since mid-2008, two salient facts emerge. First, Asian LICs' exports held up somewhat better than those of EMs in G-3 markets, but performed similarly to those of EMs in Asian markets. Second, the fall in exports to the rest of Asia excluding Japan occurred immediately after the onset of the crisis, whereas the decline to the G-3 materialized only with a lag.

Asian LICs' export resilience to the G-3 is explained by their product mix, partly reflecting their stage of economic development. They mostly export textiles and garments to the United States and European Union, and increasingly to Japan, while sending commodities to Asia excluding Japan. In the G-3 markets, demand for textiles and garments and low-end manufacturing appears to have been less affected during this downturn, with some garment exporters even managing to expand their sales, unlike the EM producers of medium- and high-end manufacturing products, which suffered a precipitous fall in demand.

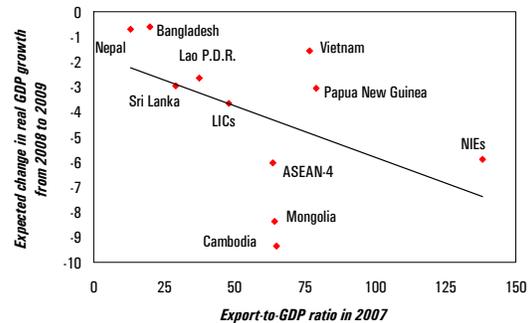
Note: The main authors of this box are Ran Bi and Varapat Chensavasdijai, with assistance from To-Nhu Dao.

¹ The low-income countries in this analysis include Bangladesh, Cambodia, Lao People's Democratic Republic, Mongolia, Nepal, Papua New Guinea, Sri Lanka, and Vietnam.



Sources: IMF, WEO database; and staff calculations.
¹ See footnote 1 for the Asian countries included in the low-income-countries (LICs).

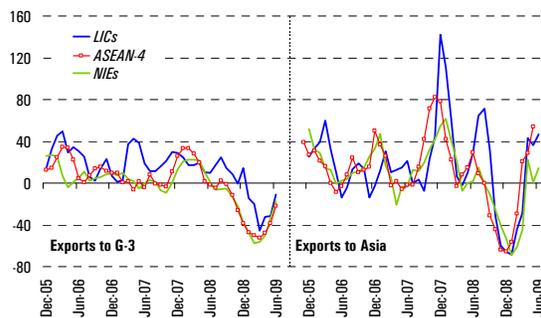
Selected Asia: Export Dependence and Impact on Real GDP Growth



Sources: IMF, WEO database; and staff calculations.

Selected Asia: Value of Exports

(U.S. dollar basis, 3-month percent change of 3-month moving average, SAAR)



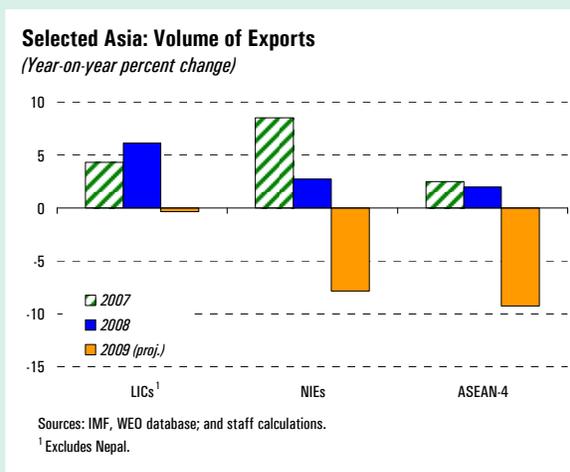
Sources: IMF, Direction of Trade Statistics; and staff calculations.

Box 1.1. (concluded)

The earlier and sharper drop in exports to the Asian markets reflects the collapse in commodity prices in the second half of 2008. Asian LICs nonetheless managed to maintain their commodity export volumes to Asia, especially China. Accordingly, overall Asian LIC export volumes are likely to see only a slight decline this year, a much better performance than in the NIEs and ASEAN-4, where volumes are likely to be significantly down for 2009.

Composition also explains the variation in 2009 export performance among Asian LICs.

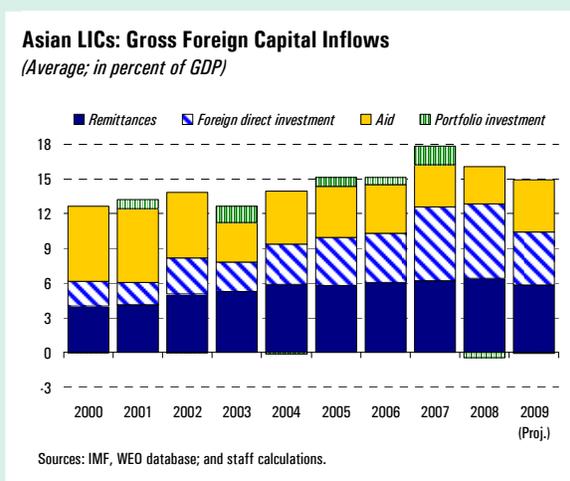
- In general, commodity exporters (Lao People’s Democratic Republic, Mongolia, Papua New Guinea, and Vietnam) have suffered the deepest declines in growth of export values.
- Although food prices have also dropped significantly, the impact on large rice-exporting Asian LICs (Cambodia and Vietnam) has been partially mitigated by an expansion in export volumes.
- Among large garment-exporting Asian LICs, the impact has varied. Bangladesh has been able to gain market shares in the G-3, owing to its lower labor costs and a more vertically integrated garment sector (that is, one with higher domestic content), compared with its low-income peers (Dunn, 2007), as well as its exchange rate depreciation relative to the euro as a result of its U.S. dollar peg. The longer-term shifts in strategic sourcing by multinational corporations (MNCs) toward lowest-cost producers starting several years back have benefited Bangladesh and Vietnam, allowing them to gain market shares, especially in the United States. By contrast, Cambodia’s garment exports appear to be suffering because of higher labor and utility costs, lower productivity, and lack of vertical integration (Baker, 2009).



Financial Impact

The impact of the global crisis on capital flows to Asian LICs appears to have been modest, largely because these countries depend little on private portfolio flows. Gross capital inflows to Asian LICs are expected to decline only moderately in 2009, with a drop in foreign direct investment (FDI) being cushioned by steady remittances and aid flows.

The impact on FDI has varied by country and sector. Four Asian LICs (Cambodia, Lao People’s Democratic Republic, Mongolia, and Vietnam) are relatively large recipients of FDI in percent of GDP. In these countries, foreign investment is concentrated in resource-related industries, light manufacturing, real estate/construction, and tourism. Some of these sectors (such as tourism) have been hit hard by changes in external demand, whereas others (such as low-end light manufacturing) are benefiting from shifts in sourcing strategy. Resource-related industries continue to attract FDI, especially for those countries with projects already in train (Lao People’s Democratic Republic, Mongolia, and Papua New Guinea).



Remittances are expected to remain flat in relation to GDP. Among the four Asian LICs for which remittances are important, positive growth in these flows is expected in Bangladesh, Nepal, and Sri Lanka. Most of their migrant workers are employed in the Gulf Cooperation Council countries, where remittances will be supported by long-term employment contracts, despite the fall in oil prices since 2008 (Almekinders and Abenoja, 2009). Meanwhile, remittances to Vietnam are expected to be affected by the downturn in the United States.

With the ongoing global downturn, traditional bilateral donors may be financially constrained from scaling up aid. But recent initiatives from multilateral institutions such as the IMF, World Bank, and Asian Development Bank may help augment financing. In addition, some nontraditional “emerging” bilateral donors whose economic prospects remain robust (for example, China and India) may also step up their contributions.

Road to Recovery

As concerns over growth increased, Asian LICs responded proactively. Several countries loosened monetary conditions through reductions in policy interest rates and/or reserve requirements (Cambodia, Sri Lanka, and Vietnam), as well as unsterilized purchases of foreign exchange (Bangladesh). Some countries announced fiscal stimulus packages (Bangladesh, Sri Lanka, and Vietnam), which included increases in capital and social spending, tax measures, and interest and other government subsidies to designated sectors. However, the implementation of stimulus measures has been constrained by available financing and capacity limitations. There are also concerns about the size and speed, as well as the quality, of these measures.

Most Asian LICs are expected to record positive growth in 2009 and should see a further strengthening of activity in 2010 as global conditions continue to improve. A strong rebound in exports is unlikely, given that some of the Asian LICs' export products (for example, agricultural goods and garments) have low responsiveness to global demand changes. However, dominant garment producers should continue to benefit from shifts in MNCs' strategic sourcing. Large resource-related projects already in progress and the pickup in world commodity prices should provide some boost to growth in commodity-producing countries. Robust domestic demand, remittances, and FDI will also support growth in many countries.

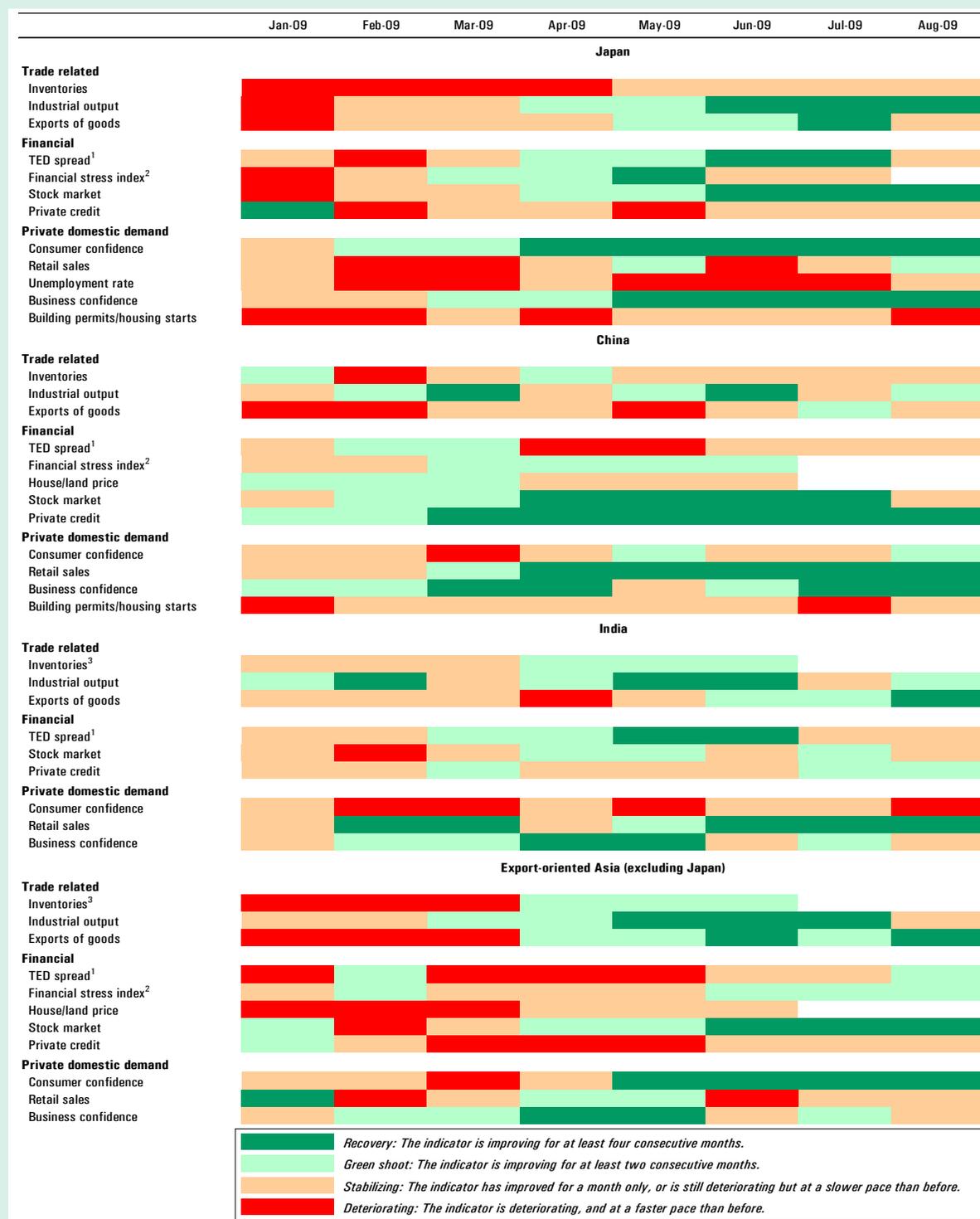
Establishing a robust recovery in the Asian LICs, however, will depend on their ability to maintain macroeconomic stability. The threats to stability are many: fiscal deficits are large, credit growth and inflation are high, and in some cases international reserves are low. Accordingly, domestic policy adjustments will be required, and countries that are facing increasing fiscal and external pressures, as well as financial soundness issues, will require stronger and faster adjustments than others.

For most Asian LICs, this means that both fiscal and monetary policy will need to be less accommodative. Tighter monetary conditions would help rein in credit growth and alleviate emerging inflation concerns in Bangladesh and Nepal as well as mitigate risks to external stability in Lao People's Democratic Republic and Vietnam. Asian LICs also need to take further steps to improve financial sector soundness, including by strengthening banking supervision. Fiscal adjustment will need to take the lead role in Asian LICs with pegged-like exchange rate regimes or those with limited operational frameworks for conducting monetary policy (Cambodia, Lao People's Democratic Republic, and Vietnam).

Asian LICs need to develop medium-term budget consolidation plans to ensure fiscal sustainability. This will also involve shifting the focus toward enhancing revenue mobilization, providing adequate social safety nets, and improving the efficiency of public investment.

Over the longer term, more efforts to accelerate structural reforms and improve the business climate would also help increase Asian LICs' competitiveness. The IMF's new concessional lending facilities can help ensure a smooth transition for Asian LICs as they make the necessary policy adjustments to restore macroeconomic stability. IMF support can also assist Asian LICs in better guarding against future shocks and continuing on their high growth path.

Figure 1.7. Asia: Growth Momentum



Sources: CEIC Data Company Ltd.; Thompson Datastream; Haver Analytics; and IMF staff calculations.

¹ Three-month (or short-term) money market rate minus equivalent T-bill rate.

² See Balakrishnan and others (2009). The index comprises seven variables capturing developments in the banking sector, the securities markets, and the foreign exchange markets.

³ Based on quarterly data.

I. ASIA'S RECOVERY IN THE GLOBAL CONTEXT

average only about half of the ground lost since September 2008 has been regained in EEA (Figure 1.10). In part, this reflects the decline in global commodity prices, which has also reduced unit values of processed products, such as chemicals. But it also suggests that the global recession has forced Asian firms to cut their prices to regain sales, reducing their profitability.

A key role in the rebound has been played by the electronics sector, which accounts for about one-third of Asian exports. Indeed, until May, the export recovery in several Asian economies was explained entirely by this sector, whereas nonelectronics exports had continued to stagnate at low levels (Figure 1.11). At work has been a powerful inventory cycle. After September 2008, the ratio of U.S. electronics imports to final sales plummeted, as American firms initially responded to the greater uncertainty by suspending new import orders. But as uncertainty diminished, financing constraints eased, and U.S. inventories became depleted, retailers started to restock, sparking a boom in Asian electronics exports (Figure 1.12).

In addition, a part of Asia's export revival is due to the recovery of China's domestic demand. Since early 2009, regional exports to China have rebounded much more strongly than those to advanced economies (Figure 1.13). In particular, commodity exporters (such as Australia and Indonesia) and to a lesser extent capital goods exporters (Japan, Korea, and Taiwan Province of China) have benefited from the surge in China's infrastructure investment.

Finally, the normalization of trade finance has also contributed to the rebound in trade. As the global financial crisis intensified in the final quarter of 2008, Asia experienced an unprecedented contraction in trade finance, which contributed to the double-digit year-on-year declines in exports. But as financial distress gradually abated and confidence in advanced economies' banking systems returned, problems with the availability and cost of trade finance essentially disappeared, facilitating the resumption of trade.

Figure 1.8. Asia: Industrial Production during 2008–09
(Percent change based on seasonally adjusted data)

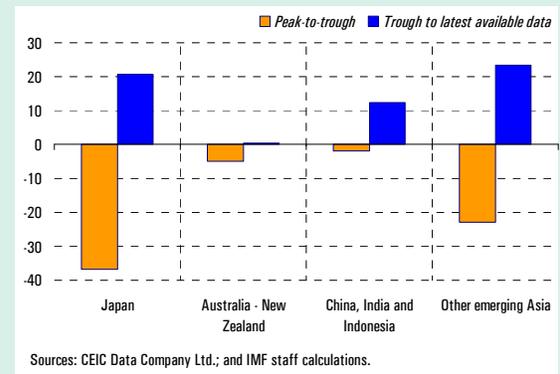


Figure 1.9. Selected Asia: Volume of Exports during 2008–09
(Percent change based on seasonally adjusted data)

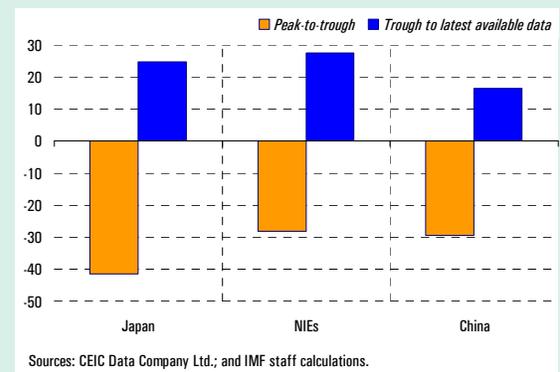


Figure 1.10. Asia: Value of Exports during 2008–09
(Percent change; data on U.S. dollar basis and seasonally adjusted)

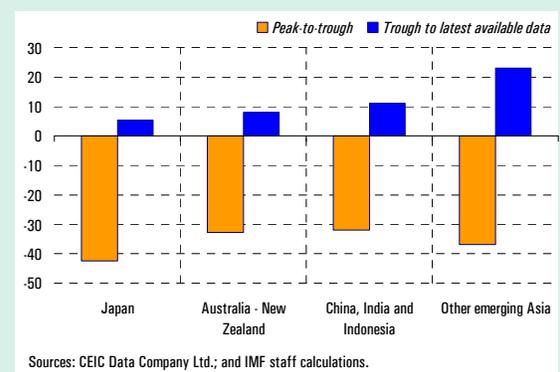
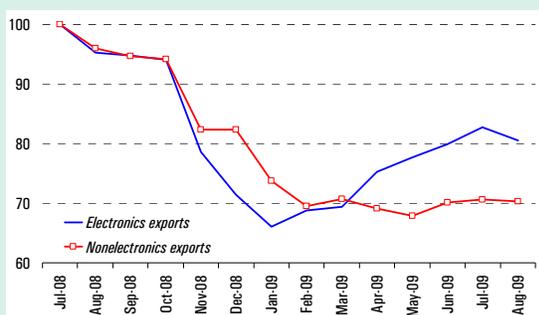
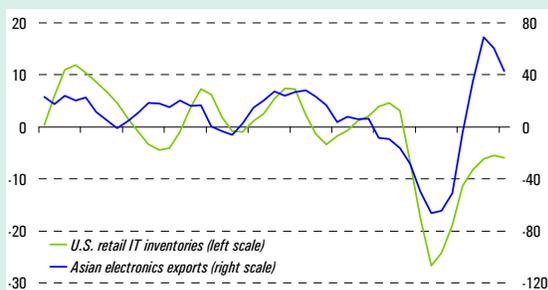


Figure 1.11. Asia: Electronics and Nonelectronics Exports¹
(July 2008 = 100, seasonally adjusted)



Sources: CEIC Data Company Ltd.; and IMF staff calculations.
¹ Includes Japan, NIEs, Malaysia, Philippines, Thailand and China.

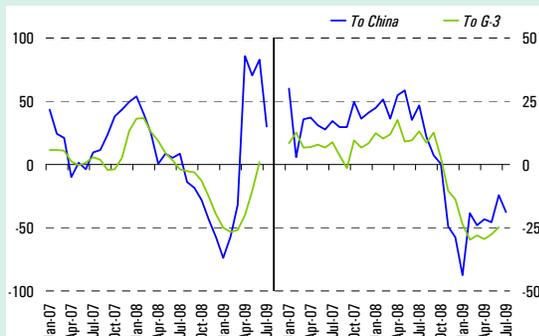
Figure 1.12. U.S. Retail IT Inventories and Asian Electronics Exports
(3-month percent change of 3-month moving average SAAR)



Sources: CEIC Data Company Ltd.; and IMF staff calculations.

Figure 1.13. Emerging Asia (excluding China): Direction of Exports

(Left panel: 3-month percent change of 3-month moving average, SAAR; right panel: year-on-year percent change)



Sources: CEIC Data Company Ltd.; Haver Analytics; and IMF staff calculations.

An Unprecedented Policy Stimulus

At the same time as exports have been recovering, policymakers have been supporting domestic demand with an exceptional amount of policy stimulus. There is a critical difference, however, between these two drivers of the recovery. Whereas the export recovery can be interpreted as a correction from the abnormal contraction of world trade at end-2008, the aggressive countercyclical fiscal response of Asian policymakers (outside of China) represents a break from past crises. Previously, Asia had been reluctant to engage in significant countercyclical policy, fearing that it could aggravate capital outflows and thereby prove counterproductive. But this time the response was forceful. In particular, the fiscal packages have been larger than in the average Group of Twenty (G-20) country (Figure 1.14). On average in Asia, projected discretionary fiscal stimulus in 2009 amounts to about 2¾ percent of GDP, compared with about 2 percent on average in the G-20, though it should be noted that packages need to be large because automatic stabilizers in Asia are relatively small.²

In addition to its magnitude, Asia's fiscal stimulus has differed from that in advanced economies along two other dimensions:

- *Greater reliance on spending than tax measures* (Figure 1.15). Overall, Asian economies devoted about 80 percent of their discretionary fiscal stimulus to increasing spending, against about 60 percent in the G-20. A large component of this spending has been focused on infrastructure, especially in China. In addition, many governments have also tried to cushion the social impact of the crisis by allocating more resources to social safety nets—including rural pension reform and the provision of better public health, housing, and schooling in China;

² These figures refer only to on-budgetary measures from central or general governments. They do not include off-budgetary or quasi-fiscal measures, including support measures to financial systems. For example, for China they only refer to support from the central government, which is about only one-third of total stimulus there.

the expansion of employment guarantees and housing programs in India; and benefits to those unemployed who attend job training schemes in Singapore.

- *Faster implementation.* Close to 50 percent of the stimulus has been implemented on average in Asian economies, well above the G-20 norm, driven primarily by strong implementation of spending programs. However, the speed of implementation has differed widely across the region, having been relatively slow for the industrial economies and fast for China, India, and the ASEAN economies (Figure 1.16).

This strong fiscal response has played an important role in stabilizing Asian economies during the first half of 2009. Simulations using the IMF's Global Integrated Monetary and Fiscal (GIMF) model suggest that fiscal stimulus accounted for on average about 1¾ percentage points of GDP growth in the first half of 2009 in Asia, when the stimulus measures from other countries (which created export demand for Asia) are also taken into account. In particular, the effect ranges from about 1 percentage point in Japan up to about 2 percentage points in China, Korea, Australia and New Zealand (Box 1.2).

Aggressive monetary policy easing by regional central banks has also contributed to Asia's recovery.

- The degree of interest rate easing in Asia stands out compared with that in previous business cycles (Figure 1.17). The median policy rate has declined by about 2¼ percentage points, about five times as much as in previous recessions. Lending rates, however, have declined by smaller amounts, raising questions about whether monetary transmission mechanisms have buckled under the strain of the global crisis (Box 1.3). IMF research suggests this is not the case. In fact, the pass-through coefficients and lags have been similar to those seen in the past, suggesting that Asian lending rates just tend to be sticky and slow to change.

Figure 1.14. Discretionary Fiscal Measures, 2009¹
(In percent of GDP)

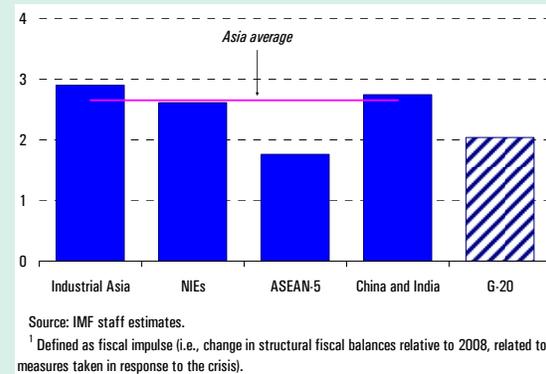


Figure 1.15. Composition of Fiscal Stimulus Measures, 2009
(In percent of GDP)

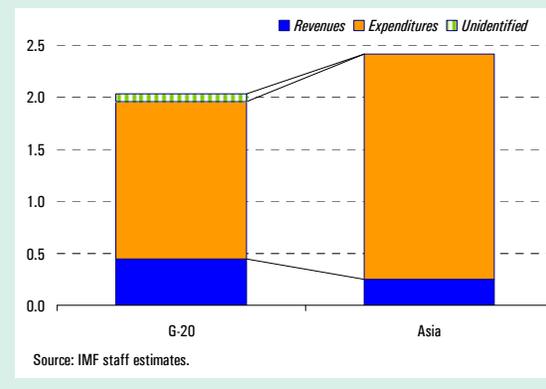
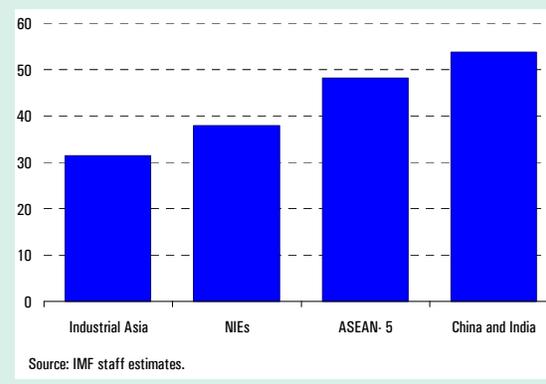


Figure 1.16. Asia: Fiscal Stimulus Implementation, 2009:H1
(In percent of full-year package)



Box 1.2. Fiscal Stimulus: Assessing Effectiveness and Sustainability

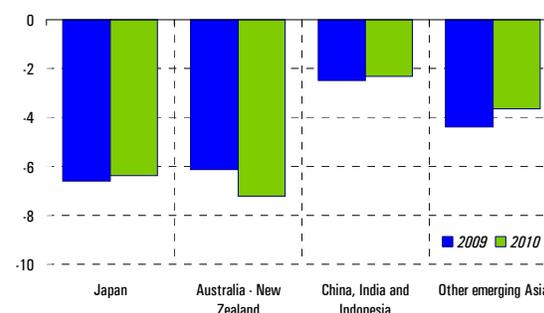
Asian countries responded to the global crisis with sizable fiscal stimulus measures. Together with the impact of automatic stabilizers, this response has been costly, contributing to a significant deterioration in fiscal positions, especially in advanced and export-dependent economies. Accordingly, it is important to assess the benefits of the measures, as well as whether the current fiscal positions are sustainable.

What Has Been the Impact on Growth?

Two methodologies are used to assess the effectiveness of the fiscal stimulus so far in 2009:

- Multipliers:** The first method consists of applying standard estimates of “fiscal multipliers.”¹ Given uncertainty about these estimates, growth impacts are estimated using ranges of multipliers.² Applying them to the different policy measures adopted in Asia suggests a significant impact of fiscal policy on growth during the first half of 2009, especially in Australia-New Zealand, China, and Korea. In particular, using the high set of multipliers, the fiscal stimulus measures are estimated to have raised GDP in the first half of 2009 by up to 3½ percentage points in Australia-New Zealand, 2¼ percentage points in China and 2¾ percentage points in Korea. The large impact for these countries reflects both the relatively larger size of their packages and their greater reliance on spending measures with large multipliers—especially in China, where most of the stimulus was focused on capital spending.³

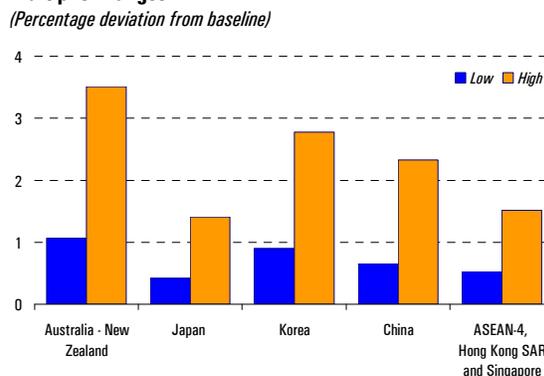
Asia: Change in Overall Fiscal Balance Relative to Precrisis¹
(In percent of GDP)



Source: IMF staff estimates.

¹ Precrisis benchmark equals average balance between 2005-2007.

Selected Asia: Impact of Stimulus on 2009:H1 Real GDP—Multiplier Ranges
(Percentage deviation from baseline)



Source: IMF staff estimates.

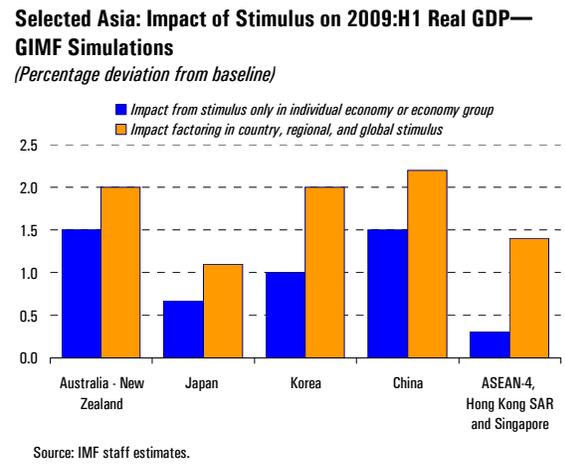
Note: The main authors of this box are Leif Lybecker Eskesen and Sonali Jain-Chandra.

¹ The applied multiplier ranges are taken from Horton, Kumar, and Mauro (2009).

² The low set included a multiplier of 0.3 on revenues, 0.5 on capital spending and 0.3 on other spending. The high set included a multiplier of 0.6 on revenues, 1.8 on capital spending and 1.0 for other spending.

³ These numbers could overestimate the growth impact of the fiscal stimulus, as not all the transfers to budgetary units may have been spent during the first half of the year. At the same time, however, in China's case, the stimulus only covers central government measures.

- Simulations:* The second method of assessing the effects of the fiscal stimulus on growth is based on simulations using an eight-country block version of the IMF's Global Integrated Monetary and Fiscal (GIMF) model.⁴ Two scenarios are considered: in the first one, only one region implements the fiscal stimulus—and the other countries remain inactive. In the second scenario, all regions implement the fiscal stimulus at the same time (including outside Asia). This approach produced broadly similar estimates of the growth impact of the fiscal packages in Asia, with an impact on GDP over the first half of 2009 of 1½–2 percentage points for Australia-New Zealand, 1½–2¼ percentage points for China and 1–2 percentage points for Korea.

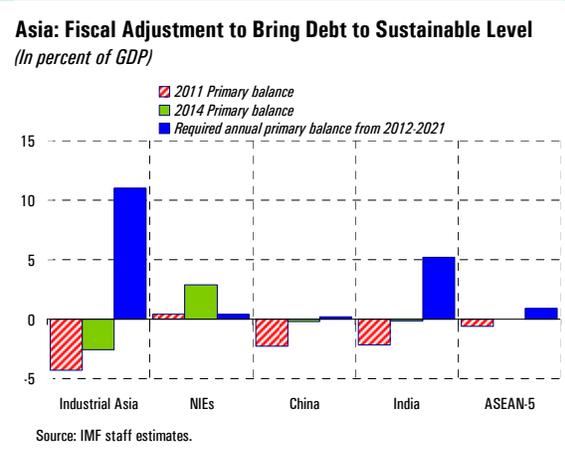


The relatively high estimated impact in these countries reflects again the significant size of the stimulus implemented, as well as the composition of the stimulus packages. The high end of these estimates is obtained when coordinated fiscal stimulus is implemented across countries, and thus reflects the positive spillovers on Asian economies from fiscal stimulus in other countries. The impact of the stimulus in ASEAN-4, Hong Kong SAR, and Singapore is estimated to be somewhat lower—¼ percentage point of GDP in the first scenario. This reflects the region's relatively higher average reliance on fiscal measures with lower multipliers (such as revenues) and its higher openness—which means that more of the additional demand stimulated by the fiscal packages “leaks out” through imports. Indeed, the estimated growth impact for this group of countries climbs to nearly 1½-percentage points, once the benefits from the stimulus in the rest of the world are taken into account.

Medium-Term Fiscal Outlook—Mounting Challenges

The fiscal positions of most Asian countries are relatively sound, having benefited from years of fiscal prudence. Moreover, as the recovery becomes well established, the general government debt-to-GDP ratio is projected to decline for most countries.

Even so, by 2014 debt-to-GDP ratios are still projected to exceed precrisis levels for a majority of Asian countries. An intuitive way of assessing the “sustainability” of current fiscal stances in the region is to estimate the primary balance that would be required on average over the next decade to stabilize debt ratios at their 2011 levels, or to bring them down to lower levels if they are judged to be too “high.”⁵ This exercise suggests that further fiscal consolidation would be needed over the medium term in those countries that already have relatively high stocks of debt, such as Japan and India.



⁴ Five of these regions are Asian: Japan, Korea, China, Australia, and New Zealand, and a group of Asian emerging economies (Hong Kong SAR, Singapore, Malaysia, Indonesia, the Philippines, and Thailand). The other regions are the United States, the euro area, and the rest of the world. For further details on this version of the GIMF model, please see N'Diaye, Zang, and Zang (2009).

Box 1.2 (concluded)

While these estimates are only for illustrative purposes, there are at least three reasons why they may underestimate the degree of fiscal adjustment needed. First, many Asian countries, including Japan and some NIEs, face aging-related fiscal pressures that will require even more ambitious primary balance targets than implied by this exercise. Second, the exercise does not take into account fiscal contingent liabilities that have increased in the wake of the global crisis, especially in a few advanced economies in the region. And finally, as the risks to the economic outlook are generally on the downside, there is a greater chance that the debt dynamics implied in this exercise will turn out to be less, rather than more, favorable for some of these economies.

⁵ For advanced economies with debt ratios above 60 percent in 2011, the required primary balance will bring the debt ratio down to 60 percent in 2021. In Japan’s case, however, the debt ratio is assumed to be halved by 2021 to around 116 percent. For emerging markets with debt ratios above 40 percent in 2011, the adjustment will bring these ratios down to 40 percent by 2021. The only exception is Singapore, for which the required primary balance will stabilize the gross debt ratio at the 2011 level despite this being larger than 60 percent, given its very large net public asset position.

Figure 1.17. Asia Business Cycle: Nominal Policy Rates¹
(Median, in percent; peak quarter of the cycles = zero)

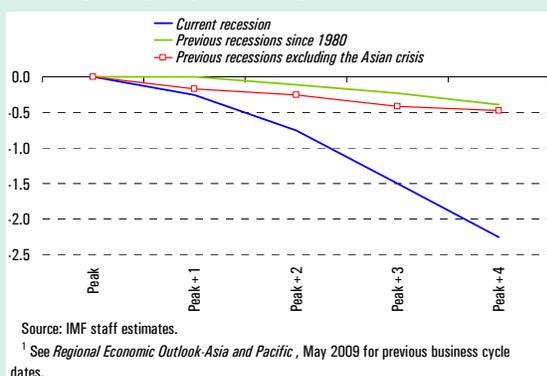
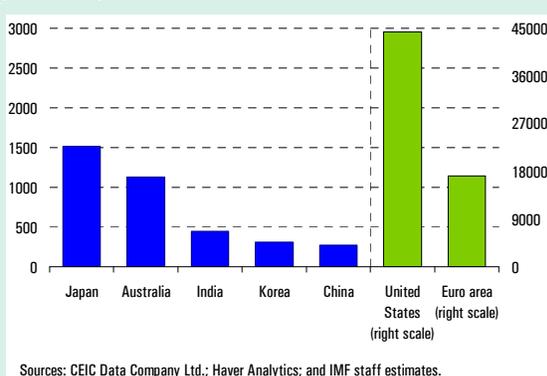


Figure 1.18. Deposit Money Banks: Excess Reserves at Crisis Peak (2007 = 100)



- Regional central banks also took unprecedented actions to ensure that financial systems had adequate liquidity. Access to central bank facilities was eased, reserve requirements lowered, and required reserves remunerated, resulting in a significant expansion of banks’ excess reserves holdings with central banks—albeit a much smaller one than in the United States and Europe (Figure 1.18), reflecting the more limited impact of the crisis on Asia’s banking systems.
- Measures were also taken to support domestic financial markets. Blanket guarantees on deposits, swaps to companies and banks needing foreign currency, guarantees on external bond issuance for banks, and expansions of guarantees to ensure that small and medium-sized enterprises (SMEs) could retain access to credit have all helped maintain confidence and sustain banking systems’ ability to play their intermediation function.

Normalizing Financial Markets

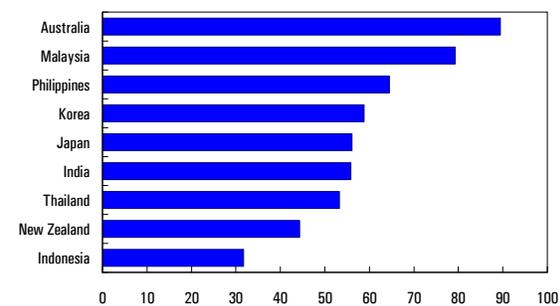
A third driver of Asia’s recovery has been the easing of financial tensions, both global and domestic. In September 2008, capital fled the region, putting downward pressure on reserves, currencies,

Box 1.3. Monetary Transmission in Asia: Is It Working?

Central banks in Asia aggressively eased monetary policy as the global crisis unfolded. They cut interest rates to historically low levels, reduced reserve requirements, and introduced unprecedented measures to provide liquidity and encourage lending. There has been some question, however, about the extent to which these actions have been transmitted to the wider economy. Accordingly, this box examines the state of the monetary transmission mechanism, looking at the pass-through from policy rates to lending rates and the behavior of credit growth and money multipliers. It finds no evidence that the degree of the interest rate pass-through has declined since the onset of the global financial crisis. In contrast, private credit growth did initially slow and money market multipliers declined, but they have since rebounded, pointing to a normalization of financial conditions. The resilience of the transmission mechanism was likely aided by credit support policies, such as guarantees, directed lending, and central bank loan facilities.

What has been the effect of monetary policy on borrowing costs? Since September 2008, Asian countries have cut policy rates by a cumulative 250 basis points (on average). Yet borrowing costs have not declined by a similar amount. The average pass-through—simply measured as the ratio of the change in the short-term lending rate to the change in the policy rate since the beginning of the current easing cycle—has been about 60 percent, but there are striking differences across countries. Whereas lending rates have declined by nearly the same amount as the policy rate in Australia, they have remained relatively sticky in Indonesia.

Selected Asia: Interest Rate Pass-Through¹
(In percent)



Source: IMF staff estimates.

¹ Pass-through is defined as the ratio between the change in the lending rate and the change in the policy rate since the beginning of the easing cycle.

Estimates from a regression model indicate that Asia's average interest rate pass-through is comparable to that in the United States and the euro area, but there is substantial variation across countries. To obtain a more rigorous measure of the pass-through, a dynamic reduced-form relationship was estimated between interbank interest rates (empirical proxy for policy rates in the regression) and short-term lending rates using monthly data over the period 2001–09.¹

The extent of pass-through in the short run (one month) is generally low, consistent with the fact that lending rates do not adjust instantly. The long-run pass-through estimate ranges from 0.3 to more than 1.0, with results being broadly consistent with those reported in the figure. The average long-run pass-through coefficient of 0.6 falls within the range of 0.6–1.0 estimated for the euro area and the United States (see Espinosa-Vega and Rebucci, 2003). The pass-through mechanism appears to be faster and more complete in Japan and the Philippines, whereas it takes about eight months to reach full pass-through in Korea and Malaysia.²

Note: The main authors of this box are Roberto Guimarães and Marta Ruiz-Arranz, with assistance from Shuda Li.

¹ The dynamic reduced-form relationship between market interbank interest rates and lending rates is an autoregressive distributed lag (ADL) model. The standard error correction econometric specification is given by $lending_t = \alpha_0 + \alpha_1 trend + \alpha_2 market_t + \alpha_3 lending_{t-1} + \alpha_4 market_{t-1} + \varepsilon_t$. In this model, α_2 measures the degree of the pass-through from market to lending rates in the short term (one month), $\alpha_2 + \alpha_4 / (1 - \alpha_3)$ measures the long-term pass-through, and $1 - \alpha_2 / (\alpha_3 - 1)$ gives the average number of months to reach the long-term pass-through (mean lag). For most countries an ADL (1,1)—which contains one lag of each variable of interest—accounts reasonably well for the time series dynamics of the data.

² It is worth noting that a high degree of interest rate pass-through does not necessarily imply a corresponding high reaction in credit extended. For example, the declines in Philippine and Korean lending rates have not been associated with a significant increase in bank loans.

Box 1.3 (concluded)

Two countries, Indonesia and India, display a relatively low degree of pass-through in the long run, reflecting less-developed debt markets and structural rigidities. In the case of India, with a long-run pass-through of about 0.3, the existence of small savings schemes that compete with commercial banks for deposits may have been partly responsible for the downward stickiness in lending rates.³ In Indonesia, banks' high cost of funds, thin and fragmented interbank markets, and structural excess liquidity explain the low equilibrium pass-through.

Model estimates do not lend support to the hypothesis that the transmission mechanism has become less effective since August 2008. There is, so far, no strong empirical evidence that the spike in risk aversion and tightening in lending standards associated with the current crisis has affected the pass-through process, making lending rates stickier.⁴ Even in those countries that have displayed incomplete pass-through, the monetary transmission is not different from what has been observed in the past. For example, in Indonesia the estimated pass-through has increased to 0.4 (from 0.3) since the crisis intensified in August 2008, and in India the crisis long-run pass-through (0.25) is not different in a statistically significant way from that observed before the crisis.

The behavior of monetary aggregates—in particular, money multipliers—and private credit growth is also consistent with the view that the transmission mechanism in Asia has not been durably impaired. Across the region, money multipliers fell at the height of the liquidity squeeze in late 2008, as banks hoarded cash on increased risk aversion. However, multipliers have since increased and are currently above precrisis levels, except in Korea and New Zealand (see figure). Reductions in reserve requirements help explain part of the upward trend in the multipliers (India, Indonesia, Malaysia), but there is emerging evidence that broad money is accelerating as a result of the stabilization of financial markets and the resumption of bank lending. Indeed, recent data show that credit growth has started to rebound in ASEAN, Australia, and New Zealand. Nonetheless, some frictions in the money creation process remain in Korea and Japan, where large liquidity injections have led to rising excess reserves, but little credit growth.

³ Small savings schemes in India have administered interest rates.

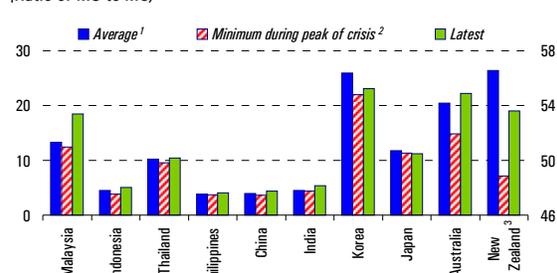
⁴ An interaction dummy is added to the baseline specification and the pass-through is recalculated.

Selected Asia: Estimated Interest Rate Pass-Through from Dynamic Regression Model

	Long run pass-through	Mean lag (in months)
Malaysia	0.9	8.0
Indonesia	0.3	1.2
Thailand	0.5	5.0
Philippines	0.7	2.2
India	0.3	1.2
Korea	1.2	8.3
Japan	0.8	2.3
Australia	0.6	7.5
New Zealand	0.5	11.5

Source: IMF staff estimates.

Selected Asia: Money Multipliers (Ratio of M3 to M0)



Source: IMF staff calculations.

¹ Average of January 2008 to July 2008.

² Peak crisis period is defined as August 2008 to January 2009.

³ Data presented on the right axis.

and asset prices. But by mid-2009, with global risk aversion declining and Asia's economic fortunes on the mend, capital began to return (Figure 1.19).

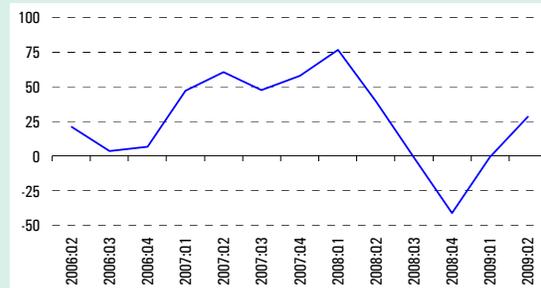
The amounts have so far fallen well short of 2007 levels, but the reality that inflows have resumed at all is significant. In previous crises, capital was extremely slow to return, even when, as in this case, the recessions had originated from abroad. The rapid return of capital this time is thus a testimony to Asia's improved resilience and economic framework.

These capital inflows, together with improving exports, have caused regional reserves and currencies to strengthen from their postcrisis lows. Policymakers in many economies have taken advantage of the inflows to rebuild reserves—while China, for example, has added to its holdings, which in September reached US\$2.3 trillion. In addition, there has also been some currency appreciation, particularly in Australia, New Zealand, Indonesia, and Korea (Figure 1.20 and Box 1.4).

Despite these recent gains, however, most Asian currencies remain below their precrisis levels, both against the dollar and in real effective terms (Figure 1.21). A notable exception has been the yen, which has appreciated strongly over the last year mainly because overseas reductions in interest rates have prompted a repatriation of Japanese funds that had earlier gone abroad, seeking higher returns. For similar reasons (as well as the increase in risk aversion), carry-trade activities in which foreigners borrowed low-cost yen to invest in high-yielding assets overseas have also declined.

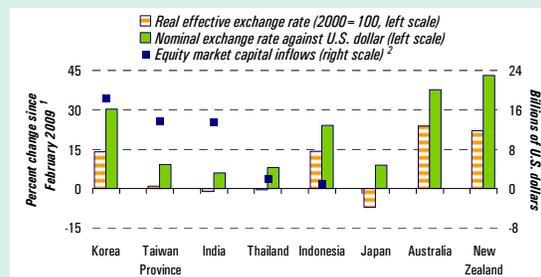
The return of foreign capital has also contributed to a strong rebound in regional equity markets. As portfolio capital has returned, equity valuations have increased, pushing many stock market indices back to 2007 levels and price/earnings (P/E) ratios closer to historical norms (Figure 1.22). With stock markets strengthening, initial public offerings (IPOs) have revived, giving companies access once again to equity capital to finance their planned investment projects, many of which had been disrupted by the

Figure 1.19. Emerging Asia: Net Capital Inflows¹
(In billions of U.S. dollars)



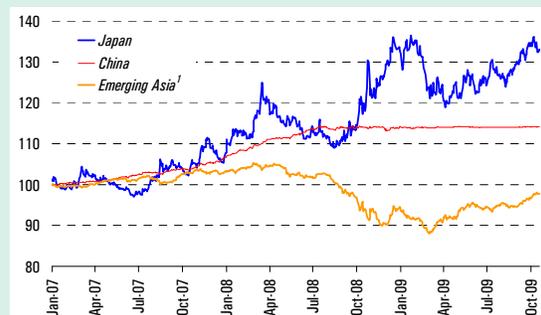
Sources: CEIC Data Company Ltd.; and IMF, *Balance of Payment Statistics*.
¹ China's semi-annual data are assumed to be equally divided between the quarters of a particular semi-annual period.

Figure 1.20. Selected Asia: Portfolio Inflows and Change in Exchange Rates
(February-September 2009)



Sources: Bloomberg LP; and IMF staff calculations.
¹ Positive change implies appreciation.
² Equity market capital inflows data not available for Australia and New Zealand.

Figure 1.21. Asia: Nominal Exchange Rate against U.S. Dollar
(January 2007 = 100; higher values represent appreciation)



Sources: Bloomberg LP; and IMF staff calculations.
¹ Trade-weighted average.

Box 1.4. Capital Inflows and Policy Responses

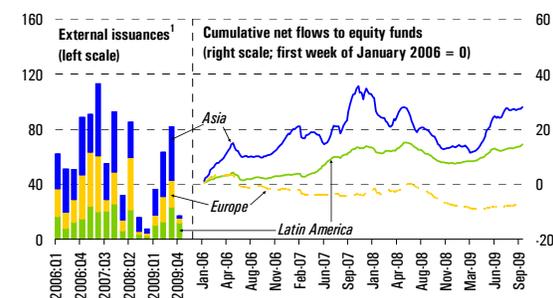
Capital flows to emerging markets have been surging again since March 2009, as economic prospects have improved and global investors' risk appetite has revived. Much of these inflows have been directed toward emerging Asia. The region has especially benefited from equity market inflows, which have not only exceeded those to other regions, but have also returned to levels prevailing before the crisis. External equity and bond issues by emerging Asian economies have also returned to precrisis levels, a much stronger rebound than in other regions. Even inflows of syndicated loans have resumed to emerging Asia—unlike elsewhere, primarily reflecting the healthier state of banks in the region.

The rapid recovery of capital inflows has generated renewed upward pressures in currency markets. Emerging Asian economies have accommodated these pressures largely by accumulating reserves rather than by allowing exchange rate appreciation. From March through September 2009, emerging Asian countries accumulated US\$510 billion in reserves, compared with US\$69 billion in emerging Europe and US\$17 billion in Latin America.¹ As a result, emerging Asia's stock of reserves stood at about US\$3.9 trillion at end-September, up from about US\$3.4 trillion at end-August 2008—much higher than in other emerging markets, not only in U.S. dollars but also as a share of GDP.

By contrast, Asian advanced countries with floating currencies, *Japan* and *Australia*, and *New Zealand*, have experienced significant appreciation in their nominal exchange rates. Overall, most real effective exchange rates (REER) in the region have returned close to (within a 10 percent range) their precrisis levels, except in Japan, where the REER is 20 percent higher.

Capital Inflows to Emerging Markets

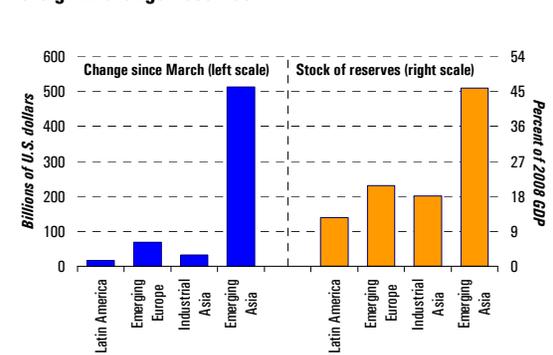
(In billions of U.S. dollars)



Sources: Emerging Market Portfolio Fund Research Inc.; and IMF, Bonds, Equities and Loans database.

¹ Bond and equity issuances.

Foreign Exchange Reserves¹

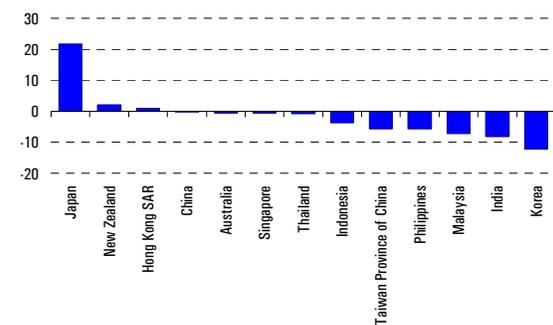


Sources: CEIC Data Company Ltd.; Haver Analytics; and IMF, WEO database.

¹ As of August 2009 for non-Asian economies and as of September 2009 for Asian economies.

Asia: Change in Real Effective Exchange Rate¹

(In percent; between August 2008 and September 2009)



Source: IMF staff calculations.

¹ Positive change implies appreciation.

Note: The main authors of this box are Benjamin Hunt and Sonali Jain-Chandra, with the assistance of Souvik Gupta.

¹ In addition to intervention, increases in reserves reflect valuation changes and earnings on reserve assets.

Figure 1.22. Stock Markets
(Index; January 1, 2007 = 100)

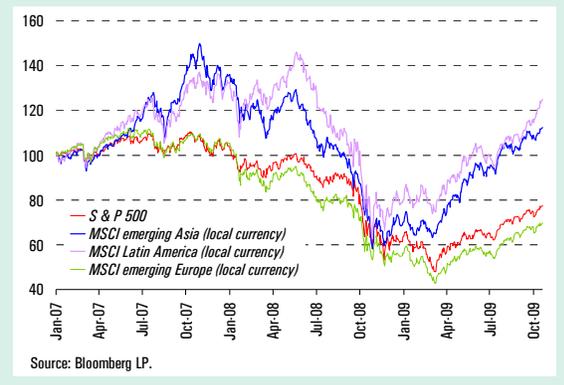
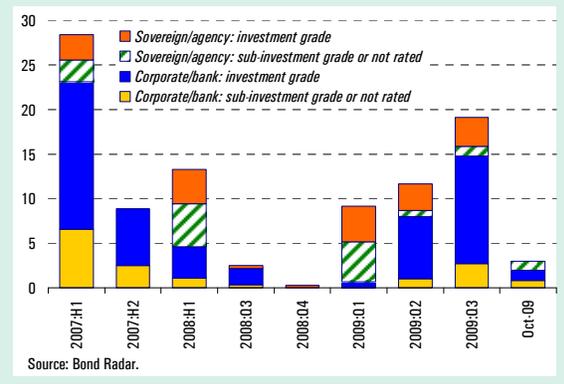


Figure 1.23. Emerging Asia: External Bond Issuance by Sector and Rating
(In billions of U.S. dollars)



crisis. Property markets have also begun to show signs of life, with transaction volumes picking up and prices recovering on a sequential basis. The increases in certain locations and specific segments of the housing market have been particularly noticeable in Hong Kong SAR, Singapore, China, Australia, and in Korea. Even so, viewed from a somewhat longer perspective, property markets remain subdued, with prices below year-ago levels in most economies.

Foreign debt market funding has also improved significantly. For half a year, from the fourth quarter of 2008 through the first quarter of 2009, Asian companies were essentially shut out from international capital markets, placing strains on their cash flows and foreign exchange positions, since

they still had large amounts of external obligations to service. But as global risk appetite has revived, access to international capital markets has been restored and spreads have narrowed to normal levels, close to trend but above the exceptionally low precrisis rates (Figure 1.23). Indeed, Asia's spreads have fallen particularly rapidly compared with those in other regions, since, as global fear has receded, the region's strong fundamentals have once again come to the fore. High-grade borrowers have been able to issue international debt at a record pace, much of which has been used to build up cash balances. Issuance by more risky borrowers has also recommenced in recent months, albeit at a much slower pace than in 2006–07, suggesting some lingering refinancing pressures.

The easing of external financial conditions and timely policy actions at home have been successful in normalizing domestic financial conditions. From September 2008 to early 2009, there was considerable dislocation in Asian markets, as domestic banks responded to their overseas funding difficulties and soaring risk aversion by curtailing interbank lending and credit to their customers, especially to SMEs. But now that overseas funding pressures have eased significantly, central banks have injected domestic liquidity, and governments have expanded SME credit guarantee programs, domestic conditions have normalized. Even in the markets most affected by the disappearance of overseas wholesale funding—foreign exchange and money markets—conditions have essentially returned to normal. For example, basis spreads on foreign exchange swaps and spreads in domestic money markets have receded to pre-September 2008 levels (Figure 1.24). At the same time, domestic Asian capital markets have begun to revive. Most important, the pace of bank credit has begun to quicken again.

Indeed, taking the year since September 2008 as a whole, bank credit has been more resilient in Asia than in other parts of the globe. Whereas elsewhere credit growth has collapsed, in Asia excluding China it has slowed but it is still running at close to a 10 percent rate (Figure 1.25). Two factors explain

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why: the healthy financial position of Asia's corporate sector and the strong capital position of its banks. Partly as a legacy from the lessons learned during the Asian crisis of the 1990s, large firms came into the downturn with low leverage, low debt service burdens, and high profitability. With sounder positions, their default risks were lower than in previous crises and have diminished rapidly as conditions have improved.³ Accordingly, banks have been willing to lend large firms the money needed to tide them over until conditions improved, though SMEs saw their access to bank credit more severely affected.

Apart from being willing, banks were also able to lend, because they had sufficient capital. Indeed, the financial strength of its banking systems has been central to Asia's resilience during the crisis. Unlike in Europe, Asian banks had little exposure to U.S. toxic assets, and the rise in domestic nonperforming loans has been modest, so the damage to their capital positions from the crisis has been relatively small. Moreover, they have been quick to replenish their buffers, raising more than US\$106 billion in capital since fall 2008. As a result, the declines in their capital-asset ratios have been negligible; in some countries, capital ratios have even risen compared with precrisis levels (Figure 1.26). So as liquidity conditions improved, Asian banks were in a strong position to resume lending.

The story in China is even stronger. Credit growth there has actually quickened since the end of 2008. Indeed, the removal of existing informal quantitative limits on bank-level credit growth has perhaps been the most important element of China's multifaceted response to the global crisis. This step triggered an exceptional credit boom: during the first half of 2009, the amount of net new bank credit was 50 percent higher than in 2008 as a whole. The expansion in credit has fueled a surge in investment,

³ For example, contingent claims analysis methodology shows that the share of publicly listed firms (weighted by assets) with a significant default probability (greater than 5 percent one year ahead) fell to less than 5 percent in August 2009 from 14 percent in March 2009.

Figure 1.24. Selected Asia: TED Spread¹
(In percent)

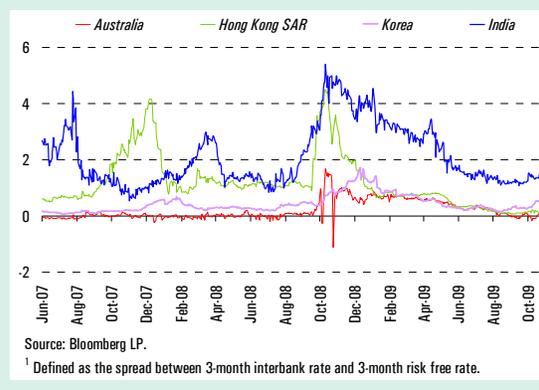


Figure 1.25. Emerging Markets: Bank Credit to Private Sector
(Six-month percent change, annualized rate)

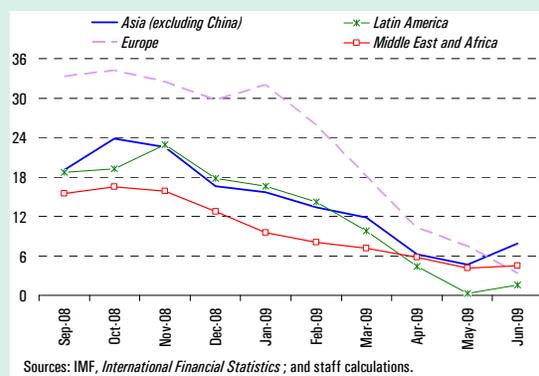


Figure 1.26. Selected Asia: Bank Capital-to-Asset Ratios
(Change from 2005-07 average; in percentage points)

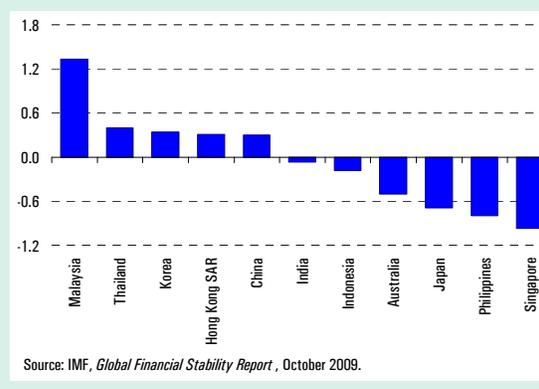


Figure 1.27. China: Credit and Fixed-Asset Investment
(Year-on-year percent change)

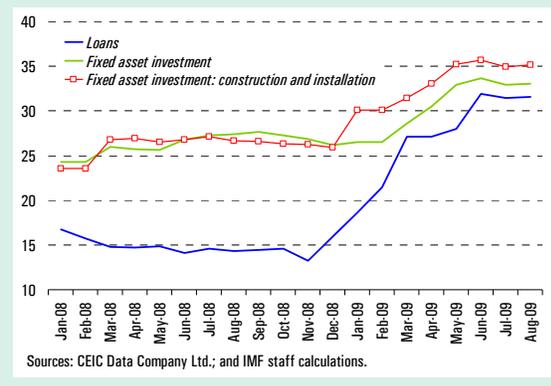
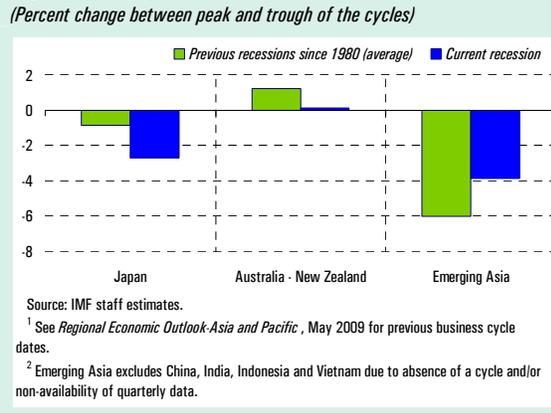


Figure 1.28. Asia Business Cycle: Real Private Consumption Expenditure^{1,2}
(Percent change between peak and trough of the cycles)



initially public, but then involving private investment too, particularly in real estate (about 40 percent of private investment in the first eight months of 2009 went into real estate) (Figure 1.27). Such a rapid pace of credit growth, however, runs the risk of creating asset price inflation and misallocating resources, risking ultimately worsening bank credit quality. Encouragingly, signs of a slowdown in credit growth are emerging.

Private Domestic Demand: Still Cause for Concern

What about private domestic demand? This is a critical question, perhaps the most critical one for assessing the state of the recovery, for it is private demand that will eventually have to take over as a driver, once the impetus from trade normalization and macroeconomic stimulus has waned. On this

count, there is some cause for concern. Both private consumption and investment have declined during the downturn, and prospects for a recovery remain clouded.

On the positive side, private consumption has fallen by less than in previous crises (Figure 1.28).⁴ One reason is that household incomes have been supported by the exceptionally large policy stimulus, which included an important component of transfers and tax cuts. But perhaps even more important has been the reaction of Asian firms to the global crisis. Despite the sharp contraction in new orders after September 2008—and in marked contrast to the reaction elsewhere—Asian firms did not immediately retrench their workforces. Instead, they hoarded labor while cutting back on hours worked. In large part, this decision may have been a reaction to the unexpected and swift collapse of trade: expecting that orders might soon rebound, they watched and waited to see what the longer-run change in demand might be. They also sustained employment because they received government subsidies for doing so, as part of the stimulus packages. As a result, employment has held up remarkably well, providing crucial support to incomes and consumption (Figure 1.29).

Consumption has also been helped by the absence of significant wealth effects—another major difference from the experience elsewhere. With stock markets and property prices essentially back to year-ago levels, confidence has rebounded, leading to a revival in retail spending (Figure 1.30). Meanwhile, the sharp reductions in policy interest rates have boosted disposable incomes of mortgage holders, since Asian housing loans are almost exclusively at floating rates.

In contrast, private investment has declined sharply, in some economies by even more than it did during the Asian crisis. In many ways, this outcome has been surprising. After all, corporate balance

⁴ A notable exception is Japan, where consumption has fallen by more than in the past, largely because there has been a significant rise in unemployment and decline in wages.

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sheets at the outset of the global crisis were much stronger than previously. Moreover, whereas a decade ago Asia was in the midst of a real estate boom, this time construction has formed a much smaller portion of investment and its impact on overall investment has been much smaller (Figure 1.31). Explanations for the sharp fall in investment remain unclear. To a certain extent, it reflects the fact that even with the rebound in production, there is still excess manufacturing capacity in the region. More fundamentally, however, weak investment probably reflects concerns about longer-term prospects. In the end, much of Asia's rebound has been driven by temporary factors—a V-shaped bounce back in trade, policy stimulus—whose importance is bound to wane over time. Ultimately, Asia will need to see a recovery in private consumption, either foreign or domestic. In past recoveries, first consumption and, at a later stage, investment have typically revived when the income from booming exports started flowing through Asia's economy. But this time, given the still weak external outlook, the traditional dynamics may not be as much at work.

What Lies Ahead?

Outlook

Over the near term, global and domestic restocking and macroeconomic policy support will continue to propel Asia's recovery forward. As U.S. electronics retailers continue to rebuild their inventories, Asian exports will continue to recover—a process that could go on for some time, since U.S. imports are exceptionally low relative to sales, suggesting that retailers will need to step up their orders sharply to replenish their supplies (Figure 1.32). Meanwhile, the domestic inventory cycle, which had depressed growth through mid-2009, also seems set to turn. Inventories within most Asian economies were seriously depleted in the first half of 2009, which means that firms will soon need to replenish them by boosting production. This could set off positive feedback between strengthening economic activity, easing financial conditions, and improved consumer and business

Figure 1.29. Asia Business Cycle: Employment^{1,2}
(Average; peak quarter of the cycle = 100)

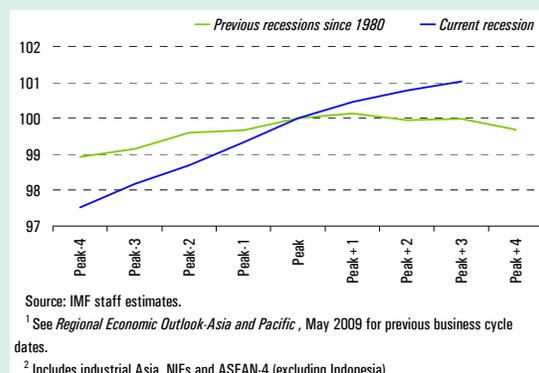


Figure 1.30. Asia: Consumer Confidence and Volume of Retail Sales¹
(January 2008 = 100)

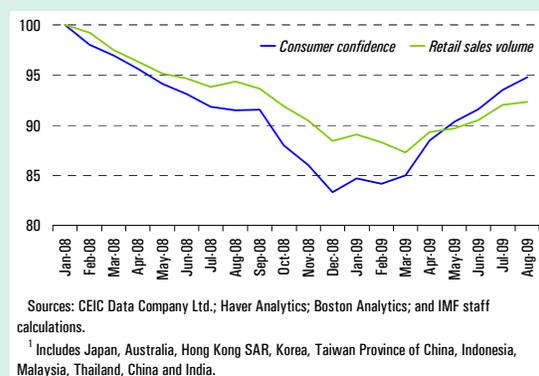


Figure 1.31. Japan and NIEs: Real Private Capital Formation¹
(Year-on-year percent change)

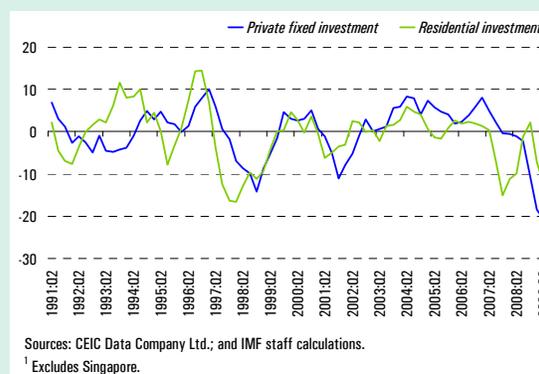
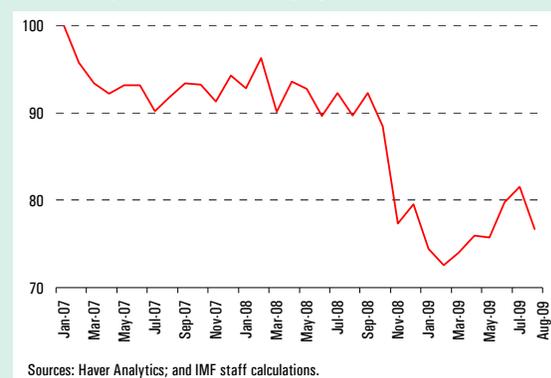


Figure 1.32. United States: Ratio of Imports to Retail Sales—Electric and Electronic Products and Parts
(Index, January 2007 = 100; seasonally adjusted)



confidence, which may sustain a pickup in private domestic demand. In addition, fiscal stimulus is likely to keep supporting GDP growth over the next few quarters; as noted above, only about half of the stimulus contained in announced fiscal packages has been implemented so far, on average for the region.

These factors are temporary, and their impetus will inevitably wane. But provided global private demand starts to recover, Asia's growth momentum should continue. Leading indicators of Asian exports, such as the manufacturing order indices in the United States and Europe, are already into expansionary levels, suggesting that export momentum is likely to remain even once the boost from global restocking has run its course.

Even so, Asia's growth in 2010 will remain well below its precrisis average, reflecting the longer-term impact of the global crisis on both the demand for Asian exports and the region's productive capacity.

- Demand:* As highlighted in the October 2009 *World Economic Outlook*, the global recovery is expected to be sluggish, with private demand in advanced economies likely to be restrained for some time by limited credit availability, households' desire to rebuild balance sheets, and still-rising unemployment. External demand is thus unlikely to provide a strong boost to Asia, as it has typically done in past recoveries (Chapter 2, May 2009 *Asia and Pacific Regional Economic Outlook*).
- Supply:* In addition, it may take Asia some time to adjust to the supply-side dislocations caused by the global recession. Indeed, the crisis is likely to have damaged potential output in Asian economies, in particular by inducing a protracted decline in capital accumulation (Box 1.5). The output losses can be substantial—for Asia, IMF staff estimates suggest they may reach 10 percent of GDP relative to the precrisis trend in EEA, where private investment will be particularly discouraged by the ample spare capacity in the manufacturing sector (Figure 1.33).

Projections for 2009–10

Against this backdrop, a modest recovery seems likely. Asia's GDP growth is now forecast to be 2¾ percent in 2009 and 5¾ percent in 2010, about 1½ percentage points higher for both years than projected in the May 2009 *Asia and Pacific Regional Economic Outlook* (Table 1.1). Even so, growth in 2010 would still remain well below the average 6⅔ percent growth over the last decade. Indeed, most Asian economies will face a significant amount of economic slack in the near term, particularly in EEA and in Japan (Figure 1.34). In contrast, the output gap is expected to be much closer to zero on average in DEA.

Within Asia, there will continue to be significant differences in growth patterns. In particular,

- China* is expected to continue leading Asia, growing at 8½ percent in 2009 and 9 percent in 2010. Investment should continue to expand rapidly, propelled by multiyear public projects and the recovery of private investment. Fiscal measures to boost consumption and employment are also expected to continue to support private domestic demand, together with improved consumer confidence—reflected in the recovery of prices in key real estate markets (Figure 1.35). Over the medium term, the need to rein in rapid credit growth, not least to safeguard hard-won gains from years of bank restructuring, combined with the availability of a

REGIONAL ECONOMIC OUTLOOK: ASIA AND PACIFIC

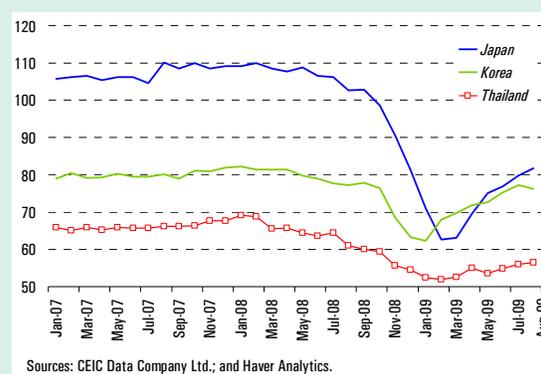
large fiscal space, will likely shift the weight of policy support to the fiscal realm.

- *India's* growth is expected to accelerate to 6½ percent in 2010 from 5½ percent in 2009, on the back of strong domestic demand. In particular, the normalization of financial market conditions is expected to support a rebound of private investment, sustaining demand even as the fiscal stimulus wanes.
- The newly industrialized economies (NIEs), *Hong Kong SAR, Singapore, Taiwan Province of China, and Korea* are all projected to contract in 2009. But growth (3½–4¼ percent) is expected to resume in 2010, thanks to domestic inventory restocking, a rebound in private consumption linked to increases in consumer confidence, and continued buoyancy in exports (Figure 1.36).
- Among the ASEAN-5, growth is expected to remain solid in the more domestically oriented *Indonesia* and *Vietnam*. Commodity exports and domestic demand are expected to sustain growth in *Indonesia*, with a modest pick-up in investment expected to offset the withdrawal of fiscal stimulus. In *Vietnam*, strong domestic demand, rapid industrialization, and relatively robust foreign demand should continue to underpin stable and high growth. *Thailand* and *Malaysia* are projected to contract at about 3½ percent in 2009, before returning to positive—though still anemic—growth in 2010. The *Philippines* is escaping contraction in 2009, thanks to the resilience of remittances and thereby private consumption, but growth momentum is expected to moderate somewhat in 2010 after the fiscal stimulus wanes.
- In industrial Asia, GDP in *Japan* is expected to contract by 5½ percent in 2009 before recovering modestly by 1¾ percent in 2010. The economy will be lifted by the continued effect of the sizable fiscal stimulus, but private demand will likely continue to be weighed down by weak labor market conditions and excess capacity in the manufacturing sector. *Australia* is avoiding a contraction in 2009, thanks to its timely and forceful policy response and strong commodity exports, especially to China. In

contrast, *New Zealand's* economy will likely contract in 2009, reflecting the large decline in residential investment and private consumption that followed the sharp reversal of the housing market boom. Both *Australia* and *New Zealand* are expected to expand in 2010, as external demand strengthens in line with the global recovery and private domestic demand regains momentum.

Figure 1.33. Selected Asia: Manufacturing Capacity Utilization

(In percent, seasonally adjusted)



Sources: CEIC Data Company Ltd.; and Haver Analytics.

Table 1.1. Asia: Real GDP
(Year-on-year percent change)

	2008	2009	2010	2009	2010
		Latest projections		Difference from May 2009 forecast	
Industrial Asia	-0.2	-4.4	1.7	1.0	1.2
Japan	-0.7	-5.4	1.7	0.8	1.2
Australia	2.4	0.7	2.0	2.2	1.3
New Zealand	0.2	-2.2	2.2	-0.2	1.7
Emerging Asia	6.8	5.1	7.0	1.8	1.6
NIEs	1.5	-2.3	3.7	3.3	2.8
Hong Kong SAR	2.4	-3.6	3.5	0.9	3.0
Korea	2.2	-1.0	3.6	3.0	2.0
Singapore	1.1	-1.7	4.3	8.3	4.4
Taiwan Province of China	0.1	-4.1	3.7	3.3	3.7
China	9.0	8.5	9.0	2.0	1.5
India	7.3	5.4	6.4	0.8	0.8
ASEAN-5	4.8	0.7	4.0	0.7	1.7
Indonesia	6.1	4.0	4.8	1.5	1.3
Malaysia	4.6	-3.6	2.5	-0.1	1.2
Philippines	3.8	1.0	3.2	1.0	2.2
Thailand	2.6	-3.5	3.7	-0.5	2.7
Vietnam	6.2	4.6	5.3	1.3	1.4
Emerging Asia (excluding China)	4.8	1.7	4.9	1.6	1.7
Emerging Asia (excluding China and India)	3.1	-0.8	3.8	2.0	2.3
Asia	5.1	2.8	5.8	1.6	1.5

Source: IMF, WEO database.

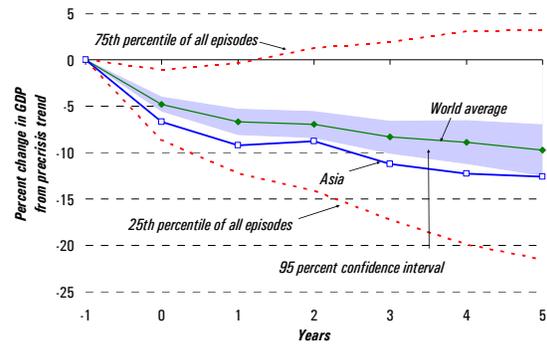
Box 1.5. Implications of the Global Crisis for Asia's Potential Output

Historical experience suggests that returning Asia's output to the precrisis trend is likely to prove challenging, as deep recessions usually have long-lasting effects on productive capacity.

“Deep recessions” are defined in this box as episodes with growth slowing by at least 5 percentage points within a year. This definition allows for the identification of 182 episodes since 1960, 27 of which were in Asia. These episodes were generally associated with either severe financial strains or significant reductions in external demand, and in about two-thirds of the deep recessions GDP never caught up to the precrisis trajectory. The average output loss amounted to roughly 10 percent across all episodes, and slightly more than that for the Asian cases.

Evidence also suggests that deep recessions can sometimes undermine medium-term growth rates. In Asia, for example, recessions in Japan, Korea, and Malaysia in the 1990s were all followed by significant reductions in annual average growth—by up to 4 percentage points in the case of Malaysia.¹ In contrast, Chile, Finland, and Mexico experienced much better outcomes in the aftermath of their own crises in the 1980s and 1990s, in part due to significant liberalization measures and rapidly increasing openness of their economies (European Commission, 2009 and IMF, 2009c).

Impact of Deep Recessions on Medium-Term Output
(Mean difference from year $t = -1$; first year of crisis at $t = 0$)



Outlook for Asia

Following the recent turmoil, medium-term output losses for Asian economies are likely to prove significant—both in levels and in growth rates. This expectation reflects the global nature of the slowdown, sluggish consumer demand in the main export markets, and the inherent challenges in rebalancing growth from export sectors toward domestically oriented industries, as potential growth of Asia's traditional trading partners, in particular the United States, is estimated to have declined.

Assessing the output losses that the recent crisis is likely to impose on Asian economies over the medium term is, of course, a very difficult exercise—one that involves not only GDP projections over the next few years, but also an assessment of the precrisis trend growth for Asian economies. Staff estimates are based on current growth projections for 2009–14 and two different estimates of the precrisis trend—one based on the IMF staff medium-term GDP projections at the outset of the crisis, and one based on the linear GDP trend estimated during 2000–07. While the resulting estimates of medium-term output losses are only illustrative—and any cross-country differences should be interpreted with caution, as the forecasting errors are at present unusually large—they both point to nonnegligible medium-term output losses relative to the precrisis trend, ranging from 2–6 percent in China and India to about 10 percent in the NIEs.

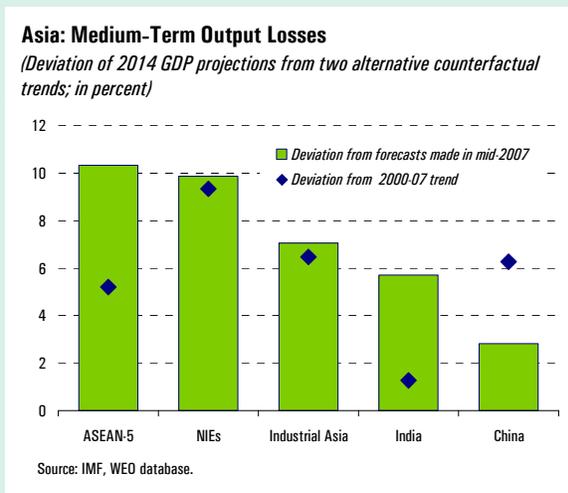
Note: The main author of this box is Martin Sommer.

¹ In Japan and Korea, the reduction in annual average growth was about 1 percentage point. The reference samples are 1992–97 (precrisis) and 1999–03 (postcrisis). While the latter sample was influenced by the burst of the information technology bubble, growth in Korea and Malaysia remained below the precrisis (1992–97) levels even during the global boom of 2002–07.

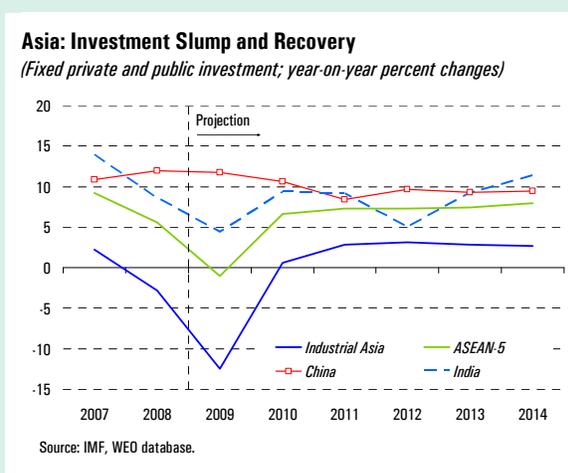
Box 1.5 (concluded)

While individual country experiences will undoubtedly vary widely, potential output will likely be reduced through several channels:²

- Low investment.* During recessions, private investment falls sharply, eroding productive capital stock. Indeed, fixed investment in advanced Asia fell by 15 percent between 2007 and 2009 and is projected to remain sluggish for some time given the large unused capacity in the corporate sector. Financial strains can further amplify the investment slump by constraining credit availability and raising financing costs, although their intensity has varied greatly across the region. However, public investment can partially (and temporarily) replace flagging private investment, possibly creating positive externalities for growth in the medium term—indeed, a number of Asian countries are currently implementing ambitious public investment programs. In some countries, such as China and India, fiscal and monetary stimulus has supported continued growth in total fixed investment (in China, fixed investment has even accelerated), helping to explain some of the cross-country differences in expected output losses.



- Impaired labor market.* Deep recessions typically keep workers out of jobs for prolonged periods, impairing their skills and discouraging some of them from seeking employment. At this juncture, this could particularly be the case in countries with less flexible labor markets such as Japan, where displaced workers may not easily move into new productive activities. Projections therefore build in a modest increase in medium-term unemployment, with negative implications for potential output. That said, the negative contribution to potential growth from diminishing labor inputs is generally projected by IMF staff as relatively small in Asia (especially in emerging economies), in part because fiscal stimulus packages in many countries have put emphasis on maintaining employment, while the initially strong balance sheets of Asian corporations have so far encouraged labor hoarding.



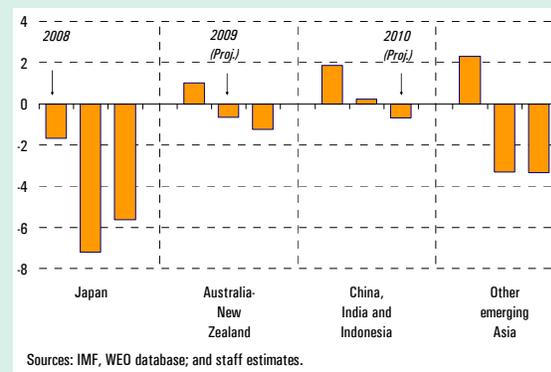
² Potential output can be defined as the level of output consistent with stable inflation or, alternatively, the trend level of output around which the economy fluctuates over the business cycle. Recent studies of the linkages between crises and growth include Cerra and Saxena (2008), European Commission (2009), Furceri and Mourougane (2009), IMF (2009b), Organization for Economic Cooperation and Development (2009), and Reinhart and Rogoff (2009).

- *Lower productivity.* Falling profitability and tighter lending conditions have made corporations slash their research and development spending, which could depress productivity. In addition, financing for SMEs or start-ups with large innovative abilities will likely be subject to more stringent credit conditions than before the crisis.³ More generally, service sector productivity stopped converging toward U.S. productivity levels in some Asian economies even prior to the financial turmoil, suggesting that making services the engine of growth will require significant reforms (IMF, 2006a).

Looking across Asia, this year's GDP loss associated with the global financial crisis could reach about US\$1 trillion in purchasing-power-adjusted dollars. Under the baseline scenario with lower potential growth in some Asian economies, the GDP shortfall could further widen to about US\$2 trillion annually by 2014. The sheer magnitude of these negative effects underscores the importance of implementing measures that help raise potential output, in particular, reforms to facilitate the shift of resources across sectors and to boost domestic demand. Resisting protectionist measures, maintaining credible fiscal frameworks, and gradually phasing out emergency labor market interventions will also be important for mitigating the negative impact of the crisis on medium-term potential output.

³ Estevão (2009) makes a similar argument about industries dependent on external financing.

Figure 1.34. Asia: Output Gaps
(In percent)



- A series of natural disasters in late September caused serious dislocations, loss of lives, and property damage in a number of countries. In some of the affected Pacific Island nations, notably Samoa, there has also been a sizable impact on economic activity (Box 1.6). In the larger economies of Indonesia, the Philippines, and Vietnam, however, the macroeconomic impact is expected to be minimal.

Meanwhile, inflation should remain generally subdued. In particular, inflation is projected to be

negative in Japan and remain at minimal levels in EEA in both 2009 and 2010, reflecting sizable output gaps and well-anchored inflation expectations (Figure 1.37). In China, a fall in food inflation, high levels of investment in nontradables, and significant excess capacity are limiting inflationary pressures, despite the massive monetary (and fiscal) stimulus. In other DEA economies, however, the relatively smaller amount of economic slack implies a greater acceleration of CPI inflation. Indeed, a pickup in core inflation and inflation expectations suggest that demand pressures are already playing a role in pushing up inflation in India. Inflation expectations are also rising in Indonesia, related largely to the expected uptrend in commodity prices.

Reflecting the still-tentative external environment, Asia's current account surplus is expected to fall somewhat (from 4¼ percent of GDP in 2008) over this year and next, averaging a little over 3⅔ percent of GDP. Substantially weaker exports will reduce China's and Japan's current account surpluses. In particular, China's current account surplus is expected to decline to about 7¾ percent of GDP in

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2009 from about 10 percent in 2008, as a restocking of commodities has led to a strong rebound in imports (Figure 1.38). By contrast, current account surpluses are projected to increase for the NIEs, particularly in Korea where exports have been supported by recent gains in export market share and stronger capital goods demand from China.

Risks

The exceptional uncertainty prevailing at the time of the May 2009 Asia and Pacific *Regional Economic Outlook* has receded, but risks remain tilted moderately to the downside (Figure 1.39).

- The main downside risk to the baseline is that the incipient recovery in advanced economies will stall. As highlighted in the October 2009 *World Economic Outlook*, a premature exit from accommodative monetary and fiscal policies could undermine the nascent global recovery. In addition, there is still a risk that financial strains could linger or even intensify, particularly if efforts to restore bank balance sheets are not followed through forcefully.
- If signs of renewed external environment weakness were to arise, the positive feedback loop triggered in Asia could shift into reverse. In particular, renewed foreign risk aversion could trigger another bout of capital outflows, with knock-on effects on equity valuations and confidence. In addition, renewed weakness in demand could induce Asian firms to shed their labor-hoarding strategy and cut jobs, leading to a sharper increase in unemployment rates than has been observed so far.
- At the same time, an upside risk to the near-term outlook is a more rapid improvement in financial conditions, both abroad and in the region. The associated confidence effects could drive a larger-than-expected rebound in domestic private consumption and investment,

Figure 1.35. Japan, China, and India: Contributions to Growth
(In percentage points)

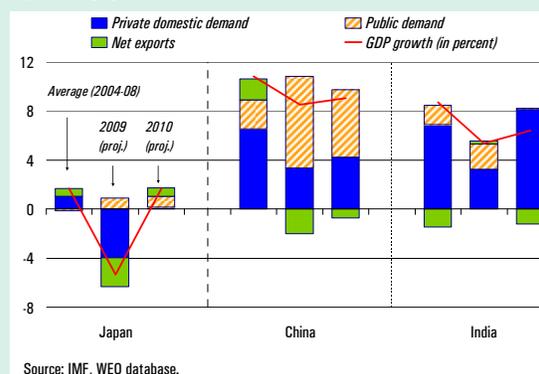


Figure 1.36. Selected Asia: Contributions to Growth
(In percentage points)

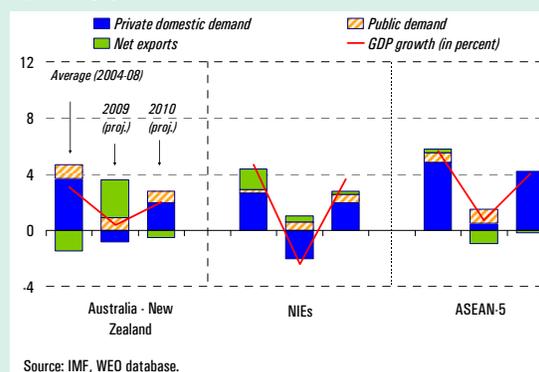
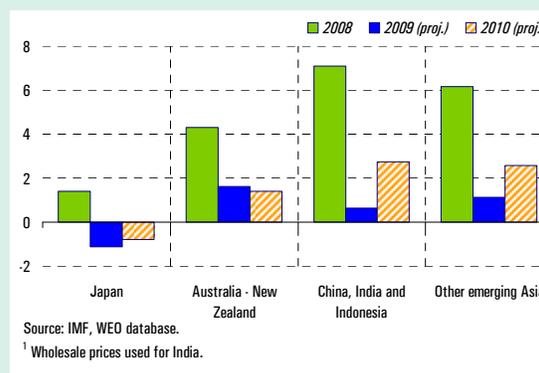


Figure 1.37. Asia: Consumer Prices¹
(Year-on-year percent change)



Box 1.6. Economic Impact of Recent Natural Disasters in Asia

Several countries in Asia were severely affected in late September by a string of natural disasters. Indonesia, the Philippines, Samoa, Tonga, and Vietnam have all suffered damage caused by a typhoon and two earthquakes. While damage has been substantial, overall macroeconomic impacts are expected to be minimal, except for in Samoa. Impacts based on preliminary information are briefly summarized below.

Indonesia: A magnitude 7.6 earthquake struck Indonesia's West Sumatra province, claiming more than 1,000 lives. The city of Padang (population 1,000,000) was severely damaged. Significant damage to infrastructure has taken place, which could affect palm oil and coal exports from Sumatra, although the three affected regions together account for only 3 percent of GDP. Estimates of the overall damage run in the range of US\$200–300 million (less than 0.1 percent of GDP). To supplement aid from private and bilateral sources, the government has set aside US\$25 million in emergency funds from within existing budget resources.

Philippines: More than 1 million people have been affected by a flood resulting from typhoons Ketsana and Parma. Initial estimates of the direct damage appear to be just under 10 billion pesos (0.13 percent of GDP), mostly from damage to crops (rice, corn, and vegetables), agriculture infrastructure, and businesses in metropolitan Manila. Damage to homes and other assets could also significantly dent household wealth. A supplemental budget of 0.15 percent of GDP is currently being discussed in the congress.

Samoa and Tonga: At least 143 deaths have been reported following a tsunami that struck Samoa, and about 2.5 percent of the population may have lost their homes. While still early to assess the full economic impact, initial official cost estimates stand at about US\$150 million (25 percent of GDP). Samoa's rapidly growing tourism sector (tourism receipts are about 20 percent of GDP) has been severely damaged. Australia, New Zealand, and France are providing emergency relief, and a strong response from overseas remittances (which in recent years were equivalent to 25 percent of GDP) is expected. Additional funding has either already been approved or likely to be approved by multilateral agencies (the Asian Development Bank and the World Bank). Damage to Tonga, which also experienced the tsunami, was less severe, with nine dead and serious damage to some outlying villages.

Vietnam, Cambodia, and Lao People's Democratic Republic: Typhoon Ketsana also left a trail of destruction in Vietnam, Cambodia, and Lao People's Democratic Republic. In central Vietnam, at least 163 people have died. Significant damage has occurred to homes, schools and public structures, and farmland, and their costs are estimated at US\$785 million (0.8 percent of GDP). On top of the US\$3 million international support so far, the government has set aside about US\$28 million and 10,000 tons of rice for storm-hit provinces. Dozens more were killed in Cambodia and Lao People's Democratic Republic. Several villages have been affected by flooding, although damage has not yet been fully assessed.

Note: The main author of this box is Uma Ramakrishnan.

helping to create conditions for a stronger recovery, especially in DEA. In particular, in India, there are upside risks to growth projections for both this year and the next as signs of recovery are broadening and the adverse impact of the monsoon is likely to be smaller than anticipated.

Key Policy Challenges

The Near Term: A Delicate Balancing Act

Asia will need to deftly manage a balancing act in the period ahead. Policymakers will need to continue to provide support to economies until it is clear that the recovery is self-sustaining and sufficiently robust. At the same time, they will need to ensure that accommodative policies are not maintained for so long that they ignite inflation pressures or concerns about fiscal sustainability. Striking the right balance will be difficult. But the key is clear: policymakers will need to ascertain that private demand, both at home and abroad, is sufficiently strong to take over as a driver of the recovery if public sector demand is withdrawn.

This is no easy task, for the risk of “false dawns” is high. Chapter 2 considers the lessons from Japan’s “lost decade.” On two occasions in Japan over the 1990s and early 2000s “green shoots” of recovery emerged, allowing stimulus to be withdrawn. In both cases, however, the underlying corporate and financial problems had not been resolved, and the external environment deteriorated dramatically—first during the Asian financial crisis in 1997 and then the information technology bubble collapse in 2000. As a result, a more severe downturn ensued, necessitating renewed stimulus to support activity. The three main lessons are

- Both domestic and international conditions are crucial to the prospects for recovery.
- A durable recovery may emerge only when “green shoots” spread beyond industrial production and exports to employment and private domestic demand (Figure 1.40).

Figure 1.38. Asia: Current Account Balances
(In percent of GDP)

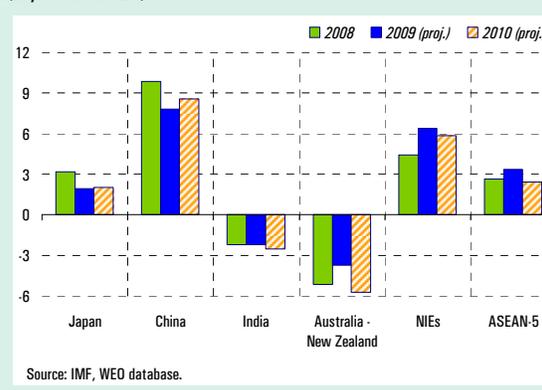
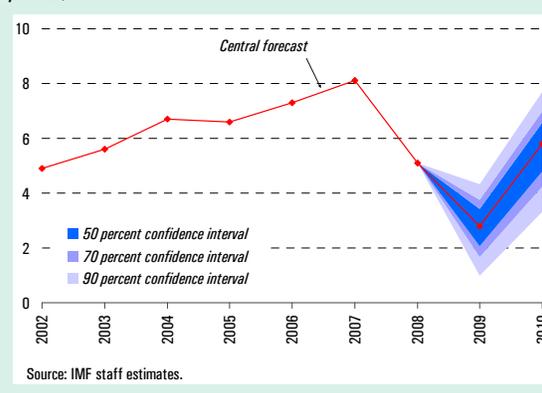


Figure 1.39. Asia GDP Growth
(Central forecast and 50, 70, and 90 percent confidence intervals; in percent)



- Achieving such a broad-based recovery, as Japan eventually did in 2003, requires advanced economies to address the balance sheet problems at the heart of the crisis.

In general, these conditions will not be met fully for some time. In a few special cases, however, the recovery is advancing so rapidly that output gaps are already starting to close and pressures are already emerging. In India, for example industrial production is recovering rapidly, and core inflation and inflation expectations are rising. In China, growth is accelerating, and the extraordinary pace of loan growth in the first half of 2009 raises the risk of future loan quality concerns. In Australia, the economy has rapidly regained strength on the back of surging commodity exports, mostly destined for China. Accordingly, in China signs of a slowdown in

credit growth are emerging, while in early October the Reserve Bank of Australia became the first central bank in a major country to raise interest rates since the onset of the crisis.

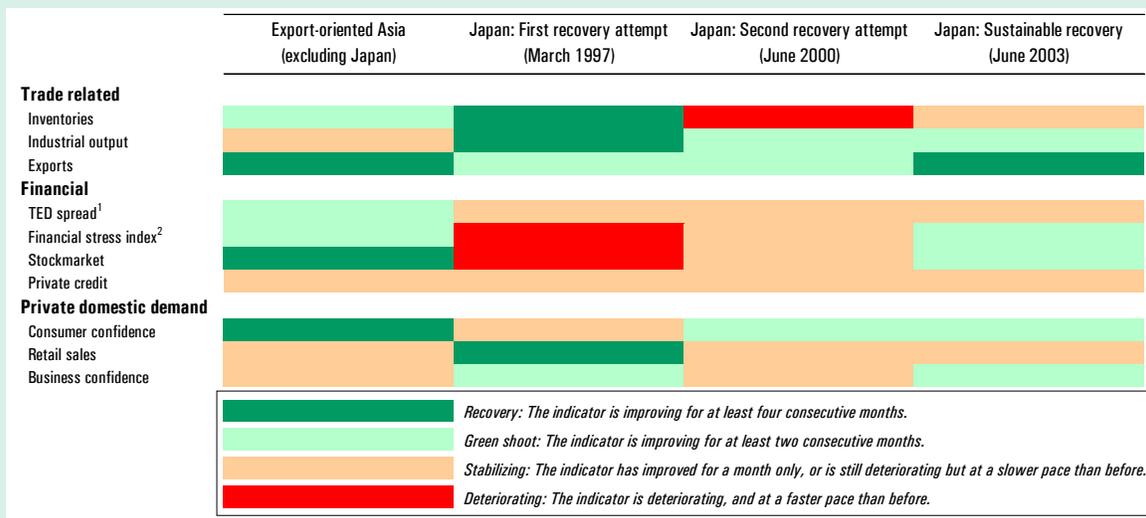
Elsewhere, however, a tightening of monetary policy in the near future seems unnecessary, for several reasons:

- The recovery so far remains tentative. In most countries, the pickup in activity has so far been supported by factors that either are temporary (inventory adjustment, policy stimulus) or could turn out to be so (rebounding capital markets and confidence). Especially in Japan and EEA, where the pickup in private domestic demand seems more tentative, these forces may not be enough for a self-sustaining recovery, if the rebound in other regions stalls.
- The risks of inflation at present are low. In most countries, large output gaps are likely to persist for some time and are even expected to widen next year in many cases, as growth is projected to remain below potential. Also, there is little evidence of inflationary risk from cost push

pressures—particularly important in Asia since nonmanufactured goods account for a large part of most CPI baskets. In particular, pressures from commodity prices are expected to remain moderate.

- The increase in asset prices so far has been limited. For example, although stock market price/earnings ratios have rebounded, they remain near long-term averages. And although housing prices have rebounded quickly in some countries, by and large the increases have been limited, and the sharp increases have been confined to certain locales (Figure 1.41). If Asian central banks nonetheless respond by raising interest rates while Western central banks sustain theirs at low levels, interest differentials will rise, attracting “carry trade–type” capital inflows that could aggravate asset price pressures. For all these reasons, it would seem preferable, at least initially, to address incipient asset price pressures through targeted prudential measures rather than the blunt instrument of monetary policy. Indeed some

Figure 1.40. Comparing Asia Now with Japan in the 1990s and Early 2000s



Sources: CEIC Data Company Ltd.; Thompson Datastream; Haver Analytics; and IMF staff calculations.

¹ Three-month (or short-term) money market rate minus equivalent T-bill rate.

² See Balakrishnan and others (2009). The index comprises seven variables capturing developments in the banking sector, the securities markets, and the foreign exchange markets.

central banks and financial regulators in the region have already done just that.⁵

For exactly the same reasons, it will be important to ensure that fiscal policy remains stimulative next year. With Asia recovering, most governments are not planning new fiscal stimulus packages. Current budgetary figures imply a withdrawal of fiscal stimulus in many Asian economies in 2010 (Figure 1.42)—particularly in advanced and export-dependent economies, which have experienced relatively larger cyclical weakening of their fiscal positions. But with the boost from global restocking likely to wane in the coming quarters, anemic final demand in Western countries, and weak Asian investment, fiscal support will likely need to continue for some time. Also, some targeted fiscal measures will need to be retained for the time being, especially employment support measures, as labor markets remain fragile.

That said, it is not too early to plan for a gradual, measured exit from the exceptional levels of policy support:

- Monetary stimulus:* Although the wide range of monetary measures adopted in the region has helped normalize credit markets, its legacy is an unusually high amount of liquidity lingering in the banking system and government intervention in credit allocation (Figure 1.43). This will need to be unwound gradually, at a pace reflecting the strength of economic recovery in individual countries. Initially, measures that have become redundant, such as government guarantees for domestic or external bond issuance, could be allowed to lapse. Then, countries could move on to measures that are still being utilized, where their removal could

⁵ In Korea, for example, the authorities have recently tightened prudential measures to cool the housing market, including by lowering maximum loan-to-value ratios and tightening debt-to-income ratio requirements. At the same time, Singapore eased its supply of land, and the Hong Kong Monetary Authority warned about excessive competition in mortgage lending.

Figure 1.41. Property Prices
(Index, 2006:Q1 = 100)

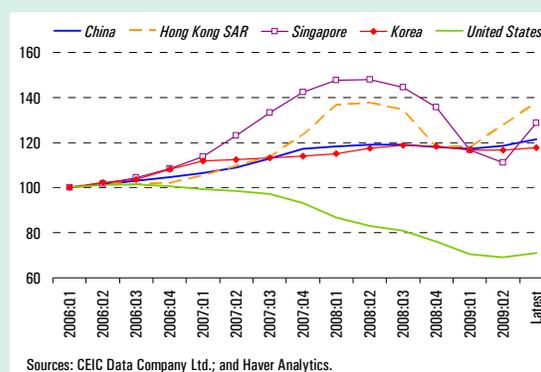


Figure 1.42. Fiscal Impulse in 2010¹
(In percent of GDP)

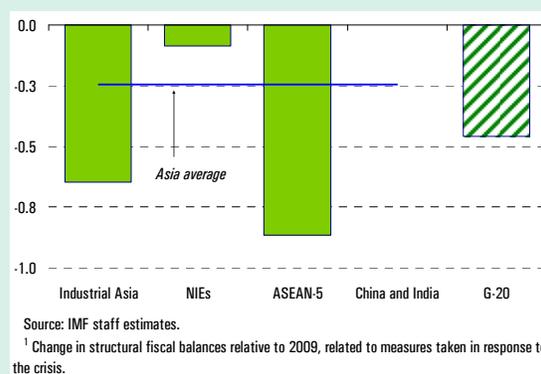
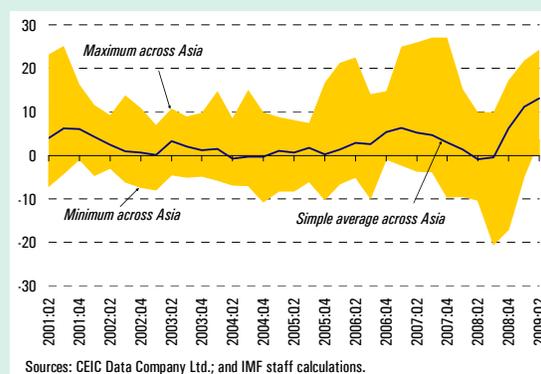


Figure 1.43. Asia: Difference Between Broad Money Growth and Nominal GDP Growth
(In percentage points; year-on-year)



potentially affect private sector activity. The pace of exit will need to be coordinated with fiscal policy, since, in mopping up excess liquidity, authorities could place undue stress on bond markets at a time when government debt issuance is increasing. In addition, in some cases, exit strategies will need to be coordinated within the region, so as to minimize the threat of destabilizing capital flows (see the October 2009 *Global Financial Stability Report*). In this regard, Singapore, Malaysia, and Hong Kong SAR have announced the creation of a working group to map out a coordinated strategy for the unwinding of the deposit guarantees by end 2010.

- *Fiscal stimulus:* Only a few Asian countries have so far announced specific medium-term consolidation plans. But these will be needed in some countries, for several reasons. To begin with, well-articulated plans to ensure fiscal solvency would bolster the effectiveness of the remaining stimulus, by reducing uncertainty and the risk of rising interest rate premiums. Indeed, concerns about the fiscal outlook have already led to rising long bond rates in many countries this year. In fact, even though economic recovery should allow fiscal deficits to subside, the debt-to-GDP ratio is projected to remain above precrisis levels in 2014 for most Asian economies, exceeding sustainable levels in a number of cases (Box 1.2). The size of the adjustment will need to be larger for those countries that are starting from relatively higher levels of debt (like Japan, India, and Malaysia) or are facing looming aging-related fiscal pressures (Japan and some NIEs).
- *Other policy support:* Particular attention should also be given to devising exit strategies from the SME credit guarantee schemes that have been adopted or expanded in many parts of Asia during the crisis. Aside from their potential fiscal costs, they also distort the playing field for firms and reduce incentives for firms to improve their financial performance. Even so, unwinding this form of support has typically

proved difficult. Over the past decade, the generosity and coverage of credit guarantee programs has tended to be enlarged with each downturn, but only partially pared back during upturns. The present crisis provides an opportunity to establish more effective ways of addressing market failures that may constrain the availability of credit to SMEs, while minimizing the cost to taxpayers (Box 1.7).

The Medium Term: Asia Rebalancing

The key medium-term challenge for Asia is to put in place policies that will allow it to restore sustained, rapid growth. With the external environment likely to remain weak for some time, demand from the West for Asia's advanced-technology manufacturing exports may not be as strong as in the past. This will have a significant impact on Asia because, despite the rapid rise of intraregional trade over the past decade, Asia remains relatively dependent on external demand (see the May 2009 *Asia and Pacific Regional Economic Outlook*). Indeed, the share of value added produced in Asian economies that can be attributed to final demand outside Asia has remained relatively constant over time, at about 30 percent on average in the region, with a peak of about 50 percent in Singapore (Figure 1.44).

The near-term scope for China to offset sluggish demand from advanced economies appears limited (Box 1.8). Certainly, China has recorded very high import growth rates for consumer goods—about 15 percent per year over the last 15 years, compared with a world average of 10 percent. Even so, it remains a relatively small importer of consumer goods, accounting for just 3 percent of global imports in 2008, with an even smaller share of consumer durables (Figure 1.45). As a result, its contribution to global import growth in consumer goods has also remained small. Moreover, despite China's rapid increase in per capita income, the composition of its imports remains very different from those of major import markets, suggesting that it may be difficult for global suppliers to switch rapidly from supplying advanced markets to meeting

Box 1.7. Exit from SME Support Measures

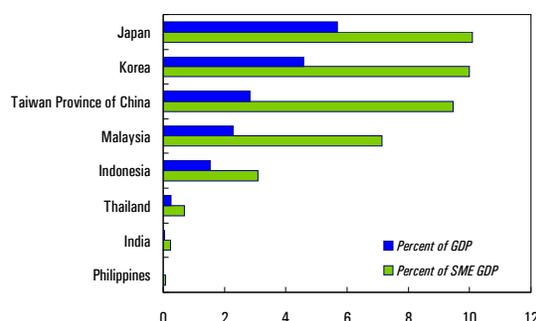
Small and medium-sized enterprises (SMEs) in Asia have been hit hard by the global slowdown. Shrinking cash flows and tighter financial conditions have put a strain on SMEs, forcing many to slash production or exit. In many Asian countries, SME bankruptcies and nonperforming loans have risen faster than those for larger firms. The impact on activity has been significant, as SMEs in Asia account for more than 90 percent of firms, three-fourths of total employment, and one-third of exports.¹ SMEs cover almost all sectors and play a critical role as suppliers to large export manufacturers.

Given SMEs' importance as a source of jobs and spending, Asian countries have responded by establishing or expanding various SME support schemes. Measures include subsidized lending and tax breaks, but the most common form of support is through public guarantees on bank lending to SMEs.

SME credit guarantee programs have been around for some time in Asia. Guarantee programs have a long history—dating back to the late 1930s in Japan and the 1960s in India and Korea—and were used extensively during the Asian financial crisis to support the corporate sector. Compared with other regions, Asia relies more on SME credit guarantees—about 2 percent of GDP in 2007, compared to 0.6 percent of GDP for a sample of 46 developed and developing countries (Beck, Klapper, and Mendoza, 2008). Schemes vary in size—from 5.7 percent of GDP in Japan to less than 0.1 percent of GDP in India and the Philippines—with the relative size of the SME sector explaining only part of the variation.

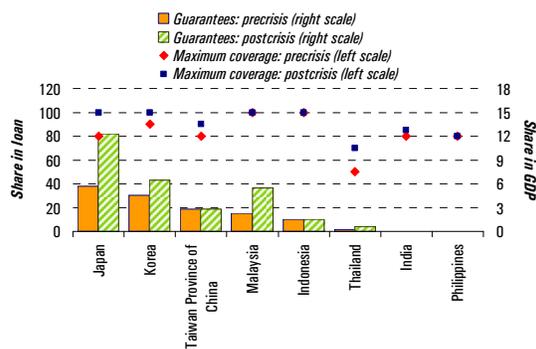
In addition to expanding the size of guarantees, policymakers have also made their coverage and terms more generous. Japan, Malaysia, and Thailand have more than doubled funding for their SME credit guarantee programs, and Korea announced a 50 percent increase, although only part of the additional amount has been used so far. In addition, many countries have increased the guarantee coverage, with four countries (Indonesia, Japan, Korea, and Malaysia) now guaranteeing 100 percent of certain loans, thereby eliminating any credit risk for banks. Other measures include raising the maximum guarantee amount per enterprise (India, Korea, and Taiwan Province of China), extending the maturity (Korea, Taiwan Province of China), relaxing credit standards (Korea), and reducing guarantee fees (Taiwan Province of China).

Selected Asia: Outstanding SME Credit Guarantees, 2007



Sources: Annual Reports of Credit Guarantee Institutions and Asian Credit Supplementation Institution Confederation; and IMF staff calculations.

Selected Asia: Crisis Response
(In percent)



Source: IMF staff estimates.

Note: The main authors of this box are Erik Lueth, Chad Steinberg, and Murtaza Syed.

¹ Although definitions differ across the region, more than 95 percent of SMEs in the region employ fewer than 100 people (Harvic, 2004).

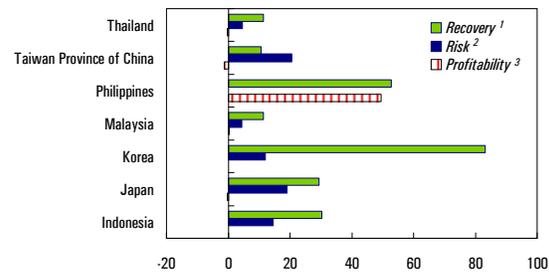
An evaluation of past performance suggests that a rapid expansion in guarantees can be very costly. Although up-front costs are low and liabilities contingent, guarantee programs seldom come cheap. The financial performance of most schemes has been poor, with profitability generally lower for those that are more leveraged and with more generous coverage (Shim, 2006). Revenues from guarantee fees, ranging from 0.25 to 3 percent of the principal, typically cover less than three-fifths of outlays, but risks can be high, especially in Japan, Indonesia, and Taiwan Province of China, where the schemes are leveraged at close to 20 times capital. To compensate for losses—which tend to escalate during major downturns—governments have been forced to find budget space to replenish their capital.

Moreover, unwinding such support has proven difficult. The size and coverage typically rise with each crisis, but are only partially pared back during the subsequent recovery. As a result, costs tend to be recurring. For example, in Korea after the financial crisis, the two major guarantee programs reported annual losses of almost 4 percent of outstanding guarantees between 2001 and 2005 (Shim, 2006). In Japan, a program that started in 1998 extended nearly ¥29 trillion in credit guarantees with 100 percent coverage over about three years, resulting in net losses to the government of about ¥2 trillion.

Asia's experience with generous guarantees highlights the need to design an effective exit strategy that both supports restructuring and minimizes fiscal risks.

- In the short-term, credit guarantees could be redesigned to better align incentives and facilitate an unwinding of support once the crisis abates. For instance, blanket guarantees could be replaced with partial coverage (as was done in Japan in 2001) and set at a level more in line with the international average of 60–80 percent. Guarantee fees could also be adjusted based on risk to offset credit costs and provide stronger incentives for banks to restructure their problem borrowers. Charging higher fees based on the duration of the loan or coverage of the guarantee, as is done in Brazil and Colombia, could have similar benefits. Consideration could also be given to including a sunset clause for schemes implemented during the crisis, contingent on economic developments, as is done in Korea.
- Over the longer term, attention should shift away from relying on guarantees to addressing the root cause of SMEs' limited access to credit. Research suggests that improvements in the financial infrastructure can expand credit availability, such as by liberalizing the interest rate regime, expanding credit information sharing, and improving the tax, regulatory, and legal environment (Beck and Demirgüç-Kunt, 2006). Some promising policies already underway in Asia include expanding credit bureaus, allowing the securitization of movable assets, and developing venture capital markets for SMEs. New institutions to encourage markets, rather than the government, to provide insurance could also be considered; in China, for instance, credit guarantees are largely privately provided.

Selected Asia: Performance of Credit Guarantee Agencies
(In percent; latest year available)



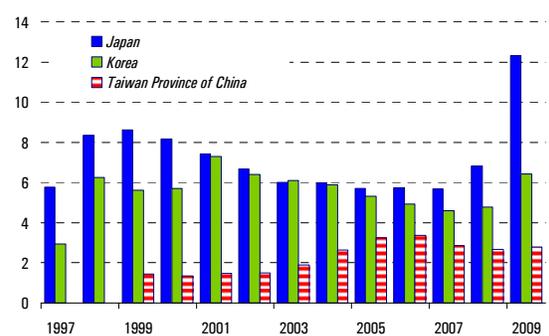
Sources: Reports of credit guarantee agencies; and Shim (2006).

¹ Recovery-to-payments.

² Outstanding guarantees-to-capital.

³ Profits-to-outstanding guarantees.

Selected Asia: SME Credit Guarantees
(In percent of GDP)



Source: IMF staff estimates.

Box 1.8. Global Shifts in Demand: Making Up for Weaker Consumption in the United States

By any measure, Asia is highly dependent on external demand. A compelling metric comes from an input-output analysis that traces indirect trade linkages to final demand without double-counting the cross-border flows of intermediate goods. Detailed input-output tables for the largest Asian economies show that value added in export-related activities exceeds one-third of GDP in many countries—substantially more than the average for advanced economies.¹ The data also show that the bulk of exported value added is in most cases linked to destinations outside Asia.

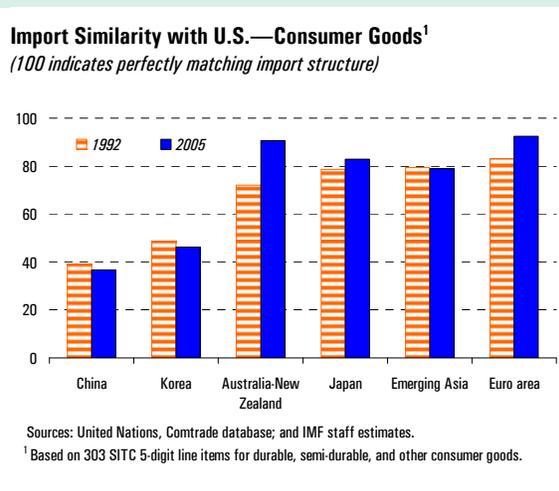
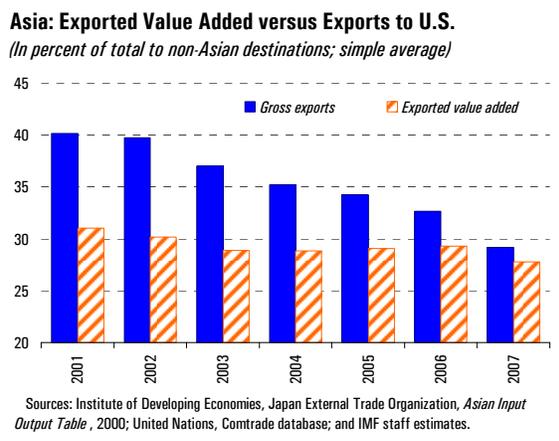
Asia depends primarily on consumers in the large advanced economies. Gross trade data give a distorted picture of the nexus between Asia’s exports and U.S. consumption, since they do not properly capture China’s role in the supply chain for consumer goods exports from Asia. Taking into account intra-Asian production linkages, the United States has consistently accounted on average for about one-third of Asia’s exported value added. The bulk of this exported value added is traceable to demand for consumer goods—about 70 percent in the case of ASEAN and China, and about 60 percent for Japan and Korea.

In light of this dependence, what are the implications for the region of weak consumption in the United States? In particular, can China’s consumers alone make up for the faltering demand of consumers in the United States and thus sustain regional growth? There are at least two reasons for thinking that such an offset is not likely.

First, China’s economic size is small compared with that of the United States. GDP at current exchange rates is about one-fifth of that in the United States—and private consumption is just over one-eighth of that in the United States.

Other indicators reinforce the point: China’s share in world imports of consumer goods is about 3 percent, and its share in world import growth has averaged only 4 percent in recent years. Just because of the smaller economic footprint, the demand adjustment needed in China to compensate for a pullback by U.S. consumers is unlikely without, among other things, sweeping adjustments in the allocation of resources. This would take time under the best of circumstances.

Second (and more subtly), even if a large demand adjustment took place in China, the current composition of its consumption suggests that regional spillovers would be limited. The import content of domestic consumption in China is significantly smaller than that in the United States. Moreover, the consumer goods imported by China are very different from those



Note: The main authors of this box are Sanjay Kalra, Adil Mohammad, Papa N’Diaye, and Olaf Unterberdoerster.

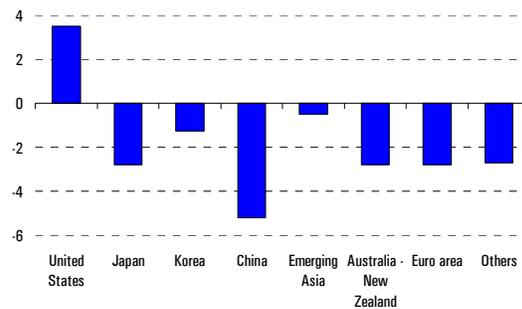
¹ Using the methodology in Peltonen and Pula (2009), input-output tables have been constructed for 1995–2008 based on the 2000 *Asian Input-Output Table* provided by the Japan External Trade Organization.

imported by U.S. households. Measured by an import similarity index for more than 300 types of consumer goods, the consumer goods basket imported by China overlaps by only about 35 percent with that in other advanced economies.²

These observations are supported by model-based analysis. Simulations from the IMF's GIMF model show that the negative impact on Asian exports of a rise in the saving ratio in the United States could not be offset by an equal decrease in that ratio in China. In this scenario, positive spillovers to the region from greater Chinese demand would at best mitigate one-third of the adverse shock from lower U.S. consumption. In fact, once confidence effects and financial linkages are taken into account, the impact of an adverse shock emanating from the United States could be much bigger—as recent experience shows.

Thus, a broad array of policies would be needed in the region to ensure sustained strong growth in an environment of weak export demand from advanced economies. As highlighted in the October 2009 *World Economic Outlook*, these policies would entail reforms in the provision of public goods (for example, education, health, and social protection) and financial services to lower precautionary savings, as well as measures to boost productivity in the nontradables sector. More flexible exchange rates would over time also help in allocating resources toward domestic-demand-oriented industries.³

Export Impact from Changes in U.S. and China Savings Rates¹
(Percent difference from baseline)



Source: IMF staff calculations.
¹ Assumes U.S. (China) private savings increases (decreases) by 2 percentage points of GDP.

² Based on SITC-5 digit data comprising over 300 line items for consumer goods, the import similarity index between two economies j_1, j_2 is $100 \sum_i s(i, j_1) s(i, j_2) / (\sqrt{\sum_i s(i, j_1)^2} \sqrt{\sum_i s(i, j_2)^2})$ where $s(i, j)$ is the share of good i in country j 's imports.

³ See N'Diaye, Zhang, and Zhang (2009).

the needs of Chinese consumers. Among export-dependent Asian economies, only Korea and Taiwan Province of China have been able to gain significant market shares in the Chinese consumer market over the last two decades.

All this means that Asia's growth prospects may be determined by its ability to diversify the drivers of growth to domestic sources. This will require structural reforms across a wide range of fronts.

- Chapter 3 shows that financial sector and corporate governance reforms will be needed to address issues relating to the region's corporate savings. Over the past few years, Asia has witnessed a sharp increase in corporate savings, even as investment has remained subdued (Figure 1.46). This unusual combination has posed two puzzles. Why did corporations not

pay out their profits as dividends, if they did not have suitable investment projects? And why did households not respond to the increase in corporate wealth by increasing their consumption? The chapter finds that financial and corporate governance reforms are the keys to solving the puzzle and addressing the underlying problems. Greater financial development could increase access to capital for a greater number of firms and reduce firms' need to retain earnings in order to self-finance profitable investment projects. Meanwhile, improvements in corporate governance could impose greater discipline on corporate managers and create incentives for them to retain earnings only insofar as their firms have profitable projects in which to invest.

Figure 1.44. Selected Asia: Contributions of Final External Demand to Total Value Added
(In percent)

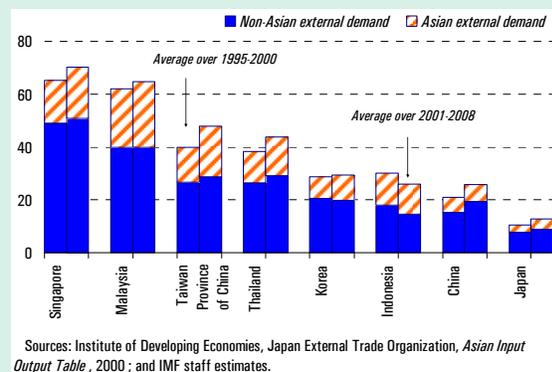


Figure 1.45. Contributions to Growth in World Imports: Consumer Goods
(In percent over previous five years; excluding intra-group trade)

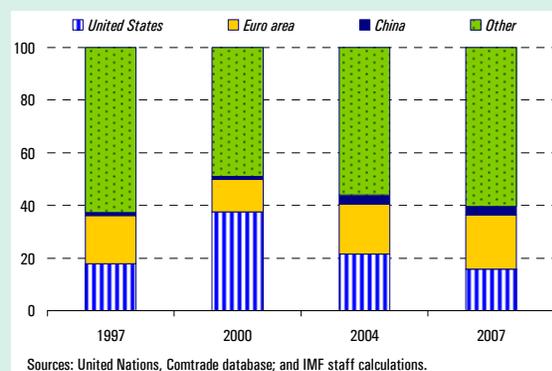
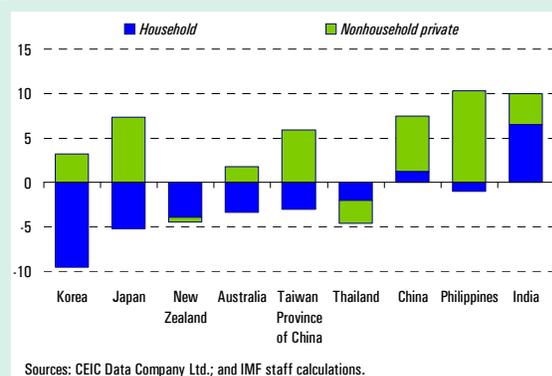


Figure 1.46. Selected Asia: Private Savings—Changes in the Share of Household and Nonhousehold Savings in GDP
(In percentage points; difference between the average during 1990–96 and 2003–most recent)



- Reforms would also be needed to raise household incomes and reduce the relatively high level of precautionary savings. For example, many countries still lack comprehensive systems of social insurance that cover health care expenses, education, and retirement. Some progress has been made recently on this front; China for example, has approved an ambitious plan to develop a national health care system over the next three years. However, more reforms are needed. Moreover, these reforms are likely to have a long gestation period and should therefore be put forward quickly and decisively.
- Finally, measures will be needed to encourage resources to move to the sectors of the economy with greater potential, especially nontradables sectors like services. Such a shift would be facilitated by greater flexibility in exchange rates.

The Role of the IMF during the Crisis and in the Post-Crisis World

The IMF has mobilized on many fronts to support its member countries during the economic crisis. It has stepped up emergency financing dramatically, with commitments amounting to over twice as much as during the Asian crisis. The capacity to extend concessional loans has been scaled up to US\$8 billion in the next two years—more than triple what was available before the crisis—and up to US\$17 billion through 2014. The IMF has also drawn on its cross-country experience to advise on policy solutions, boosted global liquidity, increased its lending resources, and introduced reforms to modernize its operations and become more responsive to member countries' needs. There has also been a historic agreement to strengthen IMF governance by shifting quota shares toward underrepresented members.

In particular, progress has been made in the following areas:

- Surveillance.* The IMF's monitoring, forecasts, and policy advice, informed by a global perspective and experience from previous crises,

have served as important inputs for the policy deliberations of the G-20 and of the entire IMF membership. The G-20 has given the IMF an important new multilateral surveillance mandate, by asking it to support the G-20's mutual assessment efforts.

- *Global liquidity.* An allocation of US\$283 billion in Special Drawing Rights (SDRs, the IMF's reserve currency) has boosted member reserves. Central banks in Asia have received about US\$54 billion through the SDR allocation.
- *Lending resources.* The IMF's lending resources are being tripled, to US\$750 billion. Asia-Pacific is contributing significantly to this financing effort, providing US\$178 billion through the New Arrangements to Borrow, a credit arrangement between the IMF and a number of member countries and institutions, and Note Purchase Agreements, which allows members to invest in IMF paper.
- *Lending facilities.* The IMF has overhauled its general lending framework to make it better suited to country needs. Several changes have taken place. First, the Flexible Credit Line (FCL), a precautionary facility, has been launched. It provides financial insurance for countries with very strong fundamentals, policies, and track records of policy implementation.

Disbursements are not phased, and there are no conditions to meet once a country has been approved for the FCL. Second, borrowing limits have been doubled for all countries.

Concessional loans will be interest-free through 2011. In Asia, Mongolia and Sri Lanka have already received new, high-access financing from the IMF (Box 1.9). Third, conditionality has been streamlined, to focus only on core policy measures that are critical for macroeconomic stability and growth. The IMF is also accommodating higher budget deficits in both concessional and nonconcessional lending programs and IMF programs now have special provisions for protecting the poorest and most vulnerable.

- *Governance.* The IMF membership has agreed to a shift in quota shares to dynamic emerging markets and developing countries, of at least 5 percent from overrepresented to underrepresented countries. This shift should give Asia a greater voice in the IMF, in accordance with its weight in the global economy. It will come on top of the 1.6 percentage point shift in quota shares to emerging market and developing countries that was agreed in April 2008.

Box 1.9. Macro-Stabilization in Mongolia: An Emerging Success Story

The global economic crisis hit Mongolia hard, in large part as a result of a precipitous drop in copper prices. The Mongolian authorities' strong policy implementation, however, supported by an IMF program and with timely support from donors, has helped it weather the worst of the global storm and put its economy back on a path to sustainable growth with low inflation.

The collapse in global commodity prices hit both the country's fiscal position and its balance of payments. The price of copper, a key export for Mongolia, fell precipitously in 2008, dropping over 60 percent from its peak. This led to a sharp drop in export earnings and a loss of 5 percent of GDP in fiscal revenue. Making matters worse, macro policies during the boom years had been excessively procyclical, which meant that Mongolia entered the crisis with inflation reaching as high as 30 percent and an overvalued currency. The boom in credit has also swelled bank balance sheets, and insufficient attention to prudent risk management within the banks exposed their balance sheets to the deterioration in market conditions.

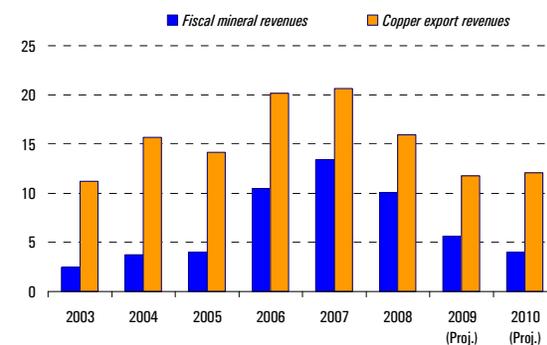
By late 2008 the economic situation was becoming critical. International reserves were being depleted amid outflows from the banking system, despite the authorities' allowing the exchange rate to depreciate substantially. The nominal depreciation, while needed, also served to weaken bank balance sheets. In October 2008, the fourth-largest bank was hit by a bank run and was taken into conservatorship by the central bank. The situation was precarious, with confidence in the banks, the currency, and the wider economy sliding fast.

An IMF-supported program was quickly agreed and implemented. The IMF approved an exceptional-access Stand-By Arrangement on April 1, 2009, for US\$235 million. This catalyzed other donors and the World Bank, with the authorities holding a donor conference shortly prior to the IMF Executive Board meeting that secured pledges for some US\$200 million in budgetary support—primarily from the Asian Development Bank, Japan, and the World Bank itself.

The authorities' economic program focused on the key priority areas. First, the government aimed to restore health to public finances, starting with passage of a revised 2009 budget.

Second, with more than one-third of the population living below the poverty line, it was imperative to take urgent steps to address the economic downturn and protect Mongolia's most vulnerable citizens. As part of the economic measures taken, social transfer programs were protected, and the government began to design a comprehensive overhaul of these programs, to improve targeting and raise the level of social support to the very poor. Third, the central bank raised interest rates and introduced a transparent mechanism for auctioning foreign exchange in order to safeguard international reserves and steadily lower inflation. Finally, the economic program sought to bolster confidence in the banking system, including by improving the deposit guarantee system and enhancing bank supervision. Its conditionality was parsimonious and entirely focused on these priorities.

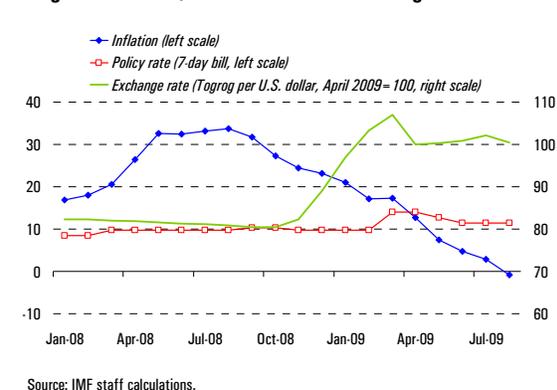
Mongolia: Mineral Revenue
(In percent of GDP)



Note: The main author of this box is Steven Barnett.

The authorities' strong policy implementation and strong ownership of fiscal and monetary policies served to stabilize financial markets quickly. A front-loaded increase in the policy rate, in combination with a flexible exchange rate, worked to stem capital outflows and ease pressure on the currency. Passage of a revised budget enhanced fiscal credibility. Improvements to the deposit guarantee system bolstered confidence in the banking system. Finally, IMF financial support and the catalytic impact that it had on donors increased confidence. The combination led deposits to flow back onshore and into the financial system, easing pressures on the banks and allowing the central bank to begin rebuilding its international reserves.

Mongolia: Inflation, Interest Rate and Exchange Rate



The quick turnaround in confidence allowed economic policies to be adapted to improved market conditions. With pressure on the currency easing faster than expected, international reserves being rebuilt, and inflation coming down, within a couple of months of program approval, the central bank already had scope to begin a gradual easing of monetary policy. Further, as financing constraints eased, the program's fiscal targets were recalibrated to provide additional support to the economy and allow greater room for automatic stabilizers to operate. Moreover, the IMF's recent SDR allocation provided US\$75 million in additional resources that have been deployed to finance the fiscal position for this year and next.

Looking forward, the outlook for the Mongolian economy is encouraging. The economy stands to benefit enormously from its mineral wealth. Indeed, agreement on major investments in one of the world's largest copper-mining projects has recently been reached and looks set to generate significant economic benefits for Mongolia in the coming years. Managing this wealth will present its own challenges. However, the Mongolian government is fully aware of the need to improve Mongolia's institutional structure and is in the process of designing a comprehensive Fiscal Responsibility Law that will promote prudent fiscal management, carefully manage the country's resource wealth, and help contain the past tendency toward procyclical fiscal policy. This and other reforms that have been under the umbrella of the IMF program should be able to steer the economy down a path of strong, sustainable, and equitable growth with low inflation and improving living standards for all of Mongolia's citizens.

II. How Japan Recovered from Its Banking Crisis: Possible Lessons for Today

Is the recovery from the global financial crisis now secured? The crisis that stalled Japan's growth miracle in 1990s may provide some clues. This chapter explores the parallels between the two crises and draws potential implications for the current global recovery. On two occasions during Japan's crisis, "green shoots" withered as the economy was buffeted by severe external shocks aggravated by a still-fragile financial system, forcing policymakers to intervene with more aggressive support. A sustainable recovery took hold only when spillovers from a favorable external environment reinvigorated private demand and the financial and corporate sector problems at the heart of the crisis were adequately addressed. Japan's experiences suggest three possible lessons for policymakers today. First, green shoots do not guarantee a recovery, implying a need to be cautious about the outlook. Second, financial fragilities can leave an economy vulnerable to adverse shocks and should be resolved for a durable recovery. And third, while judging the best time to withdraw policy support is difficult, clear medium-term plans may help.

Following two quarters of free fall, the latest economic news from across the world provides grounds for cautious optimism. Buoyed by a sharp rebound in Asia together with stabilization or modest recoveries in other regions, the world economy seems to slowly be returning to life. The panic that gripped global financial markets last fall has also receded significantly, although stresses remain. In differing patterns and intensity, green shoots are sprouting across the world, fueling hopes that the Great Recession may be ending and that an enduring recovery could be around the corner.

But has the global economy reached a true turning point, and should policy support be reversed anytime soon? Aggressive macroeconomic stimulus,

unprecedented financial sector interventions, and restocking associated with global inventory cycles are providing an important boost to activity. Beyond these transient forces, however, the durability and shape of the recovery are likely to vary across economies, based, among other things, on the health of their financial systems, the soundness of private sector balance sheets, and their relative dependence on external demand and financing. Looking ahead, policymakers in individual economies will need to judge the extent to which any recovery that may be underway is on a firm footing, based primarily on whether private demand is sufficiently well placed to replace generous government support.

To help assess current economic prospects, this chapter recalls Japan's experiences with incipient recoveries during its banking crisis of the 1990s. Many commentators have noted the striking similarities between Japan's "lost decade" and the ongoing crisis, notably with respect to their genesis and the policy challenges they posed. During the spring, when the crisis was turning global, the May 2009 Asia and Pacific *Regional Economic Outlook* looked back at the lost decade in search of lessons for combating the outbreak and containing its fallout. With conditions now having stabilized, this chapter revisits Japan's history for insights on the process of economic recovery, highlighting two episodes in which green shoots emerged but could not be sustained. Based on Japan's experience, the chapter asks:

- Are current green shoots harbingers of a true turning point or "false dawns" propped up by stimulus and other temporary factors?
- What are the key signs of a sustainable economic recovery, and how important are efforts to restore the soundness of creditor and debtor balance sheets?

Note: The main authors of this chapter are Kenneth Kang, Murtaza Syed, and Kiichi Tokuoka, with assistance from Souvik Gupta, Ioana Hussiada, and Adil Mohommad.

REGIONAL ECONOMIC OUTLOOK: ASIA AND PACIFIC

- How should policymakers design and articulate exit strategies, even if they are implemented only after a durable recovery takes hold?

For Asia, these questions have an added significance. First, they could be informative about the likely endurance of the rebound that is underway within the region. Second, given the region's high exposure to demand from the United States and Europe, the outlook for these key trading partners has important implications for Asia's ability to sustain high rates of growth in the short run, as well as the urgency of rebalancing over the medium term.

Japan's Lost Decade: From Crisis to Recovery

Contrary to popular perception, Japan's lost decade was not an uninterrupted period of economic decline, but involved three distinct phases (Figure 2.1). On two occasions, green shoots of recovery emerged, allowing stimulus to be withdrawn. However, on both occasions, the external environment subsequently deteriorated dramatically, and the shock to the economy was magnified by a still-fragile financial system. A more severe downturn ensued, necessitating even more aggressive stimulus to support real activity and magnifying the longer-term challenges associated with unwinding policy support. An enduring recovery was ultimately possible only when financial and corporate sector problems at the heart of the crisis were addressed, allowing a resumption of

policy stimulus and a favorable external environment to reinvigorate private demand.

By the time it was over, Japan's crisis featured three dips in activity and spanned almost a dozen years. As the crisis unfolded, the Japanese authorities faced a set of challenges unprecedented in the postwar era and responded with innovative measures that ultimately proved successful. Japan's crisis also highlights the tremendous uncertainty involved in judging the strength of recovery from a postbubble recession and the difficulty in timing the exit from policy support. In particular, while fragilities in the financial system and debtor balance sheets remain, a recovery can be derailed by unforeseen adverse shocks. This section summarizes Japan's experiences with fledgling recoveries that did not endure and the keys to its eventual sustained turnaround.

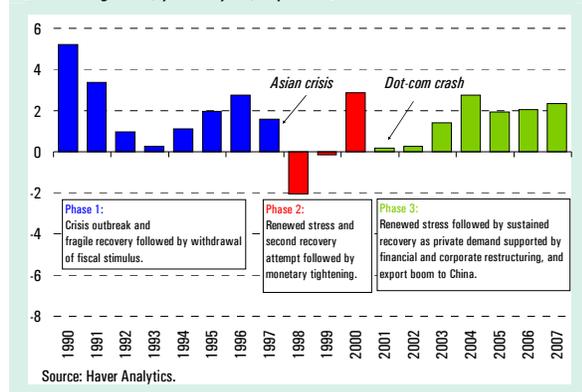
Phase 1: 1990–97—Crisis Outbreak and Fragile Recovery

Much like the Great Recession, Japan's crisis was sparked by the collapse of bubbles in its stock and real estate markets in the early 1990s. After tripling during the latter half of the 1980s, these markets collapsed in 1989–90. Whereas real estate prices declined continuously over the next decade, the stock market staged intermittent bull runs (1995–96) and (1999–2000), only to subsequently slide to new lows. As in the present situation, private debt also escalated in the lead-up to Japan's crisis, although it reflected borrowing by firms, not households.

The fallout was relatively muted during the first phase of the crisis, as the bursting of the twin bubbles stalled Japan's long postwar expansion for a few years. For two decades, Japan had enjoyed the strongest growth among advanced economies, expanding by almost 4 percent annually after the oil shock of 1973, compared with an average among countries of the Organization for Economic Cooperation and Development (OECD) of about 2¾ percent. Over the same period, unemployment was less than half the OECD average and inflation almost 3 percentage points lower. After the bubbles burst, the economy stagnated, with growth falling to

Figure 2.1. Phases in Japan's Banking Crisis

(Real GDP growth; year-on-year, in percent)



II. HOW JAPAN RECOVERED FROM ITS BANKING CRISIS

an average of 1½ percent between 1991 and 1994. Unemployment ticked up, and inflation fell gradually from highs of about 3½ percent, although credit growth remained relatively resilient and official nonperforming loans (NPLs) were low.

By the middle of the decade, green shoots were sprouting in the face of policy stimulus. With the Bank of Japan (BoJ) cutting policy rates to near zero by 1995, together with successive fiscal stimulus packages, the economy was expected to emerge relatively quickly from what was seen as a cyclical downturn. Indeed, a recovery appeared to be taking hold from 1994, with growth and inflation picking up, unemployment leveling off, and the stock market rallying. Industrial production also recovered, supported by a technical correction related to the inventory cycle (Figure 2.2). Signs of recovery allowed policy stimulus to be withdrawn—with a fiscal consolidation effort launched in April 1997 in response to concerns about escalating public debt (Figure 2.3).¹

Phase 2: 1997–2000—Renewed Systemic Stress and Second Recovery Attempt

The Asian crisis then struck in 1997, pushing the economy into a second and more virulent phase of crisis and bringing Japan close to a financial meltdown. The bursting of the asset bubbles had left Japan’s financial system saddled with large NPLs, but these were masked by regulatory forbearance and their full scale not properly diagnosed. The increasing mistrust of financial institutions came to a head when the external environment deteriorated unexpectedly as a result of the Asian crisis—mounting losses on failed real estate loans and falling share prices led to a seizing up of the interbank markets and a wave of large-scale failures in the financial sector. The real impact was severe, as a credit crunch ensued and the economy contracted for two years in a row (in both 1998 and 1999).

¹ As announced two years earlier, the consumption tax rate was raised to 5 percent from 3 percent in 1997, and a temporary income tax cut was lifted. At the same time, social security premiums were raised.

Figure 2.2. Japan: Industrial Production and Unemployment

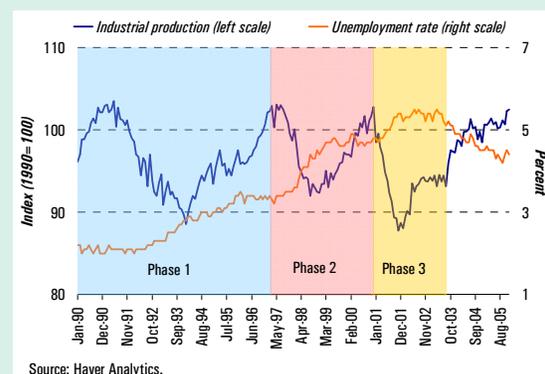
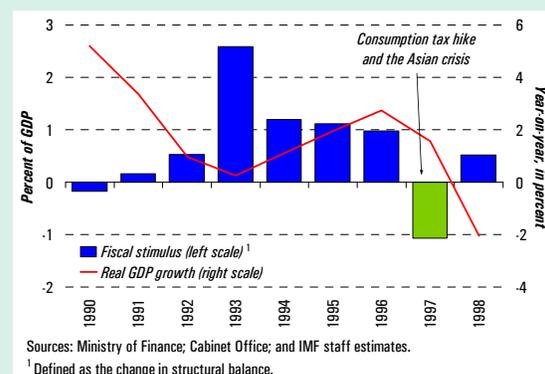


Figure 2.3. Japan: Fiscal Stimulus and Growth

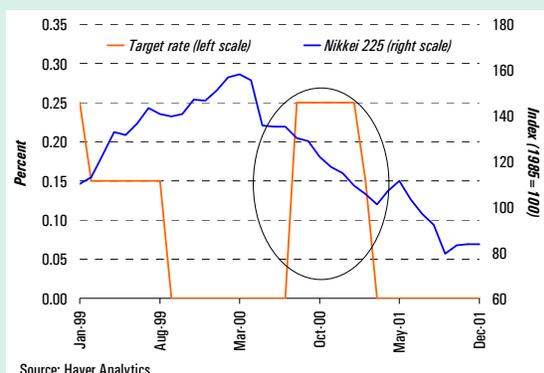


The economy then seemed to mend between 1999 and 2000. In the aftermath of the 1997 crisis, capital was injected into the banking system—albeit with few conditions and without tackling the NPL problem—and policy stimulus was reintroduced, in the form of larger fiscal packages and a shift to a zero-interest rate policy. These actions helped to calm markets and supported a pickup in activity. With the worst seemingly behind, the policy rate was raised modestly by 25 basis points in August 2000 (Figure 2.4).

Phase 3: 2001–03—Renewed Systemic Stress Followed by Sustained Recovery

The collapse of the global information technology bubble from March 2000 onward triggered a third phase of financial and economic stress as deteriorating corporate profits strained the still-fragile banking system, and policy stimulus was

Figure 2.4. Japan: Policy Rate and Stock Market Index



reintroduced. With the economy barely growing in 2001 and 2002, a large output gap opened up. As credit contracted in the face of long-delayed but much-needed deleveraging, unemployment rose to a postwar high of 5½ percent in 2002, and NPL ratios peaked at almost 9 percent. Against this weak economic backdrop, public debt rose to nearly 75 percent of GDP in net terms, easily the highest among advanced economies.

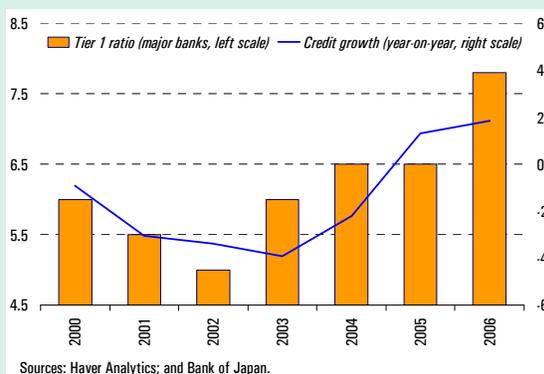
A comprehensive strategy for addressing underlying problems in the financial and corporate sectors was finally put in place in 2002–03. A more aggressive approach to dealing with problem loans and capital shortages in the banking system was adopted, helping to restore confidence in the banking system (Figures 2.5 and 2.6). In addition, corporates—helped by a push to restructure distressed assets—made significant progress in shedding the “triple excesses” of debt, capacity, and labor from the bubble period (Figure 2.7). As a result, corporate debt, which had continued to rise even after the bubbles burst—from 80 percent of GDP in the early 1980s to 120 percent in 1995—returned to prebubble levels by 2004.

Figure 2.5. Japan: Nonperforming Loans
(In billions of yen)



What was different about the third episode? A more aggressive approach to restoring financial health combined with positive growth stimulus from China enabled a more durable expansion to finally take hold. In contrast to the earlier recovery attempts, private domestic demand was on a stronger footing (Figure 2.8), supported by a revitalized banking system and a healthier corporate sector. As a result, sustained growth finally resumed—averaging a healthy 2 percent between 2003 and 2007—on the back of a virtuous circle, with bank and corporate profits rebounding, credit flowing again, employment rising, the stock market surging, and investment picking up (Figure 2.9). Favorable global conditions, together with a real effective depreciation associated with deflation and a weak yen, also benefited the recovery, with net exports accounting for about a third of Japan’s growth during this period.

Figure 2.6. Japan: Bank Capital and Lending
(In percent)



From Stimulus to Exit: Japan’s Disengagement Strategies

The exceptional actions described above eventually needed to be unwound to avoid undermining longer-term growth and macroeconomic stability. Policymakers faced the difficult dilemma of maintaining stimulus long enough to support growth and prevent deflation, while considering the appropriate timing of exit to prevent new imbalances and a rise in public debt. The costs of unconventional monetary and financial policies also increased over time, notably by reducing market activity, compressing credit spreads, and dampening incentives for restructuring.² Twice the authorities withdrew stimulus under what appeared to be favorable conditions before having to ease policies again as underlying financial and balance sheet fragilities left the economy extremely vulnerable to adverse shocks. Against this backdrop, the next section will discuss possible ways to judge the appropriate timing of exit on the basis of trends in high-frequency indicators. In addition to the timing, the choice of instruments to achieve the unwinding is another key policy challenge, and Japan’s exit experiences are also likely to be informative in this regard.

Japan found unwinding its fiscal policies to be particularly challenging. Although a law aiming to reduce deficits over the medium term was formulated in 1997, it was quickly scrapped in light of the sharp economic contraction at the beginning of the second phase of Japan’s crisis. Only in mid-2001 was a target for achieving a primary balance (excluding the social security fund) announced, by which time net debt had quintupled on weak growth, stagnant tax revenues, and increased spending (Figure 2.10). The protracted downturn and the delay in framing a medium-term strategy saw the income tax cut introduced in the late 1990s only fully lifted 10 years later (in 2007), contributing to persistently large deficits and a continued rise in

² For example, ample liquidity and low interest rates may have delayed the recognition of problem loans and undermined market discipline by making it easier for essentially insolvent borrowers to remain current on their interest payments.

Figure 2.7. Japan: “Triple Excesses” of the Corporate Sector (In percent)

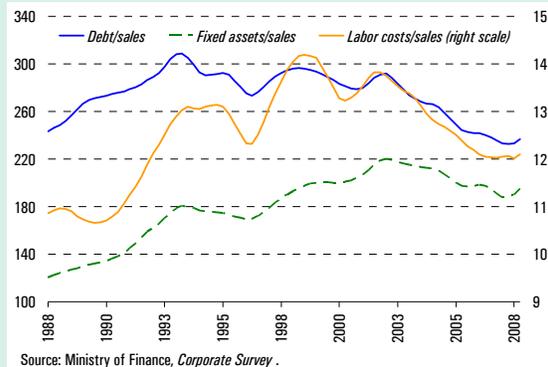


Figure 2.8. Japan: Contributions to GDP Growth (In percent)

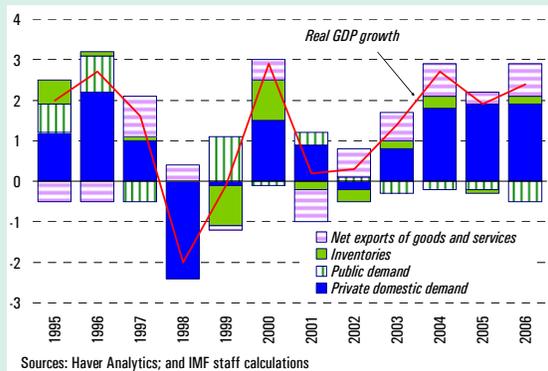


Figure 2.9. Japan: Corporate Leverage and Investment (In percent)

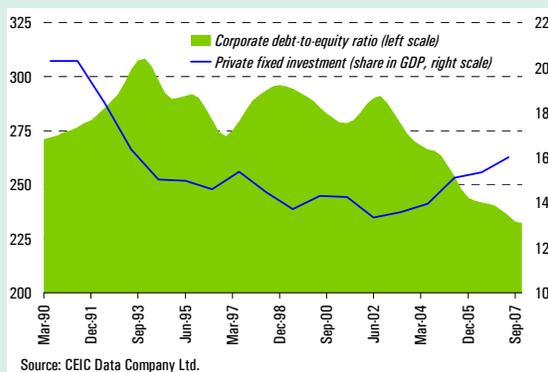


Figure 2.10. Japan: Public Debt
(In percent of GDP)

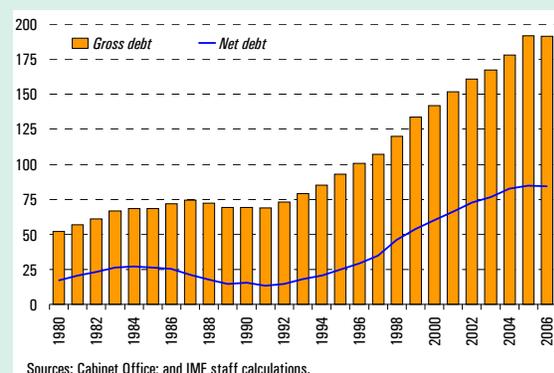


Figure 2.11. Bank of Japan Assets
(In trillions of yen)

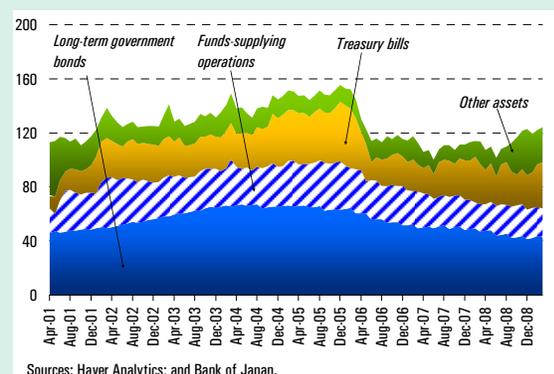


Table 2.1. Japan: Public Funds Allocated to the Financial Sector (1999–2008)

	Allocation		Recovery as of March 2008	
	Trillions of yen	Percent of GDP	Trillions of yen	Recovery rate (%)
Grants of loss coverage	18.6	3.6	8.2 ¹	...
Asset purchases	9.8	1.9	9.6	98.0
Capital injection	12.4	2.4	10.2	82.3
Others	6.0	1.1	4.9	81.7
Total	46.8	9.0	32.9	70.3
Excluding grants	28.2	5.4	24.7	87.6

Sources: Bank of Japan; Financial Services Agency of Japan; and Deposit Insurance Corporation of Japan.

¹ 10.4 trillion yen is covered by the taxpayers, with the remaining amount scheduled to be covered by deposit insurance fees paid by financial institutions.

public debt. While long-term yields have remained low given the large available pool of domestic savings, the elevated public debt—now approaching 200 percent of GDP in gross terms—continues to limit policy flexibility.

Exit was more successful in the monetary arena, as the BoJ was able to end quantitative easing and smoothly unwind its balance sheet. In October 2003, the BoJ clarified the timing of its exit by announcing two necessary conditions: that core CPI be nonnegative for a few months and that it be forecasted to remain positive by a majority of Policy Board members. This also helped the BoJ to better manage market expectations about the future path of interest rates (the so-called policy duration effect). With these conditions met, the BoJ announced in March 2006 that it would gradually drain liquidity while keeping overnight interest rates effectively at zero. By July of that year, the BoJ had smoothly transitioned to a more normal monetary framework, with current account balances normalizing and the policy rate raised.

Since quantitative easing in Japan had relied mainly on extended liquidity operations and the purchase of government securities, the BoJ was able to exit through normal open market operations. Given its large holdings of short-dated government paper, the BoJ managed to withdraw liquidity without selling Japanese government bonds (JGBs) or issuing its own bills (Figure 2.11). With the recovery drawn out and inflationary pressures subdued, the BoJ was also able to avoid losses and yield spikes by holding JGBs to maturity. In the end, the money market, which had withered during the late 1990s, was revived, as institutions gradually reduced their reliance on the BoJ for funding. In addition, outright purchases of asset-backed securities and asset-backed commercial paper carried sunset clauses and were of short maturity, facilitating the eventual unwinding.

Fully unwinding financial sector interventions, however, has proved more difficult. An exit strategy for divesting public shares in the banking system and other interventions took longer to be designed.

II. HOW JAPAN RECOVERED FROM ITS BANKING CRISIS

To restore market discipline and minimize moral hazard, blanket guarantees were replaced with partial deposit insurance, and public funds were gradually repaid. Impressively, nearly three-fourths of the 10 percent of GDP in public funds needed to dispose of NPLs and recapitalize banks has been recouped (Table 2.1). However, the BoJ has been unable to fully unwind its purchases of equities held by banks, and some banks have been unable to fully repay their public funds. Similarly, the withdrawal of public support of SMEs (primarily in the form of generous credit guarantees) has been relatively gradual and may have held back needed restructuring of the sector.

Notwithstanding these partial successes with exit policies, the crisis has left some long-term scars, manifested in persistently lower investment, weak price pressures, and a significant rise in public debt. Compared with rates reached in the 1980s, gross fixed capital formation has on average been more than 5 percent of GDP lower, and average growth has fallen by half. Asset prices also have never fully rebounded, with the stock market and house prices remaining some 40 and 70 percent below their precrisis highs, respectively. Meanwhile, deflationary pressures have persisted, with headline inflation only edging into positive territory from 2006 and policy rate peaking at a mere 50 basis points.

How Does the Current Great Recession Compare with Japan's Lost Decade?

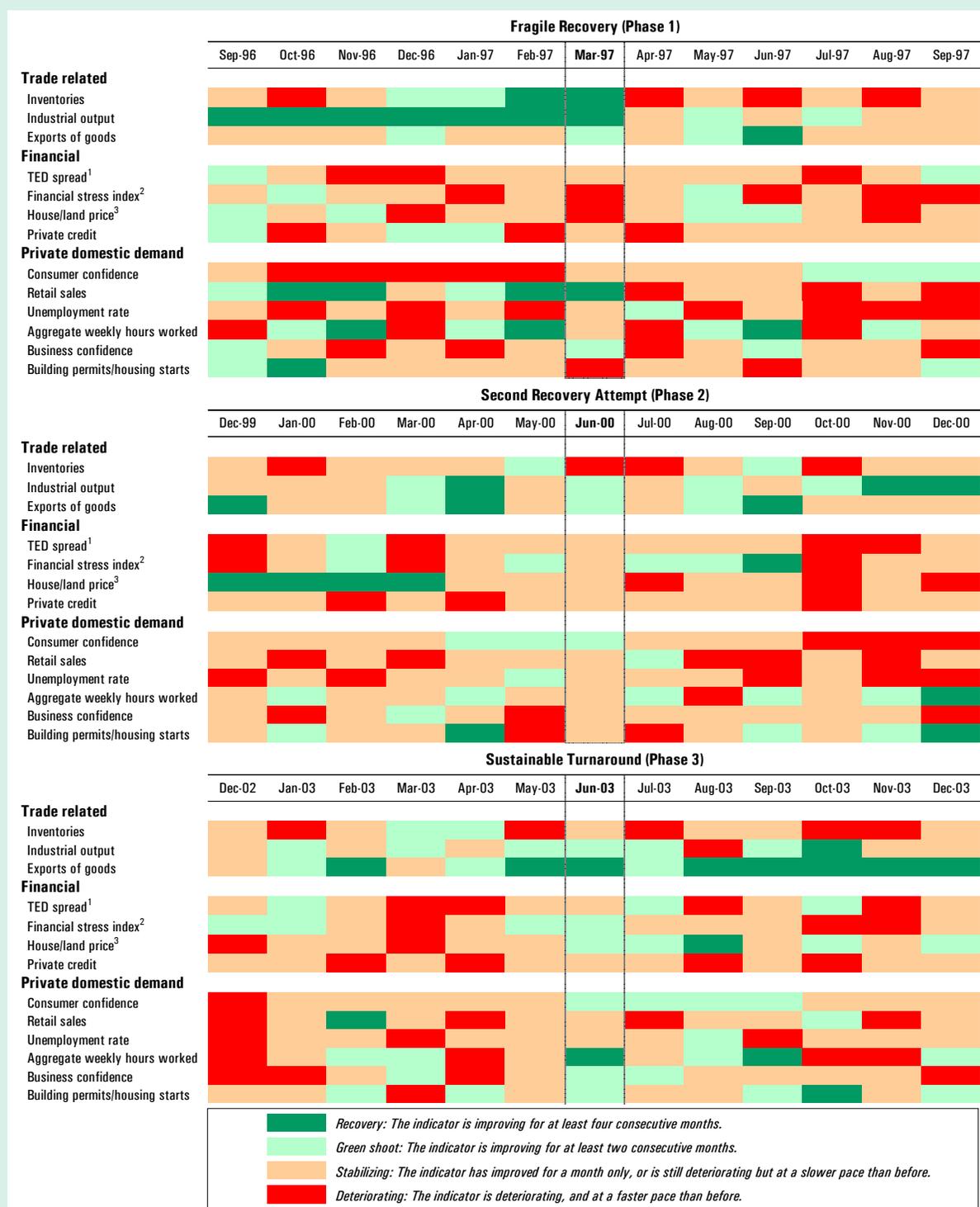
What can Japan's experiences tell us about the outlook for the global recovery? This section recreates recovery "heat maps" for various time periods during Japan's lost decade and compares them with those for the United States, the United Kingdom, the euro area and Asia since the beginning of the year. The heat maps track a set of high-frequency indicators—for trade, financial conditions, and private domestic demand—classifying them as being in modes of recovery (dark green), green shoots (light green), stabilization (orange), or deterioration (red) based on their underlying momentum. The time intervals

considered for Japan are 12-month windows centered on: (1) March 1997, (2) June 2000, and (3) June 2003. Recall from the previous section that the first two episodes represented fledgling recovery attempts stifled by negative external shocks after the withdrawal of stimulus (the consumption tax increase in April 1997 and policy rate increase in August 2000), whereas the third episode marked the onset of a more durable recovery.

Although comparing the Japanese heat maps highlights the difficulty of differentiating green shoots from genuine turning points, it also reveals some interesting patterns (Figure 2.12):

- A sustained upturn was possible only when indicators across all the components—trade, financial conditions, and private domestic demand—were displaying signs of tangible recovery by flashing green. This suggests that a broad-based pickup may have been a key ingredient for a lasting recovery.
- In all three episodes, exports and industrial production seemed to be recovering strongly, but there was little spillover to private demand during the first two recovery attempts. Underlying momentum was weak, with significant fragilities remaining in the financial system and corporate balance sheets. As a result, when external shocks hit, the economy foundered again.
- In the final episode, private demand was stronger—in particular, corporate investment—as firms had made progress in cleaning up their balance sheets and deleveraging, and the financial system had been recapitalized and was in a position to lend again.
- Although it is difficult to tease out a precise sequence, it appears that certain financial market indicators, in particular the stock market, were typically the first to show signs of recovery, together with a cyclical correction in inventories that supported production. In the middle stages, there was a tendency for consumer and business sentiment to improve, bolstering domestic

Figure 2.12. Recovery Heat Maps in Japan: Three Phases of the Banking Crisis



Sources: CEIC Data Company Ltd.; Thompson Datastream; Haver Analytics; and IMF staff calculations.

¹ Three-month (or short-term) money market rate minus equivalent T-bill rate.

² See Balakrishnan and others (2009). The index comprises seven variables capturing developments in the banking sector, the securities markets, and the foreign exchange markets.

³ House price index not available for Japan, proxied by stock market instead.

demand. In the final stage, only reached at the third attempt in Japan, private credit, house prices, and the labor market turned, sealing the recovery.

Qualitatively, the patterns in leading indicators over the last year in advanced economies outside Asia resemble somewhat those in the lead-up to Japan's incipient recovery attempts (Figure 2.13). Much as in those two episodes, indicators related to trade and financial markets are showing signs of recovery in places, but private domestic demand—which was a key ingredient for Japan's lasting recovery—still appears weak:

- *Trade related:* Global stimulus efforts are bolstering exports, and inventory adjustment is progressing. However, the recovery in production has yet to take hold.
- *Financial markets:* Reflecting aggressive credit easing and financial sector support measures, recovery is most strongly apparent in some financial market segments, led by the United States. Money markets in the United Kingdom have also recovered strongly. Overall, however, financial markets are still under strain, and credit conditions remain exceptionally tight for many households and firms.
- *Private domestic demand:* Improvements seem to be lagging in the real economy. Although fiscal stimulus appears to be providing some support to confidence in the euro area, consumer and business sentiment generally remain depressed. Moreover, spending is uniformly subdued and labor market conditions extremely weak.

By contrast, emerging Asia, in particular China and India, are rebounding much more quickly. As discussed in Chapter 1, sizable monetary and fiscal stimulus and the rebound in global risk appetite have underpinned the striking recovery in emerging Asia. At the same time, industrial production and exports are benefiting from an unwinding of earlier global inventory adjustments. Sound macroeconomic management in the lead-up to the crisis has also allowed more aggressive policy

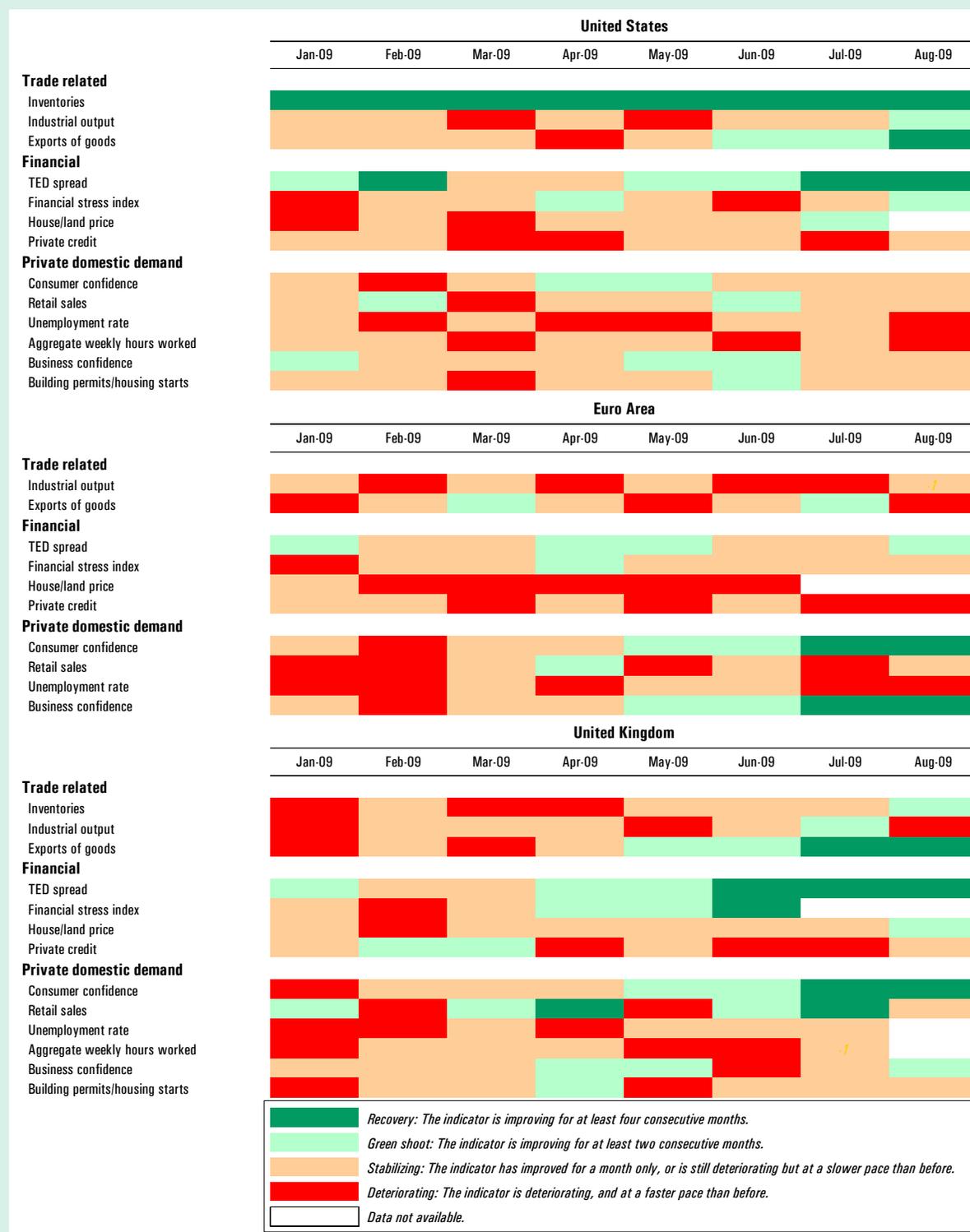
responses in many parts of the region. In turn, their effectiveness has been magnified by the generally much better condition of private sector balance sheets, as banks have been more willing to lend and borrowers less constrained by debt in their decisions to borrow and spend out of tax cuts. In marked contrast to most other regions, credit has continued to expand across most of Asia, and in China it has accelerated rapidly, providing further support to consumption and investment. That said, private domestic demand still looks vulnerable in the export-oriented Asian economies, with business confidence and private consumption still not in full recovery mode.

Potential Implications for the Global Outlook and Policies

A global repeat of the lost decade is by no means inevitable or even likely. Through forceful interventions, policymakers appear to have precluded the worst possible outcomes, and the world economy is on the cusp of a recovery. The beginning of the end of the Great Recession could well be in sight, but based on Japan's experiences, where could the global economy go from here?

An important lesson from Japan is that green shoots do not guarantee a recovery, implying a need to be cautious on the outlook today. In fact, if Japanese history is any guide, the global recovery could still be in the initial stages. Systemic risks of collapse have been sharply reduced, and the macroeconomic response has generally been forceful and faster than was the case with Japan's more drawn-out crisis. These would seem to lower the risk of a double-dip or a very protracted recession. However, financial conditions remain far from normal, credit growth remains subdued, and weak labor markets and sizable excess capacity are weighing on global output. Moreover, as was the case in Japan in the early stages of the lost decade, the problems that lay behind the crisis in advanced economies linger: delinquencies on mortgage loans are still rising, households remain highly indebted, and the financial system remains encumbered by an

Figure 2.13. Recovery Heat Maps in Advanced Economies in 2009¹



Sources: CEIC Data Company Ltd.; Thompson Datastream; Haver Analytics; and IMF staff calculations.

¹ See footnotes to figure 2.12.

II. HOW JAPAN RECOVERED FROM ITS BANKING CRISIS

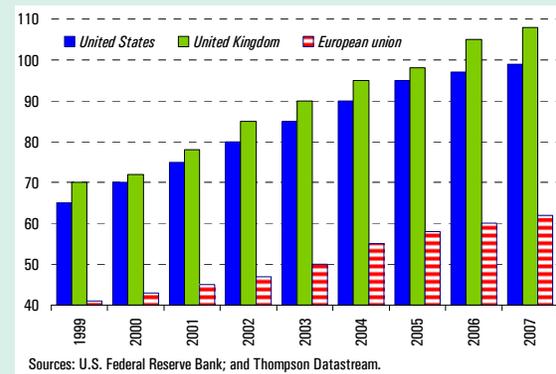
uncertain amount of distressed assets and doubts about firms' capital positions. Even in emerging Asia, a vigorous and sustained turnaround cannot yet be taken for granted, and the significant fragility of external demand outside the region may slow the momentum of exports, dampening what has historically been a key channel for Asia's recoveries.

Indeed, Japan's experiences caution that lingering financial fragilities can magnify the impact of adverse shocks on the economy. On two occasions in Japan, adverse external shocks were amplified by a weak banking system, pushing the economy back into stagnation. Today, given downside risks and the still strained nature of financial systems and household balance sheets in advanced economies, the possibility of a double-dip cannot be discounted altogether. Moreover, a double-dip recession would necessitate further rounds of aggressive and costly macroeconomic and financial interventions, which could worsen longer-run outcomes.

So what does this imply about the appropriate setting of policies? First, a lasting recovery is likely to depend on concerted efforts to resolve financial sector and debtor imbalances. In Japan, it was only when corporate debt had returned to prebubble levels and banks had disposed of their distressed loans and been adequately recapitalized that the benefits from policy stimulus and a favorable external environment could spill over and reinvigorate private domestic demand. In advanced economies that find themselves at the center of the Great Recession, this would suggest that a robust private-led recovery may not take hold until household debt levels fall back toward more normal levels and banks are sufficiently strengthened (Figure 2.14).

Second, while restructuring is underway and until the recovery becomes better established, policy stimulus may need to be maintained. As in Japan, stimulus could facilitate needed restructuring by giving banks and households in advanced economies time to rebuild their balance sheets. It could also lay down firmer foundations for renewed growth.

Figure 2.14. Household Debt
(In percent of GDP)



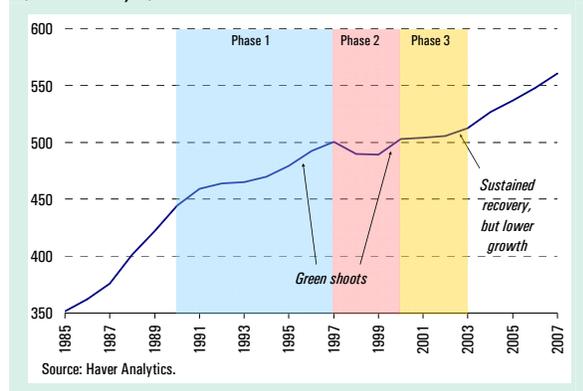
Third, while policy support is maintained for as long as needed, clear plans for exit are likely to be beneficial. As illustrated in Japan, calibrating the timing of actual exit will be challenging under extreme uncertainty about the underlying strength of the economy and financial vulnerabilities. In particular, policymakers will need to navigate skillfully between avoiding a withdrawal of stimulus before underlying imbalances are redressed, and maintaining support for too long at the expense of longer-run outcomes. In Japan, stimulus was necessary but not a panacea, and over time its effectiveness waned on concerns over rising public debt and banking sector problems. To address these risks and guide expectations, the underlying exit strategies need to be communicated carefully and at an early stage, as in the case of Japan's exit from quantitative easing. This time around, the global scale of the crisis also makes it important that exit strategies be well coordinated across economies.

Japan's experiences suggest that clear and credible exit strategies can help anchor expectations and reinforce confidence:

- *Outlining a concrete medium-term fiscal consolidation strategy could help manage the difficult balancing act between supporting the economy and maintaining confidence in longer-term debt sustainability.* Aggressive fiscal stimulus being implemented across the world is projected to result in a rapid rise in levels of public debt and markets may require convincing that this trend will eventually

reverse.³ In the current setting, laying out policy options for achieving the desired fiscal adjustment could also help address longer-run spending needs associated with aging populations and expanding social safety nets.

Figure 2.15. Japan: Real GDP
(In trillions of yen)



- *An exit strategy from exceptional monetary policies needs to be convincingly articulated to help guide market expectations.* The most desirable exit scenario would be for investors’ risk appetite to recover and credit markets to normalize smoothly, as happened in Japan. Communicating to the markets on how and under what conditions monetary stimulus would be withdrawn could help ensure a smooth transition to more normal conditions. At the same time, making available a diverse set of tools for managing liquidity—including for instance, granting central banks authority to issue their own debt—would enhance policy flexibility and credibility.

- *A strategy for eventually unwinding financial and corporate sector policies is needed to minimize distortions and fiscal risks.* As was the case for Japan, this will likely imply tightening terms on facilities extending support to financial institutions and corporations, as well as gradually reducing guarantees and subsidies.

Once the dust settles, global economic conditions could look markedly different from the benign precrisis environment. Unlike cyclical downturns, postbubble recessions can undermine long-term output as risk repricing, deleveraging, and financial restructuring dampen investment and curtail credit. Such forces were at play in Japan, where growth rates have never returned anywhere close to precrisis levels, falling to only half the 4 percent rate achieved during the 1980s (Figure 2.15). Broader international experience also suggests that financial crises result in permanent losses of output (see, for example, Cerra and Saxena, 2008, and Reinhart and Rogoff, 2009), although there is less evidence of an impact on potential growth rates. Moreover, the global dimension of the current crisis may introduce additional complications. Whereas the emergence of a durable expansion in Japan was supported by strong external conditions, the weak global environment today may limit prospects for an export-led recovery. In the face of these potentially long-lived effects on advanced economies, it will be critical to rebalance the global economy to ensure robust growth over the longer term.

³ Here Japan’s experience may not be typical since government bond yields have shown little sensitivity to changes in the debt stock or fiscal deficits over time. This can be explained by Japan’s large pool of household savings, stable institutional investors, and a strong home bias (see Tokuoka, 2009).

III. Corporate Savings and Rebalancing in Asia

In recent years, despite relatively flat investment in most of the region, corporate savings have risen in Asia, more than in other regions. Since Asian households have not reduced their savings to the same extent, the increase in corporate savings has led to higher private savings in the region. Decisions over retained earnings are related to the strength of corporate governance and the degree of financial market development, particularly in Asia. Hence, reforms in these areas must be further deepened to reduce private savings, contribute to higher private consumption, and help regional rebalancing in the coming years.

In recent years the corporate sector in much of Asia has begun to save an increasing share of national income. This has been true in the regional powerhouses of Japan, Korea, China, and India, but also in the ASEAN region and among Asia’s newly industrialized economies (NIEs) (Figure 3.1).

Although high profits and rising corporate savings have been a global trend through much of this decade (Cardarelli and Ueda, 2006), the increase in Asian corporate savings has outstripped that in all other regions of the world (Figure 3.2). Further, in other regions, this large increase in corporate savings has been largely offset by lower household savings (Figure 3.3). This has not been true of emerging Asia (Figure 3.4). As a result, higher corporate savings in the region have driven up national savings. Corporate savings have come to account for not only an increasing share of the region’s GDP, but also a rising fraction of global savings as a whole (Figure 3.5).

This rapid rise in Asian corporate savings has been particularly surprising since it occurred during a period of relatively stagnant levels of investment in the region. The decline in investment following the

Note: The main authors of this chapter are Sonali Jain-Chandra, Malhar Nabar, and Nathan Porter, with assistance from Souvik Gupta. The authors would like to thank Kenichi Ueda for sharing data from Worldscope, as well as the corporate governance dataset used in this chapter.

Figure 3.1. Change in Savings since 2000
(In percent of GDP)

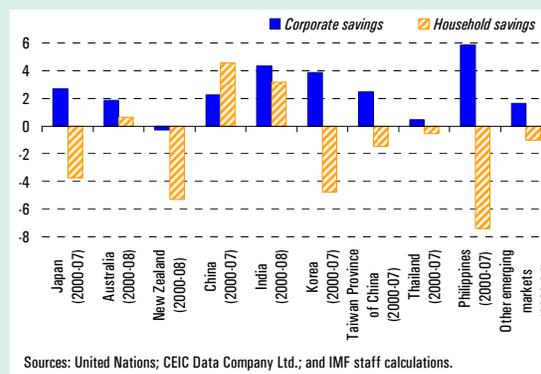


Figure 3.2. Difference in Mean Corporate Savings, Post-2000 versus Pre-2000
(In percent of GDP; regression coefficients and confidence intervals)

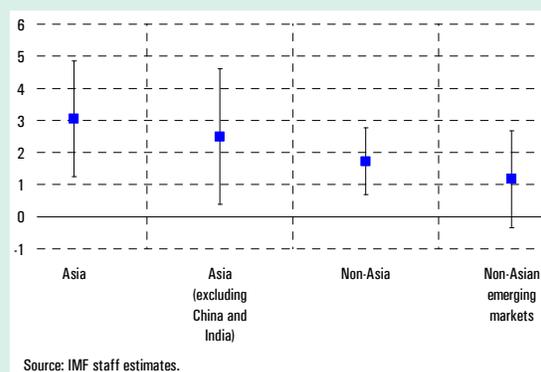


Figure 3.3. Non-Asian Emerging Markets: Savings
(In percent of GDP, relative to 1997 = zero)

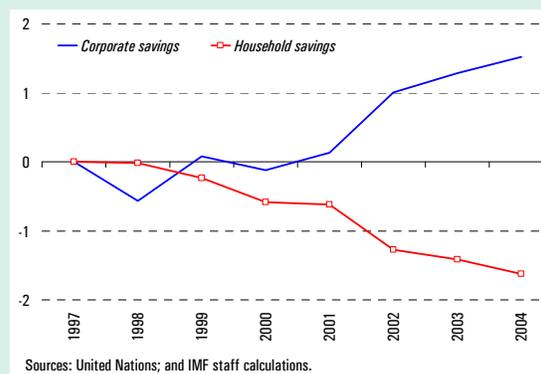


Figure 3.4. Emerging Asia (excluding China): Savings
(In percent of GDP, relative to 1997 = zero)

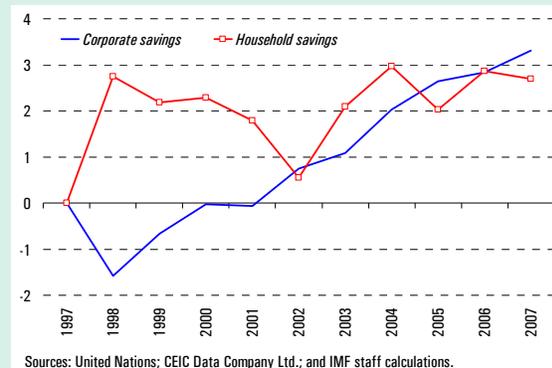
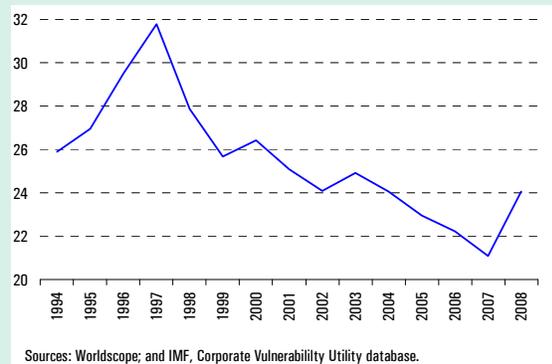


Figure 3.5. Emerging Asia Corporate Savings
(Share in world savings, in percent)



Figure 3.6. Leverage in Emerging Asia
(Debt-to-assets ratio, in percent)



Asian crisis is well known and has been extensively studied (September 2005 *World Economic Outlook*; May 2006 Asia and Pacific *Regional Economic Outlook*) and resulted from the unwinding of the excessive levels of investment during the 1990s fueled by rapidly rising asset prices, loose credit, and weak corporate governance. Since then, outside of China and India, investment in Asia has risen broadly in line with output. Despite this flattening out of investment, in the same set of countries, corporate savings had increased by more than 5 percent of GDP by 2005, and this can be explained only partially by the region-wide deleveraging that followed the Asian crisis (Figure 3.6). These three phenomena—rising corporate savings, stagnant corporate investment, and a lack of offsetting behavior by households—have led to a widening of the region’s current account surplus, directly contributing to the global imbalances of the past decade. This chapter investigates these interlinking themes and examines whether a policy response is warranted to limit the incentive for Asian firms to save so much.

The reasons for the rise in corporate savings in Asia, as well as elsewhere, have been extensively studied (Cardarelli and Ueda, 2006) and Asian Development Bank, 2009). For example, in G-7 countries recent corporate savings have been driven by a desire to finance share buybacks at home and net purchases of equity overseas and to acquire liquid financial assets (Cardarelli and Ueda, 2006). In Asia, the rise in gross corporate savings has been variously linked in country-specific cases to energy and land subsidies, cheap credit, low dividend payout ratios, and robust economic growth (Asian Development Bank, 2009). Given this previous work, this chapter focuses on two other questions that directly relate to the policy discussion: (i) Do households in Asia offset corporate savings decisions? and (ii) What impact do institutional and policy factors have on corporate savings?

The structure of this chapter is as follows. The second section examines how the household reaction to corporate savings has differed between Asia and elsewhere. The analysis suggests that,

unlike elsewhere, higher corporate savings in Asia are not offset by an increase in household consumption (see Box 3.1 for a detailed analysis of Japan's experience). As a result, corporate behavior has had a potent effect on the region's savings. Consequently, for a given level of investment, a decline in corporate savings should reduce regional imbalances and boost consumption.

The third section traces the role played by corporate governance and financial sector institutions in the accumulation of corporate savings. The evidence indicates that decisions on the level of retained earnings are intimately related to the strength of corporate governance and to the degree of financial market development and that the size of these effects is particularly large in Asia. In countries where market-financing options are plentiful and firms are able to raise capital readily from banks or capital markets, the motivation for retaining high levels of corporate earnings is lessened. Similarly, if corporate managers' incentives are more fully aligned with those of shareholders, then this should lead corporations to pay out as dividends any profits that are not required to finance investment projects.

The fourth section draws out the policy implications of these results, finding that since the Asian crisis, improvements in corporate governance and financial development have mitigated the need for corporations to amass a large war chest of savings. However, these effects have been more than offset by the rising tide of corporate savings. Nevertheless, further improvements in corporate governance and financial reform will still need to be a critical component of the region's rebalancing strategy in order to address the underlying structural factors that create incentives for the region's corporations to save. In particular, the analysis finds that, for example, if Asia can converge to the average level of financial development and corporate governance that is currently seen in the G-7, then corporate savings could be lowered by as much as 7 percent of GDP.

The chapter's final section provides a brief conclusion.

Does Higher Corporate Saving Affect Household Behavior?

Economic theory suggests that, absent tax distortions, and assuming that households have relatively easy access to well-working financial markets, the level of national savings should be relatively unrelated to the savings of corporations. As households ultimately own the corporations, they should be indifferent between holding their savings directly or indirectly via the savings of the firms that they own. However, to be indifferent, households must be able to smooth the impact of changes in corporate savings (the timing of corporate dividend payments), either by borrowing using their financial assets as collateral or by liquidating some part of those assets.

But there are a number of reasons why this neutrality result may not hold. For example, if dividends are retained in order to finance low-rate-of-return projects, then households may not realize any increase in their wealth from higher corporate savings and therefore may not adjust their consumption and savings decisions. Similarly, if corporations are government owned and pay dividends to the state, but these revenues are then deployed inefficiently with limited direct benefit to households, neutrality will again break down. Therefore, key to this neutrality proposition is the existence of an active corporate ownership culture and strong market discipline on corporate managers so that their incentives are aligned with those of shareholders.

This section examines empirically how households react to corporate savings by looking at corporate and household behavior across a range of emerging markets, using a methodology developed by Poterba (1987). In particular, a panel of emerging market economies from 1979 to 2007 is used to test whether a change in the level of corporate savings has any impact on private (that is, household plus corporate) savings. If households are indifferent to the timing of dividends and the level of retained earnings, it should be the case that corporate savings will have no explanatory power in the regression.

Box 3.1. Corporate Savings, Household Income, and Private Spending in Japan

Despite a robust recovery of the Japanese economy and the associated pickup in corporate saving during 2003–07, household spending remained muted. Private consumption increased by only 5 percent over the period, compared with a roughly 10 percent increase in GDP. This box reviews Japanese household income and balance sheets with the aim of identifying the main drags on private consumption.

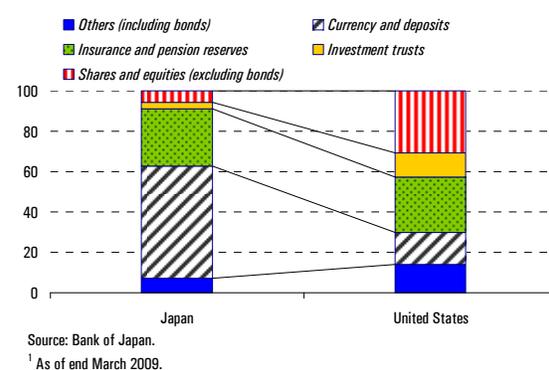
Low Investment Income

One reason for the sluggish spending may have been weak household investment income despite record corporate profits.¹

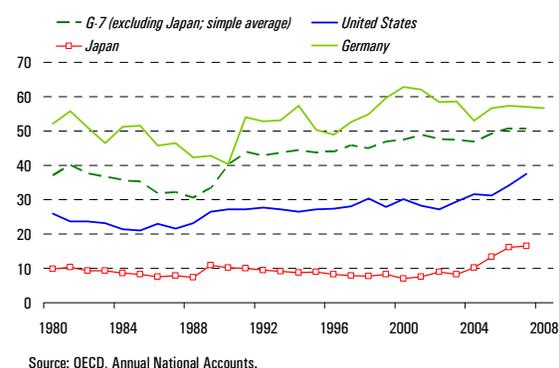
- Household holdings of risky assets, including equities, have historically been smaller in Japan than in other advanced economies. Despite financial deregulation, demand for risky assets has remained low, possibly due to relatively high transactions costs (especially trust fund fees) and stronger risk aversion.²
- In addition, Japanese corporations have continued to pay out only a small share of their net profits, despite strong earnings (especially in the manufacturing sector) and record low interest costs. This may have reflected factors such as shareholder differences and the preference of Japanese corporations to reduce their debt to more manageable levels.

That said, investors and households have made some progress in piercing the corporate veil, with the dividend-to-GDP ratio jumping from 1 percent to 1½ percent during the 1980s and 1990s to about 3½ percent in 2007. However, dividend payments still remain well below German levels (about 14 percent in 2007) despite a similar level of operating profits. Japanese corporations have also not engaged much in equity buyouts, which have become a popular means of distributing profits to shareholders among Anglo-Saxon corporations.

Financial Wealth Held by Households¹
(In percent of total financial wealth)



Nonfinancial Corporations: Dividend Payout
(In percent of net profit)



Note: The main authors of this box are Martin Sommer, Suchanan Tambunlertchai, and Kiichi Tokuoka.

¹ Gross operating surplus of Japanese nonfinancial corporations increased from about 21 percent of GDP in the early 2000s to 23 percent of GDP in 2007—this surplus level is higher than in the United States and about the same as in Germany. For comparison, property income accounted for 3.8 percent of disposable income in Japan, 19.2 percent in the United States and 23.7 percent in Germany in 2007.

²The structural increase in unemployment and weakening of the lifetime employment model (one-third of the labor force now has flexible contracts) may have discouraged some households from investing in risky assets (Nakagawa and Shimizu, 2000).

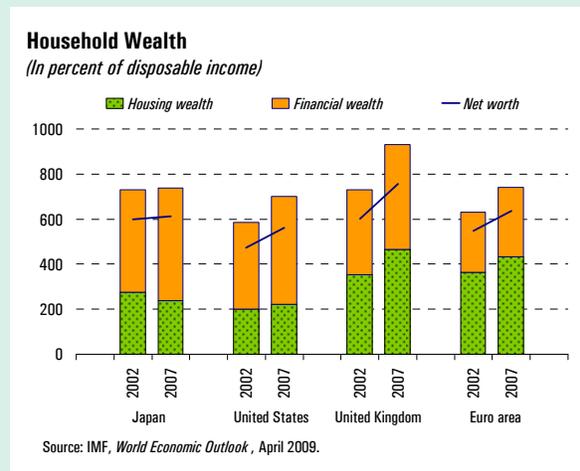
Falling Share of Labor Income

In addition, household spending has been held down by sluggish wage growth. Low wage growth can be attributed to a variety of factors, many of which also apply to other advanced economies: these include effects of foreign competition and technological progress (manufacturers have become more sensitive to cross-country wage differentials and restricted wage growth in their home countries), deregulation (liberalization measures in the second half of the 1990s expanded the list of industries that can hire low-wage “nonregular” workers),³ and population aging. Low wage growth has also partly reflected the unbalanced nature of Japanese growth—low productivity growth in Japan’s nonfinancial services sectors, accounting for about two-thirds of total employment, has put a drag on total wages (Sommer, 2009).

Stagnating Net Worth and Financial Constraints

In contrast with many other G-7 economies, household asset values and net worth have stagnated in Japan, as falling house prices offset equity price increases. Unlike in some other major economies, Japanese households could not therefore engage in a debt-financed spending supported by rising equity and housing wealth.

In this regard, downside risks to Japanese household spending from the ongoing adjustment in global asset prices seem limited. However, it remains to be seen whether Japanese consumption will respond meaningfully to rising asset values once the global recovery is firmly in place given the low marginal propensity to consume out of wealth (IMF, 2008) and limited availability of home equity loans (including reverse mortgages).⁴ Furthermore, despite recent improvements, consumer lending remains constrained, in part due to limited sharing of credit information.



How to Revive Consumer Spending?

Household spending accounts for about 55 percent of GDP in Japan, compared with almost 60 percent among the other G-7 economies, suggesting that the scope for boosting private consumption could be significant. Policy measures could help in several areas:

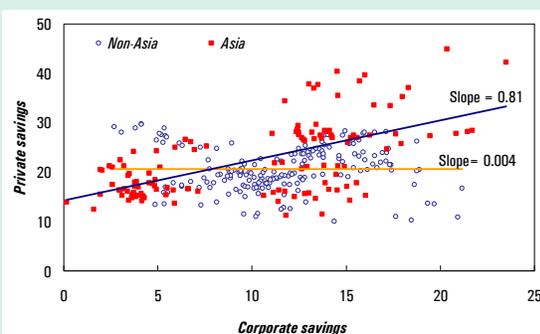
- *Labor and product market reforms.* Adopting reforms to increase productivity of services sectors would help reduce Japan’s economic dualities and boost per capita incomes. After the recovery takes hold, greater labor flexibility could encourage firms to pay higher wages, as the implicit insurance premium incorporated in the contracts of permanent workers would diminish.

³ Nonregular workers are much easier to dismiss, have limited social insurance, and typically earn about 40 percent less than regular workers.

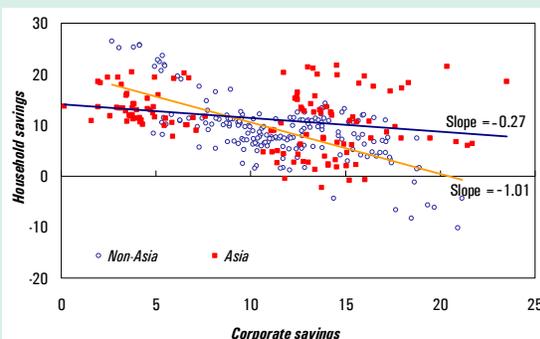
⁴ Tight collateral requirements combined with high real estate prices may have encouraged Japanese households to accumulate large holdings of cash and deposits, further reducing investment income. See, for example, Iwaisako (2003) and Iwaisako, Mitchell, and Piggott (2004).

Box 3.1 (concluded)

- *Diversifying household portfolios.* Further development of the capital markets would help reduce transaction costs of investing, while measures to promote understanding of investments among the general population would make stockholding more prevalent.
- *Financial deepening.* Financial reforms to further enhance access of households and corporations to credit could facilitate spending out of wealth and future income, and aid the emergence of new high-productivity enterprises. Encouraging the use of reverse mortgages would ease liquidity constraints faced by the elderly.
- *Removing uncertainty.* Strengthening the public pension system could boost consumption by reducing precautionary savings (IMF, 2009b).

Figure 3.7. Private and Corporate Savings*(In percent of GDP)*

Sources: United Nations; CEIC Data Company Ltd.; and IMF staff calculations.

Figure 3.8. Household and Corporate Savings*(In percent of GDP)*

Sources: United Nations; CEIC Data Company Ltd.; and IMF staff calculations.

Various factors such as age dependency (to capture life cycle savings motives), the level of economic volatility (to capture precautionary motives), the real interest rate (to capture the financial incentive to save), the level of disposable income, and lagged private savings (to proxy for accumulated wealth) are also controlled for. The results indicate that, in emerging markets as a whole, private savings are not significantly affected by the level of corporate savings (Figures 3.7 and 3.8). However, this result does not hold in an Asian subsample. Indeed, Asian households offset only about 20 percent of the increase in corporate savings. In other words, for every additional US\$100 saved by Asian firms, households in Asia reduce their savings only by US\$20 (Figure 3.9). It is notable that these results are not driven by the strong trends for rising savings that have been seen in China. Indeed, dropping China from the sample leads to the result that only 7 percent of higher corporate savings are offset by lower household savings. These results are very robust to changes in sample period and the use of alternate measures of private savings (see Appendix 3.1 for detailed results).

To examine the neutrality hypothesis from another angle, the question is asked, following Auerbach and Hassett (1991): to what extent is private consumption dependent on the level of

dividend income paid to households? If households are not credit constrained, consumption decisions should be independent of the flow of dividend income they receive. However, numerous studies have found that, even in advanced economies, liquidity constraints are generally binding (for example, Flavin, 1981; Carroll, 2001). Auerbach and Hassett (1991), however, argue that although it is true that many households may be liquidity constrained, it is unlikely that households with significant levels of dividend income will be subject to such constraints. If these households are not credit constrained, then their consumption decisions should be independent of the level of dividends they receive and their consumption should depend only on wealth, not on their current income (Figure 3.10).

This same test is undertaken for a sample of emerging markets, to examine whether a broad measure of property income—which encompasses interest, rent, and dividends—has a significant effect on household behavior. The results indicate that households, in general, are not indifferent to their levels of property income. However, the data also suggest that the marginal propensity to consume from property income is significantly higher in emerging Asia than elsewhere, even though liquidity constraints seem equally binding. In particular, Asian households appear to consume about US\$7 more for every additional US\$100 in property income they receive (compared with only US\$1 for non-Asian emerging markets) (Figure 3.11). In sum, Asian households do not appear to offset the behavior of firms in making their consumption decisions. Therefore, the high levels of corporate savings in Asia are an important factor in regard to the size of national savings and have a clear role in determining the level of current account imbalances in Asia. This result is specific to Asia and also appears not to be driven solely by the savings trends in China or India (see Box 3.2).

Figure 3.9. Corporate Savings Offset by Households
(In percent of corporate savings)

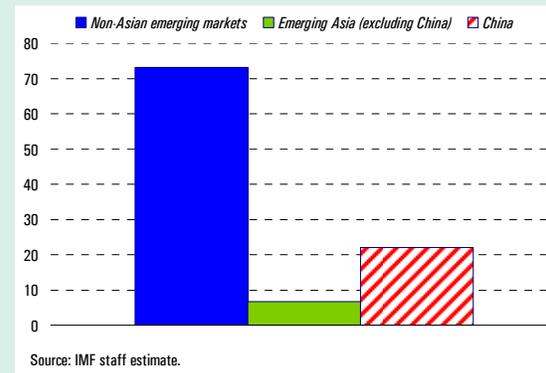


Figure 3.10. Households: Consumption and Disposable Property Income
(Change in percent)

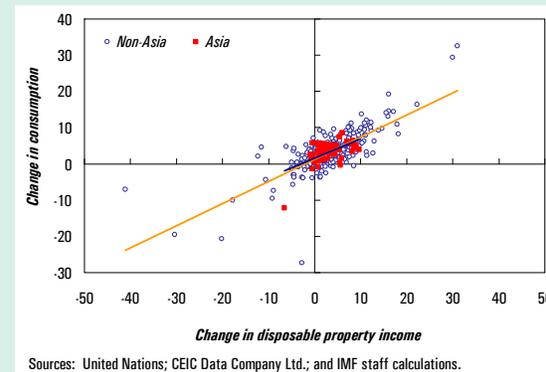
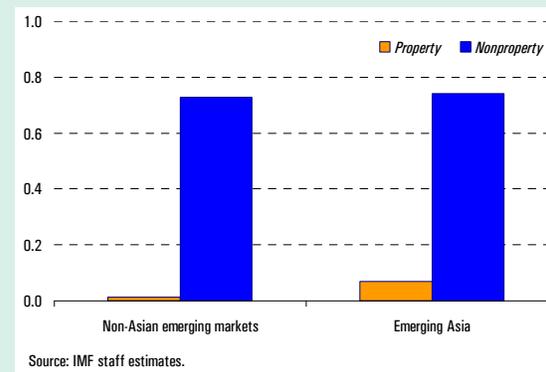


Figure 3.11. Marginal Propensities to Consume
(Share of current real disposable income)



Box 3.2. Savings in China

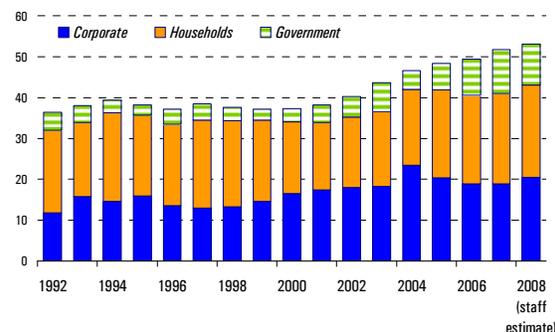
China's saving rate has risen rapidly in recent years, and it is among the highest in the world. National saving is currently more than 55 percent of GDP and has increased more than 12 percentage points over the past five years. The high savings rate reflects high levels of savings by firms (including public companies), households, and to some extent the government. By 2005, both corporate and household saving rates were greater than 20 percent of GDP and while corporate savings slipped slightly lower in 2006 and 2007, both corporate and household savings remain very high.

The drivers of rising household savings are relatively well known. Chinese households face considerable expenditure risks. In addition, their consumption opportunities have been stymied by the falling share of household disposable income in GDP (Aziz and Li, 2007). Following the reform of state-owned enterprises (SOEs) in the 1990s, the industry-based social safety net disappeared, limiting the support available to many individuals for their health care, their pensions, and education for their children. Consequently, households had to increase savings significantly to cover their retirement and the risks associated with sickness (Barnett and Brooks, 2009). Household income has also lagged broader economic growth, particularly reflecting (at times) modest wage growth and low investment income, the latter held down by financial repression. Recent government initiatives, however, have sought to strengthen safety nets (reducing the precautionary motives for savings) and boost household disposable income. In particular, the government is expanding health care provision and insurance coverage, increasing pensions, targeted consumption subsidies, and improved funding for rural livelihoods.

The rise in corporate savings reflects a combination of rapid growth, limited competition (which has buoyed profits), financial underdevelopment, and low input costs that increase the incentives to invest. Both listed and nonlisted companies have been highly profitable and pay little in dividends. Industrial enterprises (both listed and unlisted) account for more than 40 percent of domestic value added and almost as much in aggregate profits. Until 2008, most of the profits of these enterprises accrued to the state-controlled sector, although the share of profits made by non-state-controlled firms has increased considerably over time.

Note: The author of this box is Nathan Porter.

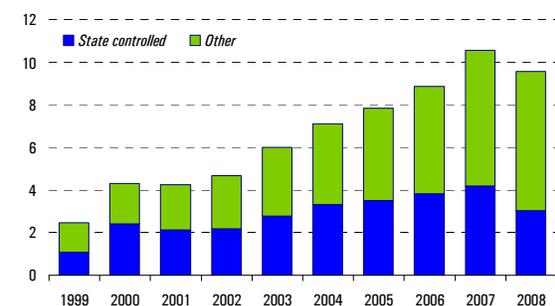
China: Domestic Savings
(In percent of GDP)



Sources: CEIC Data Company Ltd.; and IMF staff estimates.

China: Industrial Enterprise Profits¹

(In percent of GDP)

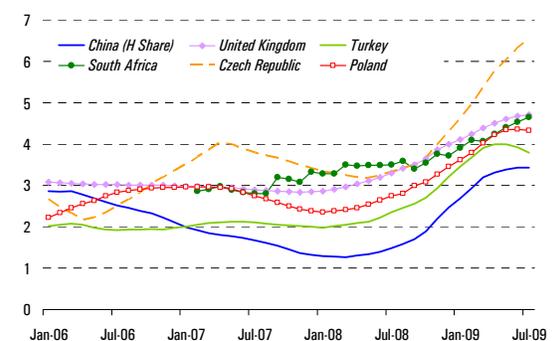


Sources: CEIC Data Company Ltd.; and IMF staff estimates.

¹ Staff estimates for 2008 are based on data up to November 2008.

Selected Equity Markets: Dividend Yields

(In percent per annum; 12-month moving average)



Sources: CEIC Data Company Ltd.; and IMF staff calculations.

Despite high profits, Chinese firms—even those with H shares listed in Hong Kong SAR, which have international investors as owners—pay very low dividends in comparison with firms in both developed and emerging markets.

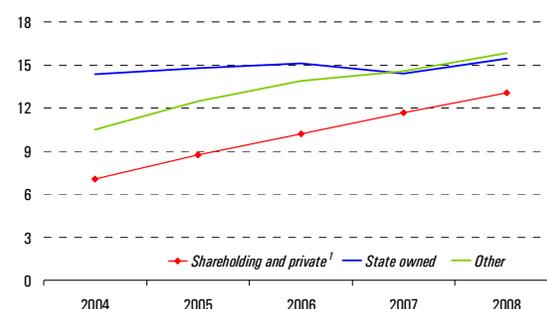
Misaligned relative prices have produced an extraordinarily high level of investment, which has led to excess capacity in some sectors, and provided a strong motive for firms to save. The incentives include the low costs of energy, water, and land, an underpricing of environmental externalities, a relatively high price for capital-intensive tradables, and a regulated, relatively cheap supply of capital for large formal-sector companies with access to financial

markets. Investment growth has been especially rapid in nonstate controlled companies, both private and nonlisted shareholding companies. Non-state-controlled companies, including SMEs, are likely the most credit constrained, at least in the formal financing market, and have to rely heavily on retained earnings (corporate savings) to finance their investment. In addition, the large state-owned enterprises also rely on retained earnings to a large extent.

The government has introduced an initiative to require state-owned companies to pay dividends that will help to reduce corporate savings. But more action might be needed. In late 2007 the government introduced a pilot program under which state-owned enterprises disburse limited dividends (at rates of 5–10 percent of profits) to the government. However, as these funds are paid into a special capital budget that is used to finance state enterprise investment, they do little to lower corporate savings or limit the availability of cheap funds for investment as they are reinvested into the corporate sector. In addition, this arrangement also prevents these funds from being reallocated to other purposes with higher social value (through the budget) or higher economic value (through financial markets).

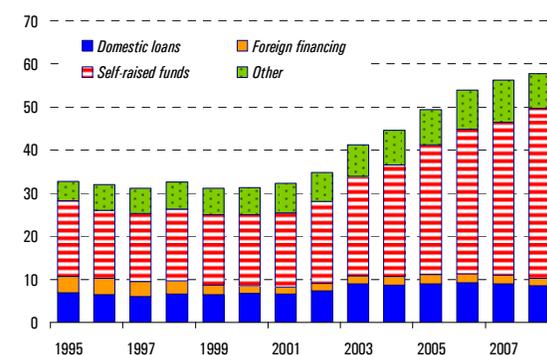
Expanding the access of all firms to formal capital market financing would seem a key issue, as it would limit the need for retained earnings to finance investment, particularly among private firms and SMEs. Such access would include greater equity and fixed-income financing for SMEs, both of which the government has been working to address. A new growth enterprise exchange for small firms was launched in May 2009 and will become operational in October of this year, and commercial paper and medium-term notes markets were established in 2005 and 2008 respectively and are in active use. Finally, better corporate governance, including through stronger shareholder activism and the development of strong institutional investors, would likely lessen the incentives to retain earnings.

China: Domestic Enterprise Investment Spending
(In percent of GDP)

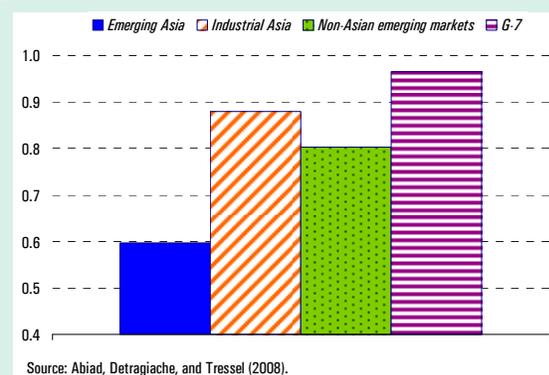
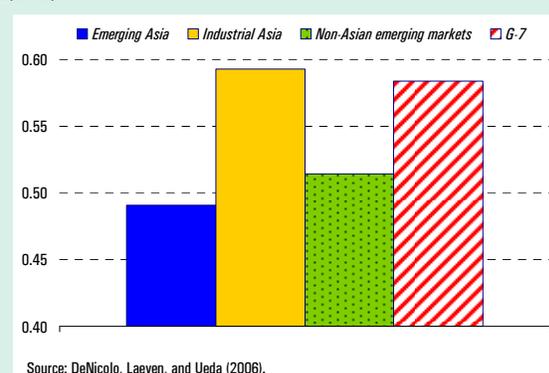


Sources: CEIC Data Company Ltd.; and IMF staff calculations.
¹ Excludes listed corporates.

China: Fixed-Asset Investment Financing
(In percent of GDP)



Sources: CEIC Data Company Ltd.; and IMF staff calculations.

Figure 3.12. Financial Reform, 2005*(Index)***Figure 3.13. Corporate Governance Quality, 2008***(Index)*

What Influences Corporate Savings in Asia?

This section supplements country-level analysis with a rich, firm-level data set (see Appendix 3.2) to examine what factors are relevant for individual-firm savings decisions and how these factors vary across countries. The firm-level data allow fundamental firm-level drivers of corporate savings such as profitability, Tobin's Q , the share of intangible assets, firm size, sales volatility, leverage, and capital expenditure to be controlled for. These data are used to examine to what extent financial market development or changes in corporate governance have an impact on corporate saving behavior, once these fundamental factors are controlled for. For financial sector reform, an index constructed by Abiad, Detragiache, and Tressel (2008) is used that incorporates various dimensions of financial

development, including banking supervision, privatization, barriers to entry, level of directed credit, credit ceilings, interest rate controls, and securities market reform (Figure 3.12). A corporate governance data set (outlined in De Nicolo, Laeven, and Ueda, 2006) that looks at earnings opacity, the comovement of stock prices, and the number of accounting regulations complied with in a particular country is also drawn upon (Figure 3.13).

Overall effects of financial reform and improvements in corporate governance on corporate savings may be ambiguous. In a liberalized financial market, firms might have easier access to finance and so need to save less. But at the same time, once close ties between firms and banks are severed, firms may no longer have access to relatively automatic credit lines, which may induce them to save more. Similarly, improvements in corporate governance, specifically transparency, may improve access to external funding and reduce the need to rely on internally generated funds. But they could also mean that firms can no longer rely on implicit intragroup cross-subsidies, and so corporate savings increase. Moreover, anecdotal evidence suggests that immediately after the Asian crisis, for example, corporate governance reforms raised fears of hostile takeovers, inducing firms to hoard cash to buy back shares. Therefore, as with financial sector reform, the net effect of corporate governance reform on corporate savings could be either positive or negative.

The firm-level data suggest that financial reform has had a significant impact by tempering the rise in corporate savings across all emerging markets and that this effect has been considerably larger in Asia (Figure 3.14). Similarly, improvements in the transparency of corporate operations also appear to have lessened the motivation for higher corporate savings (Figure 3.15).

An attempt to confirm these results is made using the World Bank's Doing Business database, drawing on measures of shareholder protection (which capture the strength of protection for minority shareholders). Using these data, the analysis

confirms the finding that improvements in corporate governance (through stronger shareholder rights) lead to a better alignment of the incentives of shareholders and managers, thereby moderating the tendency for corporations to save.

The Policy Implications

Following the 1997–98 financial crisis, Asia was a fertile ground for financial market and corporate governance reform. The corporate governance measures and financial reform indicators used in the previous section all have improved significantly (Figures 3.16 and 3.17). As the financial system in the region has become more market driven, the options for firms to finance investment projects (including equity issuance, corporate bonds, and overseas financing) have grown. This, in turn, has limited firms’ incentives to retain earnings as they become more secure that market financing will be available for high-return projects. Consequently, firms have needed to rely less on self-financing. Similarly, improvements in corporate governance over the past decade have increased the discipline on corporations and lessened their tendency to hoard cash. This progress has had a significant effect in tempering the rise in regional corporate savings.

Nevertheless, despite the impressive and steady progress in reforming the financial system and improving corporate governance, emerging Asia still lags behind competitors along a range of indicators. Certainly, the difference has narrowed over the past decade, but there is still much to do. Further corporate governance and financial reform not only would improve the allocation of capital and raise productivity but would also have a significant impact on corporate savings. Such reform could be an instrumental factor in reducing current account surpluses across the region, given the stagnant investment levels in most of Asia over the last decade. For example, if Asia were able to reach the average level of financial liberalization in advanced economies, it would be able to lessen corporate savings by as much as 5 percent of GDP. Similarly, improvement in corporate governance to bring Asia to the average levels prevailing in advanced

Figure 3.14. The Effect of Financial Liberalization on Corporate Savings
(Regression coefficients)

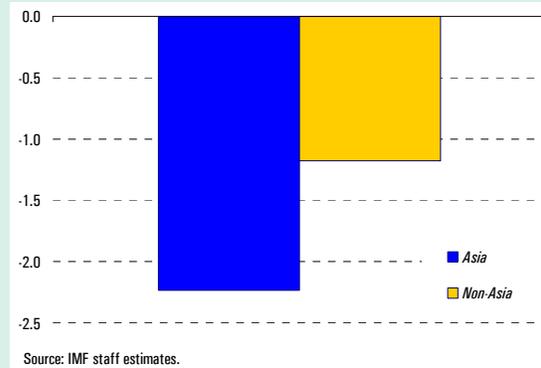


Figure 3.15. The Effect of Corporate Governance Reform on Corporate Savings
(Regression coefficients)

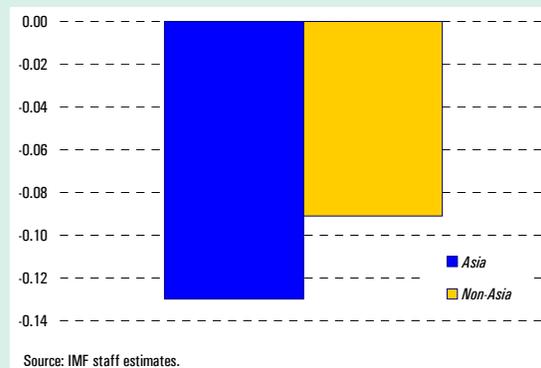


Figure 3.16. Financial Reform since the Asian Crisis
(Index)

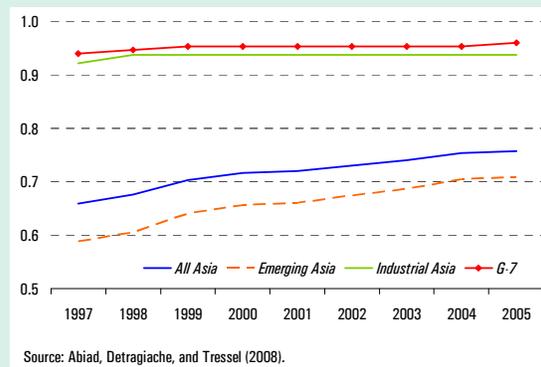
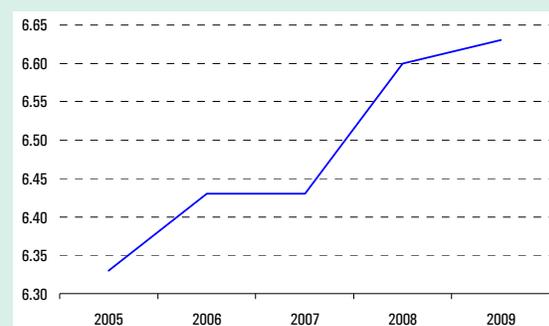


Figure 3.17. Measure of Investor Protection in Asia (Index)



Source: World Bank, Doing Business database.

economies could reduce corporate savings by 2.4 percent of GDP. Taken together, these results suggest that reforming corporate incentives and financial market institutions should be an integral part of regional rebalancing in the coming years.

Conclusion

Savings by Asian firms seem to have been a major contributor to the increase in the gap between savings and investment seen in Asia during recent years. Although high corporate profits and savings have been seen across the globe, the rise in Asia has been particularly striking, especially given anemic investment demand. Moreover, it has had a marked effect on national savings because, unlike those elsewhere, Asian households have not offset the rise in corporate savings with higher consumption. It is nevertheless true that the rise in savings would have been considerably larger if the region had not made the important advances it did over the past decade in both financial market development and corporate governance. It is important that these reforms be further deepened, and doing so will help contribute to declining savings, rising consumption, and regional rebalancing in the coming years. With the marginal propensity from property income higher in Asia, a rise in property income that follows reform is likely to lead to a larger boost in private consumption and to assist in rebalancing.

Appendix 3.1: Corporate and Household Savings

Two tests of the interaction of households and corporate savings are considered:

- In the first, suggested by Poterba (1987), a savings function is estimated based on some fundamental drivers of savings (S) to test whether changes in corporate savings (CS) are offset by households. In particular, the following equation is estimated:

$$S_t = \alpha + \beta^w S_{t-1} + \beta' X_t + \chi CS_t + \varepsilon_t \quad (1)$$

where lagged savings proxies wealth. Generally private savings should be driven by life cycle factors (such as aging) and precautionary motives. In light of this, the age dependency ratio, household disposable income, the (ex post) real interest rate, and a measure of aggregate volatility are used as fundamentals (X); disposable income is also included. Although the relationship may be biased by the holdings of equities outside the domestic market, this is unlikely to be a problem, given the extent of home bias seen in equity holdings (well over 90 percent held domestically in emerging markets). To ensure robustness, the relationship is estimated using measures of both private savings and household savings. If the corporate veil is pierced, then χ should not be significantly different from 0 when a private savings equation is estimated and not significantly different from -1 when a household savings relationship is estimated. The relationship is estimated with generalized method of moments (GMM), using as instruments twice-lagged savings, a United Nations (UN) measure of the change in household financial assets, and the lagged value of the fundamentals, to deal with possible endogeneity issues.

- The second set of tests, proposed by Auerbach and Hassett (1991), is based on determining whether consumption deviates from that

implied by optimizing consumer theory, even after liquidity-constrained consumers are controlled for (by controlling for current disposable income). Specifically the relationship between real consumption growth, interest rates, and both current disposable property and nonproperty income is estimated. Deviations based on consumption from current nonproperty income indicate the extent of liquidity constraints faced by households. However, because individuals who receive dividends (or other property income) are arguably not credit constrained, then if consumption decisions depend significantly on dividend income, these households are arguably unable to realize the same wealth out of retained earnings (corporate savings) as out of disbursed earnings (dividends). In other words, instead of saving the expected part of dividend payments (adding it to their wealth to increase lifetime consumption), they consume a significant share of it today. The following equation is therefore estimated:

$$\Delta c_{t+1} = \sigma \ln(\beta) + \sigma r_{t+1} + \gamma^Y Y_{t+1}^{NPDI} + \gamma^{PI} Y_{t+1}^{PID} + \eta_{t+1}, \quad (2)$$

where Y^{NPDI} is nonproperty disposable income, and Y^{PID} disposable property income. If consumers are credit constrained, then $\gamma^Y > 0$, and if $\gamma^{PI} > 0$ then households savings behavior is unlikely to offset corporate savings behavior. We estimate this equation using GMM and instrument for twice- and thrice-lagged consumption growth, real interest rates, and income variables.

Empirical Results

Table 3A.1 shows the relationship between private savings (constructed as the sum of corporate and household savings using UN data), fundamentals, and corporate savings.¹ This is the analogous relationship to the baseline relationship estimated

¹ These relationships are estimated using system GMM with fixed effects and lagged values as instruments to control for potential endogeneity. Significance is determined using robust standard errors.

Table 3A.1. Private and Corporate Savings
(Regression results)

Constant	-2.83	-9.54	-8.89
First lag of private savings/GDP	0.44 **	0.47 ***	0.48 ***
Age dependency	-0.19	-0.09	-0.09
Household disposable income/GDP	0.31	0.34	0.33 *
Real interest rate	-0.03	-0.05	-0.05
Volatility ¹	-19.80	-41.25	-41.72
Corporate savings/GDP			
Pooled	0.39		
Non-Asia		0.28	0.27
Asia		0.81 ***	
Asia (excluding China)			0.93 +
China			0.78 ***
R-squared	0.95	0.95	0.95
Adjusted R-squared	0.95	0.94	0.94

Source: IMF staff estimates.
Note: ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively. + indicates significance at 10.6 percent level.
¹ Standard deviation of Hodrick-Prescott-filtered GDP cycles.

Table 3A.2. Impact of Corporate Savings on Private Savings by Region: Sensitivity to Measures of Private Savings
(Regression results)

Corporate savings/GDP	Private savings ¹		Private savings ²		Household savings ³	
Non-Asia	0.30	0.29	0.41	0.41	-0.05 ***	0.01 ***
Asia	0.29		0.77 ***		-0.09 ***	
Asia (excluding China)		0.68 **		0.96 ***		0.89 *
China		0.12		0.69 ***		-0.03 ***

Source: IMF staff estimates.
Note: ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively.
¹ Private savings as measured in IMF WEO database.
² Private savings derived using national savings less government savings. Data obtained from IMF WEO database and the United Nations.
³ Household savings as measured by the United Nations. The null hypothesis (pierce the corporate veil) is that the corporate savings coefficient is -1. The significance test is adjusted accordingly.

for the United States in Poterba (1987). In the pooled sample, corporate savings have no significant impact on total private savings—consistent with households offsetting changes in corporate savings—thereby offsetting the impact of higher corporate savings with lower households savings. However, if the relationship for corporate savings in emerging Asia and elsewhere is estimated separately, it is found that private savings in Asia rise significantly with Asian corporate savings. Specifically, in emerging Asia, households offset (through lower savings) an additional dollar in corporate savings by only less than 20 cents, whereas elsewhere they offset almost three-quarters of the rise in corporate savings. The results are not

Table 3A.3. Private Consumption and Household Property and Nonproperty Income
(Regression results)

Constant	0.002	0.010 ***
Real interest rate (T-bill)	-0.103 ***	-0.067 ***
Disposable income growth		
Nonproperty (Pooled)	0.989 ***	
Property (Pooled)	0.033 **	
Nonproperty (Non-Asia)		0.729 ***
Property (Non-Asia)		0.013 **
Nonproperty (Asia)		0.740 ***
Property (Asia)		0.068 ***
Equality of disposable income coefficients (Asia = Non-Asia) ¹		
Nonproperty income growth		0.018
Property income growth		24.372 ***
<i>R</i> -squared	0.245	0.376
Adjusted <i>R</i> -squared	0.234	0.359

Source: IMF staff estimates.

Note: ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively.

¹ Wald test for the null hypothesis that the disposable income coefficients in Asia and that outside Asia are equal.**Table 3A.4. Difference in Mean Corporate Savings, Post-2000 versus Pre-2000**
(Regression results)

	Asia	Asia (excluding China and India)	Non-Asia	Non-Asian emerging markets
Post-2000	3.06 *** (0.90)	2.50 * (1.06)	1.73 *** (0.52)	1.17 (0.75)
Constant	8.89 *** (1.64)	9.61 *** (1.61)	12.0 *** (0.62)	13.3 *** (0.93)
Observations	208	166	684	305
<i>R</i> -squared	0.07	0.06	0.03	0.01

Source: IMF staff estimates.

Note: ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively. Robust standard errors are in parentheses.

an artifact of China's high savings and are robust even when Asian savings are broken down between China and the rest of emerging Asia. These results are also robust across measures of savings. Table 3A.2 shows the results of the test on corporate savings when various measures of private and household savings are used. The only substantial difference is that when the test is constructed using household savings directly, it seems non-Asian households also fail to breach the corporate veil.

Following Auerbach and Hassett (1991), Equation (2) is estimated using real disposable nonproperty disposable income and real disposable

property income to test whether current consumption depends on property income (see Table 3A.3). The results suggest that households in all regions do not fully offset corporate savings. However, although all households have a similar propensity to consume out of nonproperty income (suggesting equally binding liquidity constraints), Asian households have a significantly stronger propensity to consume directly out of property income than households in other regions. This suggests that Asian households are much less likely to offset corporate savings decisions than those elsewhere.

Appendix 3.2: Regressions on the Determinants of Corporate Savings

This chapter relies on a series of regressions using macro-level and firm-level data to explain the impact of changes in the policy environment on corporate savings.

Macro-Level Regressions

At the aggregate level, the chapter uses a cross-country panel data set compiled from various sources: the United Nations Statistical Database, CEIC Data Company Limited, World Development Indicators, the Lane and Milesi-Ferretti (2006) database on financial openness, and two new data sets that construct indices for financial development (Abiad, Detragiache, and Tressel, 2008) and corporate governance quality (De Nicolo, Laeven, and Ueda, 2006). The covariates considered are manufacturing value-added share of GDP, growth rate of GDP, volatility of GDP growth, the trade/GDP ratio, terms of trade volatility, financial openness, and domestic credit as a share of GDP. Fixed-effects regressions are used to control for time-invariant country-specific factors.

Changes in the mean corporate savings/GDP ratio since 2000 relative to prior years are tested for. The results, presented in Table 3A.4, indicate that corporate savings have increased in general across the world, with the increases ranging from 3.06 percent of GDP in Asia to 1.17 percent of GDP in non-Asian emerging economies (the change

is not, however, statistically significant for this latter group). The point estimates indicate that the magnitude of the increase is appreciably larger in Asia than it is outside Asia and that this result is not being driven entirely by China and India.

To study the policy levers that influence corporate savings at the macro level, the earnings-smoothing indicator of corporate governance constructed by De Nicolo, Laeven, and Ueda (2006) is used. This indicator tracks the degree to which managers are able to hide the true performance of firms by using accruals to smooth fluctuations of annual profits. It is calculated as the rank correlation between cash flows (before any accounting adjustments) and profits (after accounting adjustments) in a cross-section of firms within a country at each point in time.

Table 3A.5 reports the results from a country fixed-effects regression (which controls for time-invariant country-specific factors that influence corporate savings). As the coefficient on the interaction term for Asia post-2000 and corporate governance quality indicates, the association between corporate savings and corporate governance is significantly more negative than in preceding years and when compared with that for the rest of the world. This is consistent with improvements in corporate governance in Asia having an offsetting negative effect on corporate savings (against the backdrop of an overall rising trend during this period).

Firm-Level Regressions

The firm-level perspective controls for firm and industry characteristics in regard to overall corporate liquidity. The data are from the *Worldscope* database and are based on corporate balance sheets and income statements. The sample includes approximately 20,000 firms from 60 countries. It excludes financial firms, as they operate differently and hold cash and other liquid assets to meet statutory capital requirements.

Table 3A.5. Corporate Savings and Corporate Governance
(Fixed-effect regression results)

Post-2000	0.85 ** (0.39)
Asia post-2000	4.24 *** (0.87)
Corporate governance quality	0.81 ** (0.35)
Post-2000 x corporate governance quality	-0.24 (0.38)
Asia x corporate governance quality	-1.52 *** (0.50)
Asia post-2000 x corporate governance quality	-1.70 ** (0.84)
Constant	11.21 *** (0.25)
Observations	467
Number of countries	36
R-squared	0.23

Source: IMF staff estimates.

Note: ***, **, and * indicate significance at the 1, 5, and 10 percent levels, respectively. Standard errors are in parentheses.

The chapter analyzes the impact of financial liberalization on corporate savings, conditional on a number of firm-level determinants of corporate savings. The measure of financial liberalization used is an index of financial reform constructed by Abiad, Detragiache, and Tressel (2008), which looks at financial market development along seven dimensions (banking supervision, privatization, entry barriers, directed credit, credit ceilings, interest rate controls, and securities market reform) and then takes an average across the seven indicators to compile the index.

The finding is that the lack of financial development has led to an external finance premium forcing Asian firms to save more. The results suggest that financial liberalization does indeed lower the need for precautionary savings and tends to moderate the increase in corporate savings. The coefficient on the overall index is negative and significant, more so for Asia than for outside Asia.

The chapter uses the retained earnings-to-sales ratio as the measure of gross corporate savings. Retained earnings are defined as the accumulated after-tax earnings of a firm that have not been distributed as dividends to shareholders. Following

the literature on corporate liquidity (Opler and others, 1999; Cardarelli and Ueda, 2006), a number of determinants are considered in the chapter, in a dynamic-panel setting (using Arellano-Bond GMM

Table 3A.6. Results from Firm-Level Regression

Size	0.072 (11.37) ***
Share of intangible assets	0.362 (5.40) ***
Market to book value	0.018 (3.16) ***
Return on assets	0.01 (8.91) ***
Volatility	-0.001 (0.40)
Capital expenditure	-0.001 (0.34)
Financial reform index	-1.181 (4.93) ***
Asia x financial reform index	-3.416 (9.51) ***
Number of observations	105897
R-squared	0.37

Source: IMF staff estimates.

Note: *** indicates significance at 1 percent level. Robust z-statistics are in parentheses.

estimation and robust standard errors). The firm-level control variables include firm size (measured by the logarithm of the book value of assets), share of intangible assets in total assets, Tobin's Q (or the market-to-book value, defined as the market value of firms assets to book value of firms' assets), rate of return on assets, volatility of sales (measured by the rolling standard deviation of sales), capital expenditure, and leverage. In addition to the above firm-level variables, the analysis controls for country, industry, and time effects by including dummy variables. Industries are defined at the two-digit Standard Industrial Classification level (Table 3A.6).

The effect of corporate governance reforms on corporate savings is also analyzed using two databases: that from De Nicolo, Laeven, and Ueda (2006) (discussed above) and the World Bank's Doing Business database. The latter database gauges the strength of minority shareholder protections against directors' misuse of corporate assets for personal gain. The indicators distinguish three dimensions of investor protection: transparency of transactions (extent of disclosure index), the extent of director liability, and shareholders' ability to sue officers and directors for misconduct (ease of shareholder suits index).

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