

1

Overview of Issues, Challenges, and Policy Directions

BARRY P. BOSWORTH AND MASAHIRO KAWAI

The global financial crisis has provided vivid evidence of an interconnected world economy. A financial meltdown that began in the United States quickly spread to Europe, and both regions entered into a severe economic downturn. The disruption ultimately radiated throughout the rest of the world through its repressive effects on trade flows. The magnitude and breadth of the recession demonstrated the strength of the global linkages and the need for a coordination of national policies to achieve a complete recovery.

The world economy is emerging from that recession, but the pace of recovery varies greatly across the major regions. Most emerging market economies have returned to growth rates close to those in the precrisis period. Their financial systems were not significantly damaged in the crisis, and the restoration of global trade has returned them to the precrisis situation; growth is slower than before but remains strong, and their most pressing concern is inflation. However, the high-income countries of Europe, Japan, and the United States were more severely impacted, and they remain mired in more difficult circumstances. This is particularly notable in the eurozone economies. The recovery of their financial sectors remains incomplete; they are plagued by excess capacity that suppresses domestic investment and by high unemployment and low inflation. In high-income economies, the effort to stimulate their aggregate demand during the crisis left them with large fiscal imbalances.

The global recession occurred at a time of large external imbalances in the global economy. In an open trading system, individual countries should not

expect nor desire to maintain persistent surpluses or deficits in their external trade balances. But large continual deficits by individual countries do raise concerns about the sustainability of their ever-growing debt burdens. And, if the countries are large and their financial liabilities are liquid, they raise the threat of disruptive adjustments that cause systemic problems for the world economy. Similarly, large enduring surpluses at undervalued exchange rates raise concerns about the accumulation of low-return reserves and difficulties for the operation of monetary policy. Thus there was considerable concern that a pattern of large offsetting trade imbalances might raise a systemic threat to the world economy. Although external trade imbalances were not the primary cause of the financial crisis of 2008–09, many believe that they were an important contributing factor.

The disruption of financial markets, the collapse of global trade, and the unemployment concerns of the Great Recession temporarily shifted the focus of policy away from the issue of external imbalances. Global imbalances have shrunk, but an examination of the underlying causes suggests that much of the improvement is likely to prove temporary. The magnitude of the fall in trade was much greater than expected from past recessions, and some of that could be traced to large swings in commodity prices rather than the volume of trade. In addition, the synchronous nature of a financial crisis triggered by events in the world's two largest economies, the United States and Europe, led to a greater-than-normal fall in exports and imports. Furthermore, equiproportional reductions in exports and imports lessened the imbalances for the large surplus (People's Republic of China, or PRC) and deficit (United States) countries. Thus there is an expectation that recovery of the global economy will bring with it a reemergence of large imbalances.

On the other hand, some changes in the underlying pattern of saving and investment in the United States and East Asia suggest that portions of the rebalancing may prove to be more permanent. Private saving has surged in the United States, and, given the magnitudes of capacity overhang, residential and business investments are unlikely to recover for the foreseeable future. At present, those factors have been more than offset by the magnitude of increase in government dissaving, but a reduction of the budget deficit, even though gradual, would imply a substantial improvement in the saving-investment balance within the United States. Similarly, the PRC's current account surplus has remained well below pre-crisis levels, and there has been an accelerated growth of domestic demand, particularly fixed investment.

In any case, there has been some change in the perspective and concern with the current account imbalances. Before the financial crisis, the focus was on the sustainability of a world of large external imbalances, a fear that the growing cost of the U.S. indebtedness in particular would ultimately prompt a correction that could be disruptive to the global economy as a whole. After the crisis, the concern has been with the implications of a two-tier economic recovery: rapid

growth in the emerging markets and sluggish growth or even stagnation in the high-income economies. Particularly in the United States, a reduction in trade deficits—through an expansion in exports—is perceived as critical to achieving economic recovery. The absolute size of the imbalances has fallen, but in part for the wrong reason, as lower incomes in the United States have suppressed the demand for imports. A second important development has been the emergence at the 2009 Pittsburg summit of the G-20 group of countries as the central governance forum for the world economy. In its statements and the pledges of its members, the G-20 has clearly recognized the importance of coordinated actions to reduce imbalances in global trade flows.

Defining the Problem

The determinants of the current account are embedded within an interdependent system in which the external balance is driven by a combination of domestic and foreign factors. There are two principal perspectives on the current account. From the domestic side, the current account is equal to national saving less domestic investment, but from the external side, it is also equal to exports minus imports plus net income earned abroad. Thus the current account is defined by two identities: $CA = S - I$ and $CA = X - M + NFI$, where CA is the current account balance, S is national saving, I is investment, X and M are exports and imports of goods and services, and NFI is the net factor income from abroad. One of the major sources of debate over the determinants of the current account in a specific instance is the extent to which it is driven by foreign versus domestic factors, but because the identities hold from both perspectives, outcomes are a reflection of both domestic and foreign economic developments. Since individual countries are part of a system in which they export to and import from a much larger global economy, their own specific balance is likely to be dominated by their own domestic determinants, saving minus investment, and the external balance adjusts through changes in the relative price of exports and imports; but large economies also have a determining effect on the global system as a whole.

The distribution of current account balances across major regions of the world economy is shown in table 1-1. National current account balances are shown as a percentage of world GDP for the period of 1980 through 2013. Before the 1970s, current account imbalances were strictly limited, as most national financial markets operated as closed systems. With the emergence of large-scale cross-border capital flows, countries have become capable of financing larger imbalances on a sustained basis. The major feature of the table is the dominant role of the United States as the source of the deficits over the past thirty years. At the same time, many of the other economies have a relatively small influence, since their deficits or surpluses have averaged small shares of world GDP. Japan

Table 1-1. *Current Account as a Share of World GDP, Selected Regions and Years*^a

Percent

<i>Economies</i>	1980-89	1990-99	2000-05	2006-08	2009	2010	2011	2012	2013
United States	-0.53	-0.42	-1.38	-1.32	-0.65	-0.70	-0.65	-0.61	-0.51
Japan	0.28	0.36	0.35	0.33	0.25	0.32	0.17	0.08	0.05
European Union	-0.11	-0.03	-0.02	-0.15	0.01	0.03	0.12	0.24	0.44
PRC	-0.01	0.04	0.13	0.59	0.41	0.37	0.19	0.27	0.26
Emerging Asia (excluding the PRC)	-0.03	0.02	0.24	0.24	0.27	0.22	0.15	0.09	0.20
Latin America and the Caribbean	-0.14	-0.15	-0.04	0.01	-0.05	-0.10	-0.11	-0.15	-0.21
Middle East and North Africa	0.11	-0.04	0.22	0.53	0.08	0.28	0.59	0.59	0.44
Other countries	-0.70	-0.49	-1.15	-1.15	-0.65	-0.65	-0.58	-0.65	-0.63
Discrepancy	0.60	0.30	0.26	-0.40	-0.33	-0.48	-0.52	-0.47	-0.55

Source: International Monetary Fund, *World Economic Outlook* database (April 2014).

a. Emerging Asia comprises Hong Kong, China; Republic of Korea; Singapore; and Taipei, China.

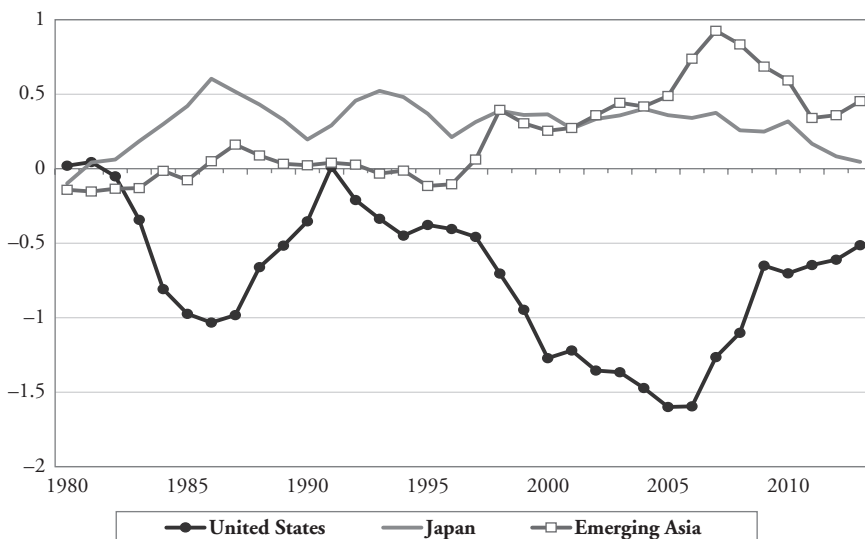
used to provide a consistent offset to the U.S. deficits, but the magnitude of its surplus has declined since 2011. The offsets to the increased U.S. deficit appear to be large surpluses in the emerging economies of Asia, including the PRC, and the oil-producing economies of the Middle East and North Africa. Given the rise of oil prices, the surge of saving within the oil-producing economies is not a surprise, but the sudden emergence of a large current account surplus in emerging Asia is less expected. There is also a substantial current account discrepancy at the global level.¹ Historically, the discrepancy was thought to arise primarily from the underreporting of investment income and transportation services, but in the past decade it has changed sign as countries are reporting more receipts than payments, largely in the area of business services (International Monetary Fund 2009, p. 35).

The dominant roles of the United States, Japan, and emerging Asia are highlighted further in figure 1-1. Their imbalances are marked by a large bilateral trade deficit-surplus between the United States and Japan until around 2000 and between the United States and the PRC since then. But a focus on recent bilateral trade flows can easily mischaracterize the nature of the imbalance because the PRC is part of a broader production network within Asia. It is often the terminal or assembly point for product components that are made throughout the countries of East and Southeast Asia. However, apart from the oil-producing countries of the Middle East and North Africa, the global trade imbalance is largely a product of economic developments in the United States and emerging Asia. As discussed above, there have been substantial declines in the magnitude of the two regions' trade imbalances since the global financial crisis. Major questions arise with respect to the durability of those changes.

Some insight into the domestic determinants of changes in imbalances is provided in figure 1-2, which reports rates of gross domestic saving and investment for four economic centers: the United States, Japan, the PRC, and emerging Asia excluding the PRC and India. The narrowing of the imbalance for the United States, which started in 2007, can be traced to the severity of that country's economic disequilibrium since it is the result of a collapse of both domestic saving and investment. The increase in the budget deficit far exceeded the rise in private saving, and national saving fell to near zero on a net basis, after adjustment for capital depreciation (not shown in the figure). The current account has improved only because of an even larger reduction in investment. Similarly, Japan suffered large declines in both saving and investment. In contrast, the PRC shows a moderation in domestic saving and a strong surge in investment. The investment to

1. The International Monetary Fund reports the discrepancy as the sum of the current accounts across all reporting countries. In the table, the sign is reversed so that the current accounts will sum to zero.

Figure 1-1. *Current Account as a Share of World GDP, United States, Japan, and Emerging Asia, 1980–2013^a*



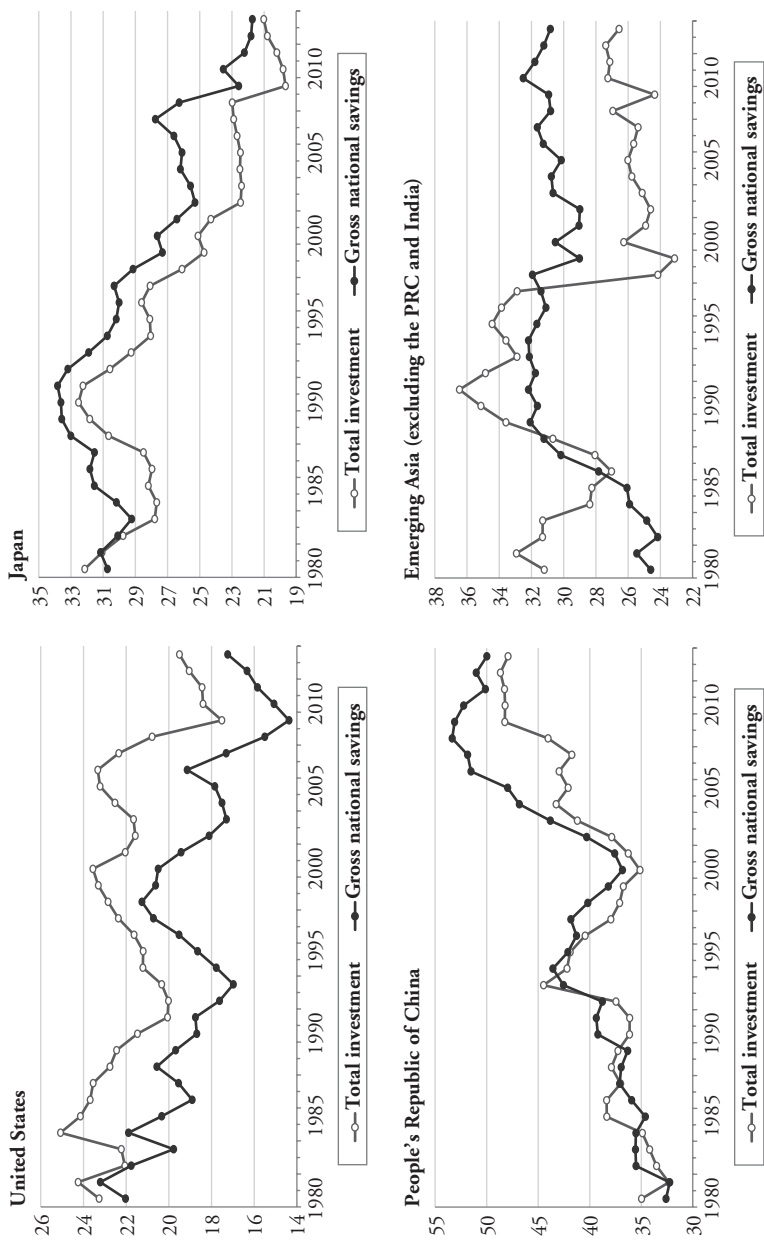
Source: International Monetary Fund, *World Economic Outlook* database (April 2014).

a. Emerging Asia comprises all Asian developing and emerging economies, particularly Hong Kong, China; Republic of Korea; Singapore; and Taipei, China.

GDP ratio rose from 42 percent in 2007 to 48 percent in 2012, while the saving to GDP ratio declined slightly from 52 percent to 51 percent over the same period. Essentially, the PRC's current account surplus shrank mainly due to the sharp rise of domestic investment, which started with a 4-trillion-yuan fiscal stimulus package adopted in response to the global financial crisis (Kawai 2010). But this high investment ratio has created overcapacity and financial vulnerabilities, particularly in the shadow-banking sector, and is likely to be unsustainable. The separate treatment of the PRC also highlights a different pattern in the rest of East Asia, where saving has remained high since the late 1990s and investment collapsed as a result of the 1997–98 financial crisis without recovering much since then. India was little affected by the past crises, and it has maintained a very large, but balanced, increase in both saving and investment.

On the external side, changes in the balance of exports and imports are driven by differences in relative rates of domestic and foreign income growth, the relative prices of domestic and foreign production, and underlying structural factors that determine nations' propensities to export and import specific products. The concept of the real exchange rate provides a simple measure of relative prices, and it is defined as the nominal exchange rate (e), defined as the foreign currency

Figure 1-2. Saving and Investment, Various Countries, 1980–2013^a



Source: International Monetary Fund, *World Economic Outlook* database (April 2013).

a. Emerging Asia (excluding the PRC and India) comprises Hong Kong, China; Indonesia, the Republic of Korea; Malaysia; the Philippines; Singapore; Taipei, China; Thailand; and Viet Nam.

price of domestic currency, multiplied by the ratio of foreign and domestic prices (P_d/P_f):²

$$q = e \times (P_d/P_f).$$

Figure 1-3 displays trade-weighted indexes of the real exchange rates, or real effective exchange rates (REERs), of the major countries and economies. The first panel contrasts the real effective exchange rates for the PRC and the United States to highlight the extent of departure in recent years. The United States has experienced a substantial depreciation of the real effective exchange rate relative to its peak in 2002, interrupted by a sharp but brief appreciation at the beginning of the financial crisis. Meanwhile, the PRC has had a substantial real effective appreciation since 2005, largely because of persistent nominal appreciation of the renminbi (RMB) against the U.S. dollar. The real effective appreciation of the RMB was also a result from substantial depreciations by some of the PRC's other major trading partners (such as Hong Kong, China; the Republic of Korea; and Taipei, China). The divergent trend changes between the U.S. dollar and the RMB are consistent with declines in U.S. deficits and Chinese surpluses.

Indexes of real effective exchange rates of the eurozone and Japan are shown in the middle panel, and they indicate a range of variation as wide as that for the PRC and the United States. Indexes for India and a composite of the emerging East Asian economies (excluding the PRC and India) are shown in the third panel. Except for the obvious effects of the 1997–98 Asian financial crisis, their exchange-rate changes have been small and largely free of a notable trend.

A Look Ahead

The objective of the following chapters is to examine factors that would achieve balanced, sustainable growth in the two regions, the United States and Asia, and the policy implications of these adjustments in both regions. The chapters that focus on individual countries address several specific issues, including the appropriate levels of domestic saving-investment (S-I) balances, the scope for policy changes to alter these balances, and the magnitude of exchange-rate changes required to switch the composition of demand between domestic and foreign sources and reallocate supply between tradables and nontradables sectors. There are also a series of major questions that we hope to address, and in some cases resolve. For example, why is saving so low in the United States, and what will be

2. The exchange rate is shown as the foreign price of domestic currency so that an appreciation of the currency is recorded as an increase in the exchange-rate index.

Figure 1-3. *Real Effective Exchange Rate, Various Economies, 1990–2014^a*

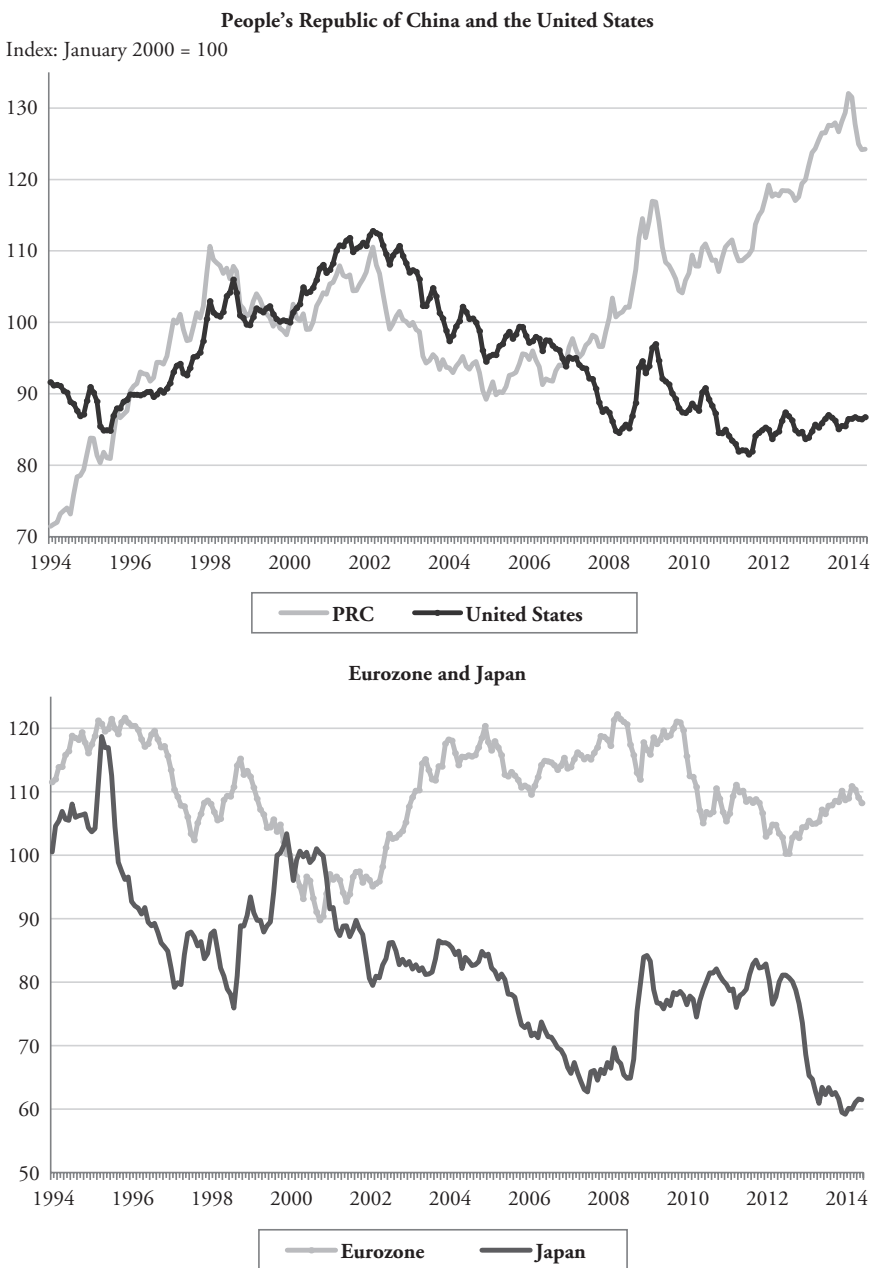
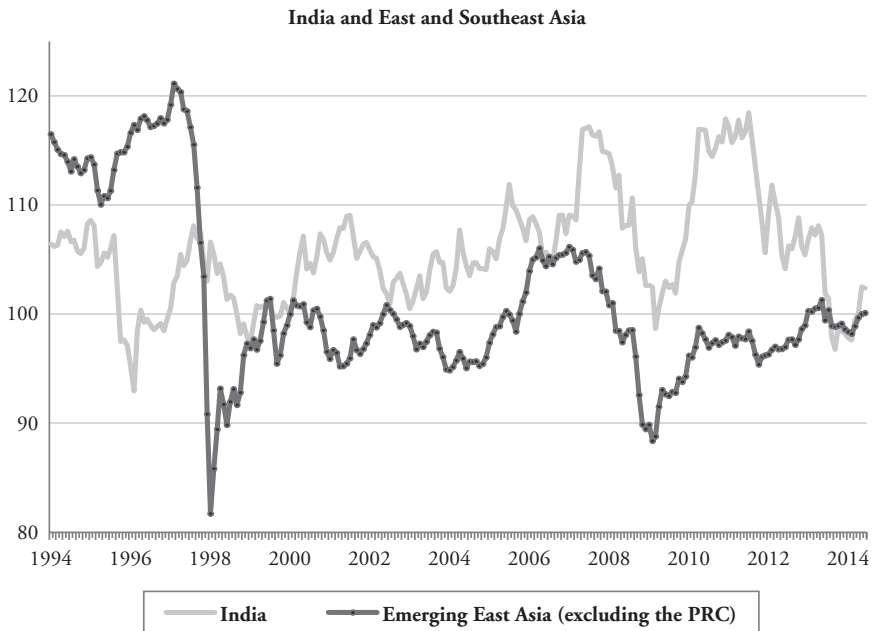


Figure 1-3. (Continued)



Source: BIS, Broad Real Effective Exchange Rate.

a. Emerging East Asia (excluding the PRC) comprises Hong Kong, China; Indonesia; Republic of Korea; Malaysia; the Philippines; Singapore; Taipei, China; and Thailand. Average regional exchange rate is calculated by using weights based on PPP GDP in 2000 from International Monetary Fund, *World Economic Outlook* database (April 2014).

the effect on consumption of the recent wealth losses and of debt decumulation? Can the government budget deficit be brought back under control? What would be the required change in the real exchange rate to bring about the realignment of resources? On the Asian side, why is saving so high? How is the high saving distributed among the household, business, and government sectors? What needs to be done to promote domestic growth without creating or exacerbating external imbalances? Can growth be sustained at a high rate without a large stimulus of exports to the U.S. market? Finally, is it necessary to establish a transpacific mechanism to facilitate needed adjustments?

Transpacific Payments Imbalances: An Overview

Barry Eichengreen and Gisela Rua (chapter 2) provide an initial overview by surveying the existing literature on the causes of transpacific payments imbalances, analyzing past and current trends of these imbalances and drawing some implications for macroeconomic stability in both the United States and Asia.

They argue for a comprehensive approach to rebalancing that takes into account two key points:

—adjustments of current account balances must occur simultaneously in both deficit and surplus countries; and

—adjustments in the composition of final demand will be accompanied by endogenous shifts in foreign exchange rates, export prices, and import prices to support the new current account balance equilibrium.

Thus they stress the interrelated nature of the interactions that determine the composition of global trade imbalances and suggest that the debate over trade balances has gone awry by focusing on exchange rates as a primary issue rather than perceiving it as an endogenously determined price that adjusts to clear markets in response to changes in policy and other exogenous shocks.

The authors describe three sets of explanations for the development of large current account imbalances: a “new-economy” argument; a more standard argument about the development of saving-investment imbalances; and aspects of the international monetary system, specifically the characteristics of international financial assets and liabilities. The new-economy view highlights the development of high rates of productivity growth in the United States, especially in the high-technology sector, that attracted inflows of foreign capital in search of higher returns. However, following the collapse of the information technology bubble in 2000, this theory seems less plausible.

The second explanation emphasizes the development of excess demand in the United States or excess saving in Asia (or both) as a result of structural factors. One version suggests that the imbalance can be attributed to a global “savings glut,” the source of which was Asia (Bernanke 2005). The alternative version argues that the imbalance was driven by excess demand, both private and government, in the United States in the years before the financial crisis.

The third explanation focuses on the arguments about the relative returns on U.S. assets and liabilities in the international monetary order, where the U.S. dollar functions as the key reserve currency. This includes the argument that foreign investors were drawn to the United States in search of low-risk debt securities (Caballero 2010): larger and more rapidly growing emerging markets sought to import safe assets from the United States to build up their foreign exchange reserves and other pools of savings.

Eichengreen and Rúa analyze the required adjustments in exchange rates needed to eliminate imbalances between the United States and the rest of the world. They use the two-region model of Maurice Obstfeld and Kenneth Rogoff (2007), which they regard as perhaps the simplest model for analyzing the general equilibrium effects of such an adjustment on prices, output, and the composition of final demand. They find that, based on various assumptions, the U.S. dollar would need to fall by about one-third in real terms to balance trade with the rest of the world. Not surprisingly, if certain countries do not allow their currencies

to rise against the U.S. dollar, the required fall of the dollar against other currencies would be correspondingly larger. Therefore, the size of the rest of the world participating in the adjustment process is a crucial determinant of the required fall in the U.S. dollar.

They also examine the nature of the adjustment in surplus countries, as opposed to the more standard research that has been undertaken for deficit countries. They conclude that large current account surpluses do tend to come to an end, but sometimes only when they have been allowed to rise to exceptionally high levels, and they find that a moderation of the surpluses was associated with slower rates of economic growth.

Exchange Rates and Rebalancing

One key issue in the adjustment process is the sensitivity of exports and imports to exchange-rate changes, which determines the degree to which exchange rates must adjust to yield a significant alteration in the trade balance. Willem Thorbecke and Ginalyn Komoto (chapter 3) estimate export and import elasticities for the United States, the People's Republic of China, and other major transpacific economies. Their estimates of price elasticity for PRC exports to the United States range from 0.2 to 1.58, with an average level of about unity, suggesting that renminbi (RMB) appreciation would have a significant negative impact on PRC exports. On the other hand, the coefficient on the ASEAN (Association of Southeast Asian Nations) exchange-rate index in the PRC export equation is negative and significant, suggesting that PRC exports would rise in response to the appreciation of ASEAN currencies. Using a consistent methodology across countries, they also estimate income and exchange-rate elasticities for exports and imports of the United States; Japan; the PRC; the Republic of Korea; Taipei, China; Malaysia; the Philippines; and Thailand. All of the income elasticity estimates are large and positive, but the results confirm earlier findings of asymmetry, that is, the United States has a higher income elasticity of imports than exports, while the opposite holds for most Asian economies, which imparts a bias toward U.S. current account deficits.

The export and import price elasticities have the right signs for the United States, but many of those for Asian economies have the wrong signs, which may reflect econometric difficulties associated with the presence of production networks, aggregation biases, and other issues. They cite extensive reviews of earlier work by Menzie Chinn (2004, 2005a, 2005b) that suggest that U.S. export and import price elasticities barely satisfy the Lerner condition (sum greater than unity); and the U.S. income elasticity of imports is about 2.4 versus a range of 1.7–2.0 for exports, pointing to continued, albeit smaller, asymmetry. These results suggest that U.S. dollar depreciation per se may have only a small impact on the U.S. trade imbalance.

The authors also point to the desirability of a general rise in Asian currencies vis-à-vis the U.S. dollar to maximize the impact on trade adjustment. Such a joint appreciation would be beneficial to the region as it would help maintain exchange-rate stability within the region, facilitating the flow of capital goods and parts and components among the Asian supply chain economies. They suggest that one way for this joint appreciation to occur would be “for the PRC to adopt a regime characterized by a multiple-currency, basket-based reference rate based on a multiple-currency with a reasonably wide band.”

Thorbecke and Komoto also look at exports, imports, and trade balances before and after the 2008 crisis. They show that while exports from most Asian countries and the rest of the world decreased and led to a lower trade balance with the United States, PRC exports to the United States were a major outlier in the global economy before the crisis and have remained so since the crisis began, so that the US-PRC bilateral trade imbalance has continued to be extremely large. This suggests that a decrease of income in the United States does not substantially reduce the PRC’s exports to the United States, owing to the nature of the products exported—primarily basic goods, as compared with the high-end luxury products exported by Japan and the newly industrialized economies. Therefore, an appreciation of the RMB would be necessary to reduce exports from the PRC to the United States as part of the reduction of the overall imbalances of the United States and the PRC. Their estimates imply that a 10 percent appreciation of the RMB would reduce the PRC’s exports to the United States by about 15 percent.

U.S. Payments Deficits and Adjustment

The global financial and economic crisis has brought about changes in aggregate demand as well as aggregate supply in both Asia and the United States. On the U.S. side, domestic consumption and private saving decisions have already adjusted substantially to reduce the S-I imbalance, even as early as 2009. The question is whether these adjustments are sustainable or whether U.S. consumers will revert to their precrisis pattern of low saving once the economy recovers. A related question is the expected trend growth rate of the U.S. economy going forward. Moreover, it is important to identify the effectiveness, sustainability, and consequences of the massive expansion of fiscal policy to cope with the painful adjustment processes in both the United States and Asia. These issues are addressed by Barry Bosworth and Susan Collins (chapter 4).

The widening of the U.S. current account deficit since 1990 was accompanied by a substantial fall in the U.S. household saving rate from an average of 7 percent of national income in the early 1980s to approximately 2 percent in the middle of the last decade. Bosworth and Collins argue that this was surprising in light of demographic trends and suggest that the decline was linked to increases

in household wealth from capital gains in equities and housing during the period that reduced the perceived need to save. They find that, since 1995, more than 100 percent of the increase in wealth relative to disposable income is attributable to valuation changes, even after taking into consideration the crash in asset prices following the Lehman bankruptcy in 2008. Looking forward, the wealth losses and increased uncertainty associated with the financial crisis and the recession have raised the private saving rate, but this may be partially offset in future years by more negative demographic factors. They conclude that any further recovery of the private saving rate is likely to be modest.

The larger domestic problem is the surge in the public sector budget deficit and collapse of domestic investment. Despite the recovery of private saving, the net national saving rate turned negative in the aftermath of the crisis, and the rate of domestic investment fell to historic lows. Furthermore, the difficulties in the housing market, which triggered the financial crisis, are likely to continue to depress the investment outlook for many years. The policy challenge is in finding a path back to fiscal balance while continuing to promote economic recovery. Managing that process will be politically difficult. At the same time monetary policy has largely been exhausted as a tool of economic recovery since interest rates are at the zero bound.

Given the large collapse of domestic demand, attention has turned increasingly to the importance of generating an expansion of exports and a reduction in the trade deficit as the critical requirement for economic recovery. The authors note the new National Export Initiative announced by U.S. President Obama in January 2010, which sets the goal of doubling exports in the next five years. However, in light of the administration's lack of the Trade Promotion Authority needed to effectively negotiate new trade agreements, the means to implement this objective are limited. Perhaps the most promising policy change would be a cut in the U.S. corporate income tax, which would improve international competitiveness. A recent study found that the United States had the second highest statutory corporate tax rate among member countries of the Organization for Economic Cooperation and Development in 2006, owing to significant tax reforms abroad (U.S. Department of the Treasury, Office of Tax Policy 2007).

Using gravity-type models to relate levels of exports and imports to GDP and other factors for a large sample of countries, Bosworth and Collins argue that U.S. exports underperform significantly, while the level of imports seems quite comparable to other high-income economies. Therefore, weak exports seem to be the main factor behind the large U.S. trade deficit, and it is important to understand what structural factors may account for the country's poor performance. Unfortunately, there is little clear evidence in this area. Bosworth and Collins suggest a partial explanation based on a greater tendency of U.S. manufacturing firms to locate production activity overseas. They argue that restrictions on U.S. defense-related high-technology exports cover only a small component of poten-

tial trade. They conclude that a substantial expansion of the export market will require further reductions in the price of American goods in world markets—that is, substantial exchange-rate depreciation.

Bosworth and Collins express a more optimistic interpretation of the potential response of U.S. trade to changes in both incomes and relative prices than is reported by Thorbecke and Komoto (chapter 3). They cite some studies that argue that the previous asymmetry in income elasticities for U.S. exports and imports has disappeared. As a result, a 1-percentage-point reduction in the aggregate trade deficit as a percentage of GDP may now be associated with a smaller real dollar depreciation, perhaps in the range of 8–15 percent, and there may not be a secular bias toward deterioration in the trade balance (see International Monetary Fund 2007; Crane, Crowley, and Quayyum 2007).

Japan's Current Account Rebalancing

Masahiro Kawai and Shinji Takagi (chapter 5) note that, for more than three decades, Japan's current account balance had been in surplus in the range of 1.5 to 4 percent of GDP until the outbreak of the global financial crisis in 2008. Japan's earlier surplus and the U.S. persistent deficit were at the core of global imbalances in the 1980s and 1990s. However, Japan's surplus was overtaken by the PRC's surplus in size in 2006 and began to shrink in the aftermath of the crisis as a result of both temporary and long-term structural factors.

Temporary factors include the reduction in global demand due to the global financial crisis, rapid yen appreciation reflecting the yen's safe-haven role during the crisis, and rising mineral fuel imports to secure electrical power supply following the triple disaster of March 2011. Mineral fuels had to be imported as virtually all nuclear power plants were shut down in Japan and no other source of energy was available domestically. Longer-term structural factors include the change in industrial structure of the Japanese economy (relocation of manufacturing production bases abroad and a trend shift of productive resources away from the tradable toward the nontradable goods sector) as well as population aging. It is the structural factors that will define the course of current account rebalancing for Japan over the medium to long term.

Kawai and Takagi raise two issues: whether the ongoing rebalancing of Japan's current account is transitory or permanent; and whether Japan's current account will turn into a deficit in the near future. There are two offsetting trends that will affect Japan's current account balance over the medium to long term. On one hand, the trade balance, which turned into a deficit in 2011, will continue to be adversely affected by the deindustrialization trend, large imports of mineral fuels, and the rapid aging of the Japanese population. On the other hand, Japan's transformation into a mature net-creditor country, which generates growing investment income from abroad, can exert favorable influences on the

current account balance. Kawai and Takagi argue that when all factors are taken into consideration, Japan's current account balance is likely to shrink or may even turn into a deficit. This implies that, given net investment income at more than 3 percent of GDP, Japan will begin to run a sizable trade deficit. This trade balance adjustment would likely contribute significantly to supporting global economic growth.

Policymakers seem to be concerned about the shrinking current account surplus and the possible emergence of a current account deficit. The shrinking current account balance is often viewed as a sign of declining competitiveness of Japanese manufacturing. However, the issue of manufacturing competitiveness should be addressed from the perspectives of how employment could be created in non-manufacturing sectors and how stable energy supply can be secured, not from a current account perspective. A more serious concern would be the potential impact of any future current account deficit on the already precarious state of the public finances—as demonstrated by the high level of sovereign debt amounting to 220 percent of GDP. Once the current account balance turns to a deficit, more of fiscal deficit financing must come from foreign savings, which could affect market sentiments, pushing up long-term interest rates and making fiscal consolidation more difficult. In the absence of serious fiscal consolidation, the Japanese economy could be forced into a sovereign debt crisis.

Kawai and Takagi argue that Abenomics, adopted by Prime Minister Shinzo Abe in December 2012 (which has three arrows of monetary policy expansion, flexible fiscal policy, and structural reforms), has the potential to address these issues. First, heading off deflationary expectations and achieving a stable level of inflation of 2 percent would set a conducive macroeconomic environment for sustained economic growth. Second, structural reform policies can support Japanese manufacturing activity in leading-edge, knowledge- and high-tech-intensive products through R&D activities and innovation. Third, as in the United States, a high corporate tax rate could be reduced to a level common to Japan's global competitors. Fourth, a program of deregulation in services sectors (particularly health and other sectors) and a reduction of entry barriers can stimulate investment, raise productivity, and expand employment opportunities in services. Fifth, enhancement of social expenditures in the areas of child care, health and education, greater support for increased labor participation by women and the aged, and liberalizing immigration of foreign talents can augment labor supply. Sixth, concluding the Regional Comprehensive Economic Partnership (RCEP), the Trans-Pacific Partnership (TPP), and the Japan–European Union Economic Partnership Agreement would help in further opening the economy, leading to greater inflows of foreign direct investment. Finally, fiscal consolidation to ensure sovereign debt sustainability is also critical to avoiding a sovereign debt crisis even when the current account balance turns into a deficit. An increase in the consumption tax rate, from 5 percent to 8 percent in April 2014 and the subsequent

planned hike from 8 percent to 10 percent in October 2015 would be an important step for this objective.

Thus Japan's current account rebalancing is likely to persist in the medium to long term. Public policy should not try to reverse this trend, but should focus on achieving a stable level of inflation, improving productivity particularly in services sectors, opening the economy, and consolidating the country's fiscal situations.

New Development Paradigm for the PRC

In 2008 the PRC had the world's largest current account surplus (US\$468 billion, or nearly three times the size of Japan's), which was by far the single largest counterpart to the current account deficit of the United States. The PRC also had by far the largest bilateral surplus with the United States. Therefore, any discussion of transpacific rebalancing must focus heavily on the U.S.-PRC relationship. Yiping Huang and Kunyu Tao (chapter 6) review a number of traditional explanations for the PRC's large trade surplus, including measurement error, factors relating to the S-I balance, demographic transition, the shift of industry from other Asian economies to the PRC as a result of the development of production networks, strong growth policies, and exchange-rate distortions.

While they acknowledge the contribution from these factors, Huang and Tao offer a provocative thesis, namely that asymmetric market liberalization and factor market distortions are the main factors behind the imbalance. Specifically, markets for export goods have largely been liberalized, but those for factor markets have not. These cost distortions are equivalent to production and investment subsidies and have generally tended to lower production costs of Chinese firms, encourage production, and improve international competitiveness. They also tend to depress household income, leading to the abnormally low share of consumption in GDP of only about 35 percent, far lower than in other Asian economies.

Huang and Tao identify major distortions in the markets for labor, capital, land, energy, and the environment. In the labor market, the main distortion is that Chinese firms do not pay social security costs for migrant workers, which is estimated to reduce their payroll costs by 35–40 percent. Producers' capital costs are reduced by financial repression, which keeps loan rates low, and restrictions on capital outflows, which limit alternative investment opportunities. Land prices for industry are kept low, and electricity and other fuel prices are subsidized. The degradation of the environment as a result of pro-growth policies is well known, and it is not reflected in the costs to firms. Huang and Tao argue that these effective subsidies probably contributed to the substantial rise of corporate saving over the past decade, which reached almost 23 percent of GDP by 2007.

In earlier work, Huang (2010) developed a methodology for measuring the magnitude of these distortions, what he refers to as producer subsidy equivalents, as a percentage of GDP. In this chapter he and Tao extend his earlier analysis to

cover the period 2000–09. There are two major findings. First, capital market distortions are the largest, accounting for about 40 percent of the total measured distortions, followed by labor market and environmental distortions. Second, the aggregate estimates of cost distortions or producer subsidy equivalents match the trend of the current account imbalance data surprisingly well, tending to lead it by about one year. The cumulative distortion effect peaked in 2006, and its decline thereafter may have reflected both steps to liberalize factor markets as well as cyclical factors.

Huang and Tao's thesis also suggests a policy prescription, namely, to liberalize factor markets to reduce the distortions that have favored producers and damaged households. Reducing implicit and explicit subsidies for production should help reduce retained earnings of firms, or corporate saving, and increase household incomes. On the demand side, the main challenge for the PRC is to find ways to expand the share of household income and consumption in GDP and obtain a greater contribution to growth from this segment.

There are two broad approaches to boosting household income and consumption. The first is to design measures to encourage the corporate sector to distribute a large portion of the corporate surplus to labor. A direct way would be to have state-owned enterprises pay larger dividends to the state, which could indirectly support the household sector by channeling the increased revenue to households in various ways. For example, government can improve income distribution by providing greater income transfers to rural areas and inland provinces, where income levels lag behind. This includes improved inland transportation infrastructure and improvements in financial infrastructure to make financing more available to rural and inland households and small- and medium-size enterprises (SMEs). The second approach would be to craft policy measures to expand the social safety net, including health care and pensions, especially for migrant workers, and to increase government spending on education. This should reduce the need for precautionary savings in these areas.

Huang and Tao argue that the RMB is probably still undervalued and that further appreciation is necessary as part of the adjustment process. However, though they state that greater exchange-rate flexibility and gradual currency appreciation are important, they also believe that those measures need to be part of a comprehensive package that aims at removing factor market distortions. This should include making efforts to remove or reduce distortions in resource prices, reforming the household registration system and thereby reducing discrimination against rural workers, and continuing with capital market liberalization.

Asian Tigers' Choices

The abrupt shrinking of external demand in Asia during the global financial crisis has raised questions about the export-dependent growth strategies in emerging

Asia. The Asian tigers—or newly industrialized economies, including Hong Kong, China; the Republic of Korea; Singapore; and Taipei, China—suffered most since their dependencies on exports in GDP are higher than many other emerging Asian economies. They are also deeply involved in regional production networks for sectors such as autos and electronics. If export-led growth is hampered, what are their choices for economic growth? How much can be expected from policies to promote domestic demand and improve productivity in the services sector? Hwee Kwan Chow (chapter 7) suggests that the general approach should be to shift toward a new growth model that puts more emphasis on domestic demand as the source of growth. However, they acknowledge that this is not feasible for small and very open *entrepôt* economies, such as Singapore and Hong Kong, China, in which domestic demand is dwarfed by the external sector. Any demand stimulus would be undercut by large import leakages. In any case, their surpluses, although large relative to GDP, are modest in absolute terms, accounting for only about 3 and 5.4 percent, respectively, of the total Asian current account surplus in 2009.

Chow sees greater potential for a rebalancing of growth in the Republic of Korea and Taipei, China. The Republic of Korea's current account surplus was only 3.9 percent in 2009, and it averaged only 1.8 percent of GDP in the previous decade. Although the Republic of Korea's surplus cannot be regarded as a significant contributor to the global imbalances, the country would still benefit from a rebalancing of its growth to reduce its exposure to fluctuations in global trade. In contrast, Taipei, China had a large current account surplus of 11.4 percent of GDP (equivalent to 7 percent of the Asian total) in 2009.

Chow's recommendations are generally close to those of Kawai and Takagi for Japan. One is to encourage consumption spending by enhancing the social safety net, thereby lowering the need for precautionary savings. In the tiger economies, savings rates are likely to decline anyway because of the rapid aging of all of these populations. Second is to improve productivity growth of the services sector, such as education, business supporting services, and traditional services. Service sector productivity has generally lagged that of manufacturing, partly owing to its role as an absorber of excess employment from the manufacturing sector following the Asian financial crisis. Deregulation of the services sector could raise its growth potential and its contribution to overall growth. In addition, higher productivity and growth of services sectors can improve income distribution and thus tend to stimulate consumption growth.

The third recommendation calls for promoting investment in education and R&D activities, which can respectively help workers upgrade skills and productivity and help companies to move up the production value chain. There is also a need to raise productivity of SMEs, which account for a large share of total employment, and to take other steps to encourage the overall business climate to promote investment. Chow's final recommendation is to support establishment

of a common market within the region to raise intra-Asian demand and investment, and the author argues that Asian tiger economies should alter their production structure to maximize the favorable impact of demand growth in rapidly growing Asian economies such as the PRC and India.

ASEAN's Strategy

As a group, ASEAN has an economy slightly larger than India's and is therefore considered a potential economic powerhouse in Asia. It aims to establish an ASEAN economic community by 2015 and to transform ASEAN into a region with free movement of goods, services, investment, and skilled labor and freer flows of capital. At present it has several free trade agreements with countries within and outside Asia. Its economy is powered by foreign direct investment and exports and has benefited much from joining Asia's production networks and supply chains. Like the rest of the export-reliant economies, ASEAN also suffered from shrinking external demand during the global financial crisis. Unlike most of the Asian tigers, some ASEAN members have large potential domestic demand. Any change in their development strategy must be consistent with the aim of establishing an ASEAN economic community.

Iwan Azis and Mario Lamberte (chapter 8) analyze developments in the ASEAN5 countries—Indonesia, Malaysia, Philippines, Singapore, and Thailand. They note that the first four of these saw a sharp drop in the ratio of investment to GDP following the Asian financial crisis of 1997–98, which led to a general shift from current account deficits to surpluses. Since then, consumption growth has generally been robust, but that of investment has not. Many ASEAN economies became even more dependent on exports after the crisis, as a result of weaker domestic demand. Along with this, corporate saving rose significantly, reflecting an increased dependence on retained earnings and, in some cases, higher profits resulting from restrictions on market access that led to the development of oligopolistic markets. Second, they argue that growth in the period following the Asian financial crisis was accompanied by some undesirable trends, such as worsening income inequality and less rapid growth of employment. Third, they note that a large proportion of the economy, both households and SMEs, has inadequate access to financial services. Therefore, they take the view that, even though these countries do not have large current account surpluses, they could benefit from policies aimed at encouraging investment growth.

These views shape their policy recommendations. First, they favor procompetition policies to allow greater market entry to reduce oligopolistic profits and to encourage the expansion of banking services, thereby reducing the need for corporations to rely on retained earnings. Deregulation of the services sector to spur growth can have a large potential in view of its sizable share of total employment.

In forging the ASEAN Economic Community, in addition to cutting tariffs, further steps are needed to reduce “behind-the-border” obstacles to trade, such as harmonizing technical regulations and standards with international standards. Barriers to investment must also be reduced. Second, they suggest that expanding access to SMEs and household financial services could contribute to growth and employment by expanding investment opportunities. Third, they recommend increasing public investment in basic infrastructure, which has been neglected since the 1997–98 financial crisis, to improve the country’s competitiveness, encouraging investment to raise worker skills and increase research and development, and supporting expansion of the social safety net. Fourth, given that domestic demand in ASEAN members—with the exception of Indonesia—is too small for it to become an effective driver of growth, steps should be taken to enlarge the potential market beyond ASEAN by further liberalizing trade and investment. In particular, each ASEAN economy needs to increase its capability to take advantage of the larger, expanding domestic markets in the PRC and India and the mature markets of Japan and other developed economies in Asia. Finally, they advocate more cooperative currency management in the region to allow a general rise of Asian currencies against the U.S. dollar as part of the process of adjusting global imbalances.

India’s Emergence

At first blush, India seems not relevant to the issues on transpacific rebalancing because it does not have the trade surpluses found in other Asian economies. However, Rajiv Kumar and Pankaj Vashisht (chapter 9) argue that India, given its large and rapidly growing domestic market, could help other East Asian economies in their efforts to achieve greater export diversification and rebalancing of growth. Regarding India’s role as a potential market for Asian exports, Kumar and Vashisht note that various trade initiatives would contribute to a sharp increase in India’s bilateral trade with the PRC, ASEAN economies, and Japan. Somewhat paradoxically, India’s trade has increased most rapidly with the PRC, which does not have any trade agreement with India. Although India has become more integrated with Asia, the gap between actual and potential trade remains high, ranging from 53 percent to 93 percent with the Philippines, Brunei Darussalam, Cambodia, the Lao People’s Democratic Republic, Bangladesh, and Pakistan.

India can also provide a model for other Asian economies aiming to rebalance growth since it has a relatively low ratio of exports to GDP and a high contribution to growth from services. The rapid growth of Indian domestic demand since 1991 has largely been attributed to the spectacular performance of the services sector, especially the software and information technology-enabled services sector. This was also reflected in the services sector’s success in attracting

foreign direct investment, which ensured a wholesale movement in technological upgrading. However, the employment impacts have been disappointing. For example, Asheref Illiyan (2008) estimates that the software sector and information technology-enabled services sector have generated only 1.63 million employment opportunities.

Despite the potential of India's huge internal market, it is still hobbled by lack of development of its transportation and distribution infrastructure, interstate barriers to trade such as taxes, onerous regulations, and barriers to entry. Kumar and Vashisht argue in favor of policies to encourage more rapid expansion of the manufacturing sector, including having the government review all policies that have an impact on doing business in India with the objective of initiating another round of structural reforms to improve the investment climate. They also call for a general review of the regulatory and financial barriers that hinder the development of SMEs and recommend that the potential for further development of finance to SMEs and microfinance be assessed.

The authors identify several other sectors ripe for structural reforms. The education sector is characterized by massive capacity constraints, an acute shortage of adequately trained teachers, and poor curriculum quality. The agriculture sector, which employs nearly 50 percent of the working population but contributes less than a fifth of GDP, is lagging behind the rest of the economy in productivity. Finally, they call for reform of the delivery of public services, starting with law and order and including primary health, urban facilities, and better connectivity in the rural sector.

Conclusion

The potential for adjustment of the transpacific current account imbalances can be seen from two complementary perspectives—the needed structural changes and the required real exchange-rate changes. Neither can be considered without the other, although structural changes usually induce the required exchange-rate changes (see Kawai and Zhai 2009). For those economies with large imbalances, a combination of both will be required. For those Asian countries with modest surpluses or deficits, adjustment per se is less a priority, but they can still benefit from policies that reorient growth toward domestic and regional demand. This will be particularly the case if U.S. trend growth has slowed, making it a less attractive export market than earlier.

Evidence is mixed on the size of transpacific export and import price elasticities and hence on the estimates of the size of real exchange-rate adjustments needed to reduce the current account imbalances. On the positive side, taking into account recent developments and aggregation biases, price elasticity estimates have tended to be revised up. Furthermore, the asymmetry between the U.S. income elasticity of demand for exports and imports also has diminished, if

not disappeared. However, the mystery of the underperformance of U.S. exports still appears unsolved, and the trend continues to worsen. The reasons for this need to be understood better, particularly if the United States has any hope of achieving its goal of doubling exports by 2015.

The United States needs an increase in domestic savings relative to domestic investment as well as a shift in production from nontradables to tradables. With private saving rates having already risen significantly after the global financial crisis, the large fiscal deficit, though gradually declining, is the main factor that sustains the current account deficit. For both this reason and the spiraling level of government debt, a tightening of fiscal policy will be the key policy priority over the longer term, and this will tend to weaken the dollar because of its impact on interest rates. However, the prospective normalization of monetary policy will also lead to an increase in interest rates and will thereby strengthen the U.S. dollar.³ Although the United States appears to have limited scope for structural policy changes, apart from fiscal consolidation, to affect its current account balance, the most obvious policy changes could be an increase in fuel taxes, a limit of tax exemption of mortgage interest payment only to the first house, and the easing of the restrictions on U.S. high technology exports.

On the Asian side of the adjustment process, the PRC looms largest in view of its rapid growth of exports, huge current account surplus, and massive accumulation of foreign exchange reserves, and it needs to see the opposite changes, that is, a decrease in domestic savings relative to domestic investment and a shift of productive resources away from tradables to nontradables. Given that domestic investment is already high as a share of GDP, it needs to come down, implying that the even higher saving rate must be reduced by a much wider margin. The good news is that there appears to be plenty of scope for doing so. The PRC looks to be rich in opportunities for structural reforms that could tilt the balance in the direction of domestic demand. The high level of corporate saving appears to be biased upward by distortions that reduce the costs of labor, capital, energy, and the environment. These factors have also tended to depress the share of labor income in the economy, leading to the abnormally small share of consumption in GDP of only 35 percent. Undoing these distortions could help raise the share of labor income and contribute to improving the distribution of income. In addition, the PRC government has already recognized the importance of raising social expenditures, which will tend to reduce the need for precautionary savings.

3. So although the net results of unwinding lax monetary and fiscal policies on the real effective exchange rate of the U.S. dollar are uncertain, the most likely scenario would be a stronger dollar in the short-term owing to the earlier normalization of monetary policy, followed by a weaker dollar owing to fiscal consolidation, which takes a longer time to implement.

Finally, RMB appreciation would most likely lead to some reduction of the PRC's trade surplus. This impact would be larger if other supply chain currencies also appreciate vis-à-vis the U.S. dollar.

For other Asian economies, the prescriptions are broadly similar, although they differ in emphasis. Aside from India, services sectors in all countries lag in terms of productivity and can benefit substantially from liberalization, including easier foreign entry. Social expenditures can be increased to support consumer spending, while increased access to financial services can benefit both households and SMEs, leading to higher employment, investment, and consumption and improved distribution of income. For larger economies with bigger domestic markets, steps to promote domestic demand can have large payoffs. In Japan, where current account surpluses are expected to shrink because of rapid aging, challenges are to reinvigorate economic activity through timely reconstruction from the triple disasters, improvement of productivity and competitiveness, reform of social security systems, and consolidation of public finance and debt. In the Republic of Korea and Taipei, China, policies to support consumer spending are vital, while in middle-income ASEAN economies, the main priorities are to improve the investment climate, especially for SMEs, and to increase infrastructure spending. Asia's regional trade integration can increase the size of the potential market and increase access to expanding markets provided by rapidly growing middle classes, especially in the PRC and India.

References

- Bernanke, Ben S. 2005. "The Global Savings Glut and the U.S. Current Account Deficit." Speech to the Virginia Association of Economics, Richmond, Va. March 10.
- Caballero, Richard J. 2010. "The 'Other' Imbalance and the Financial Crisis." Working Paper 15636. Cambridge, Mass.: National Bureau of Economic Research.
- Chinn, Menzie D. 2004. "Incomes, Exchange Rates, and the U.S. Trade Deficit, Once Again." *International Finance* 7, no. 3: 451–69.
- . 2005a. "Doomed to Deficits? Aggregate U.S. Trade Flows Reexamined." *Review of World Economics* [Weltwirtschaftliches Archiv] 141, no. 3: 460–85.
- . 2005b. "Still Doomed to Deficits: An Update on U.S. Trade Elasticities." Working Paper. University of Wisconsin.
- Crane, Leland, Meredith A. Crowley, and Saad Quayyum. 2007. "Understanding the Evolution of Trade Deficits: Trade Elasticities of Industrial Countries." *Economic Perspectives* [Federal Reserve Bank of Chicago] 31, no. 4: pp. 2–17.
- Huang, Yiping. 2010. "China's Great Ascendancy and Structural Risks: Consequences of Asymmetric Market Liberalization." *Asian-Pacific Economic Literature* 24, no. 1: 65–85.
- Illiyān, Asheref. 2008. "Performance Challenges and Opportunities of India Software Export." *Journal of Theoretical and Applied Information Technology* 4, no. 11: 1088–106.
- International Monetary Fund. 2007. "Exchange Rates and the Adjustment of External Imbalances." *World Economic Outlook* (September): 81–120.
- Kawai, Masahiro. 2010. "Global Rebalancing: An Asian Perspective." In *Rebalancing the Global Economy: Four Perspectives on the Future of the International Monetary System; Europe*

- in Dialogue 2010–11*, edited by Stefan Collignon and others, pp. 79–102. Gutersloh, Germany: Bertelsmann Stiftung.
- Kawai, Masahiro, and Fan Zhai. 2009. “China–Japan–United States Integration amid Global Rebalancing: A Computable General Equilibrium Analysis.” *Journal of Asian Economics* 20, no. 6: 688–99.
- Obstfeld, Maurice, and Kenneth Rogoff. 2007. “The Unsustainable U.S. Current Account Position Revisited.” In *G7 Current Account Imbalances: Sustainability and Adjustment*, edited by Richard H. Clarida, 339–76. University of Chicago Press.
- U.S. Department of the Treasury, Office of Tax Policy. 2007. “Approaches to Improve the Competitiveness of the U.S. Business Tax System for the 21st Century.”