

COUNCIL *on*
FOREIGN
RELATIONS

*Maurice R. Greenberg
Center for Geoeconomic Studies*

DISCUSSION PAPER

The Return of the East Asian Savings Glut

Brad Setser
October 2016

The Council on Foreign Relations (CFR) is an independent, nonpartisan membership organization, think tank, and publisher dedicated to being a resource for its members, government officials, business executives, journalists, educators and students, civic and religious leaders, and other interested citizens in order to help them better understand the world and the foreign policy choices facing the United States and other countries. Founded in 1921, CFR carries out its mission by maintaining a diverse membership, with special programs to promote interest and develop expertise in the next generation of foreign policy leaders; convening meetings at its headquarters in New York and in Washington, DC, and other cities where senior government officials, members of Congress, global leaders, and prominent thinkers come together with CFR members to discuss and debate major international issues; supporting a Studies Program that fosters independent research, enabling CFR scholars to produce articles, reports, and books and hold roundtables that analyze foreign policy issues and make concrete policy recommendations; publishing *Foreign Affairs*, the preeminent journal on international affairs and U.S. foreign policy; sponsoring Independent Task Forces that produce reports with both findings and policy prescriptions on the most important foreign policy topics; and providing up-to-date information and analysis about world events and American foreign policy on its website, CFR.org.

The Council on Foreign Relations takes no institutional positions on policy issues and has no affiliation with the U.S. government. All views expressed in its publications and on its website are the sole responsibility of the author or authors.

For further information about CFR or this paper, please write to the Council on Foreign Relations, 58 East 68th Street, New York, NY 10065, or call Communications at 212.434.9888. Visit CFR's website, www.cfr.org.

Copyright © 2016 by the Council on Foreign Relations® Inc.
All rights reserved.

This paper may not be reproduced in whole or in part, in any form beyond the reproduction permitted by Sections 107 and 108 of the U.S. Copyright Law Act (17 U.S.C. Sections 107 and 108) and excerpts by reviewers for the public press, without express written permission from the Council on Foreign Relations.

Introduction

East Asia's current account surplus—its excess of savings over investment—has recently amounted to about as large a share of world gross domestic product (GDP) as it did prior to the global financial crisis. In 2015, the region's four major economies—China, Japan, South Korea, and Taiwan—along with the city states of Hong Kong and Singapore had a combined current account surplus of \$700 billion. Their combined surplus significantly exceeded Europe's surplus. No region of the world currently contributes more to the global glut in savings. Outward flows of capital from East Asia present a challenge to the world economy, and this problem may grow in the next few years.

East Asia's surplus is all the more remarkable because it has reemerged despite two factors that act to reduce it. China's investment remains at historically high levels and Japan's budget deficit is around 5 percent of GDP. Both high investment and large fiscal deficits absorb significant amounts of savings at home. These two surplus-reducing factors are overwhelmed, however, by East Asia's extremely high rate of saving. At close to 40 percent of GDP, it appears to be at a record level relative to the size of the region's economy. Without a reduction in the savings rate, there is a risk that East Asia's already large surplus will increase. To control its bad-debt problem, China may reduce credit creation and investment. To control its government-debt problem, Japan may opt for fiscal consolidation. In either case, policies that reduce domestic risks could give rise to new global risks.

This is especially concerning right now, because the world economy is already grappling with the problem of excess savings. In an attempt to reduce saving and boost spending, major central banks have cut their official lending rates to around zero, but households and businesses continue to want to save. Market interest rates—a measure of the appetite to spend and invest—remain extremely low.

The problem of the global "savings glut" is now more acute than in 2005, when this terminology was made famous by the future chairman of the U.S. Federal Reserve, Ben Bernanke.¹ In the United States and the United Kingdom (UK)—the two countries that absorb the bulk of the world's surplus savings—real interest rates are substantially lower than they were a decade ago. The low rate implies that these economies do not have good uses for the savings flooding in from East Asia. There is a risk that capital will be badly allocated, creating losses that will burden the financial system. It would be healthier for the world economy if East Asia provided the other major regions with less unwanted capital and more demand for goods and services. The counterpart of a savings surplus is a deficit in internal demand and a corresponding need to rely on exports to support growth, which impose a burden on East Asia's trading partners at a time when they also have difficulty in generating enough demand.

Moreover, East Asia's savings surge is occurring at a time that is troubling for political as well as economic reasons. Economists have long emphasized the benefits from trade, which are real. But the dislocations from trade are also real, and the scale and cost of these dislocations increases when trade is unbalanced. Large capital flows from East Asia tend to push up the exchange rates in receiving countries, forcing a reallocation of investment and jobs away from trade-competing sectors into sectors more insulated from global competition. Recent empirical work confirms that workers often do

not adjust successfully to change. Many drop out of the labor force. Workers who remain in trade-competing jobs often experience lower wages, and this effect extends to service workers in trade-exposed communities, even though they are not exposed to trade directly.² The dislocations from trade have contributed to political polarization, a loss of trust in elites, and a hunger for populist alternatives in both the United States and parts of Europe.³ The social costs—and therefore also political costs—of relying on the United States and a few other countries as consumers of last resort are increasingly evident.

There is an urgent case for a strategy to reduce East Asia's savings rate to a level that the region can more easily absorb internally. The adjustment should be centered on China, where exceptionally high levels of savings no longer serve the same purpose as during the country's catch-up phase of economic development. In the past, high savings allowed China to finance high levels of domestic investment without drawing on potentially risky, reversible, cross-border capital flows. However, with the gains from high levels of investment now reduced, a national savings rate that still approaches 50 percent of output is simply too high to be absorbed effectively at home or abroad. China's high savings rate increasingly implies either bubbles in credit and investment domestically or large capital surpluses that have to be exported and that add to global risks.

Although China is the prime source of the savings glut, South Korea, Taiwan, and Japan also contribute. Savings rates of 35 percent of GDP in South Korea and Taiwan generate more capital than can be absorbed domestically. South Korea's current account surplus is just under 8 percent of GDP, about the same share of its GDP as the surplus of Germany, the leading non-Asian contributor to the savings glut. Taiwan's surplus is at an even higher 14 percent of GDP, although the effect is mitigated by Taiwan's smaller economy. Japan's surplus of 3 percent of GDP is comparable to that of the eurozone as a whole.

Over the past few years, the nature of the policy challenge posed by East Asia's external surplus has changed. The region's surpluses are no longer maintained primarily through intervention in the foreign exchange market, with the result that moving toward floating currencies is no longer a sufficient policy response to Asia's trade surplus.⁴ The traditional U.S. economic agenda in the region—aimed at liberalizing trade, investment, and exchange rates—also misses the threat that East Asia's savings glut poses to global prosperity. U.S. economic diplomacy now needs to advance policies that lower national savings in East Asia directly. These include the use of fiscal policy to support an increase in household consumption and reforms in high-saving East Asian economies to strengthen the social safety net and thereby lower private savings.

Finally, a note about the choice of countries for this study. This paper focuses on the main East Asian economies with persistent external surpluses: China, Japan, and the newly industrial economies—Hong Kong, Singapore, South Korea, and Taiwan. All are net exporters of manufactures, and all have run external surpluses over the last fifteen years. China is poorer than the others, so the description of a “rich East Asia” would not fit; neither would the term “Northeast Asia,” as Singapore lies to the south. The term “East Asia” in this paper is used to refer to these six surplus economies. Although Malaysia also has run a persistent external surplus and could have been added to the group, its trade and capital accounts are heavily influenced by the price of oil and follow a different pattern than the countries this paper analyzes. Because this East Asian grouping has been deliberately constructed to contain surplus economies, comparisons with Europe follow the same rule. The surplus economies of Northern Europe—Denmark, Sweden, and Switzerland—have been added to the surplus of the eurozone. Norway has been left out, given the dominant role oil plays in its external accounts.

The Evolution of Global Current Account Imbalances

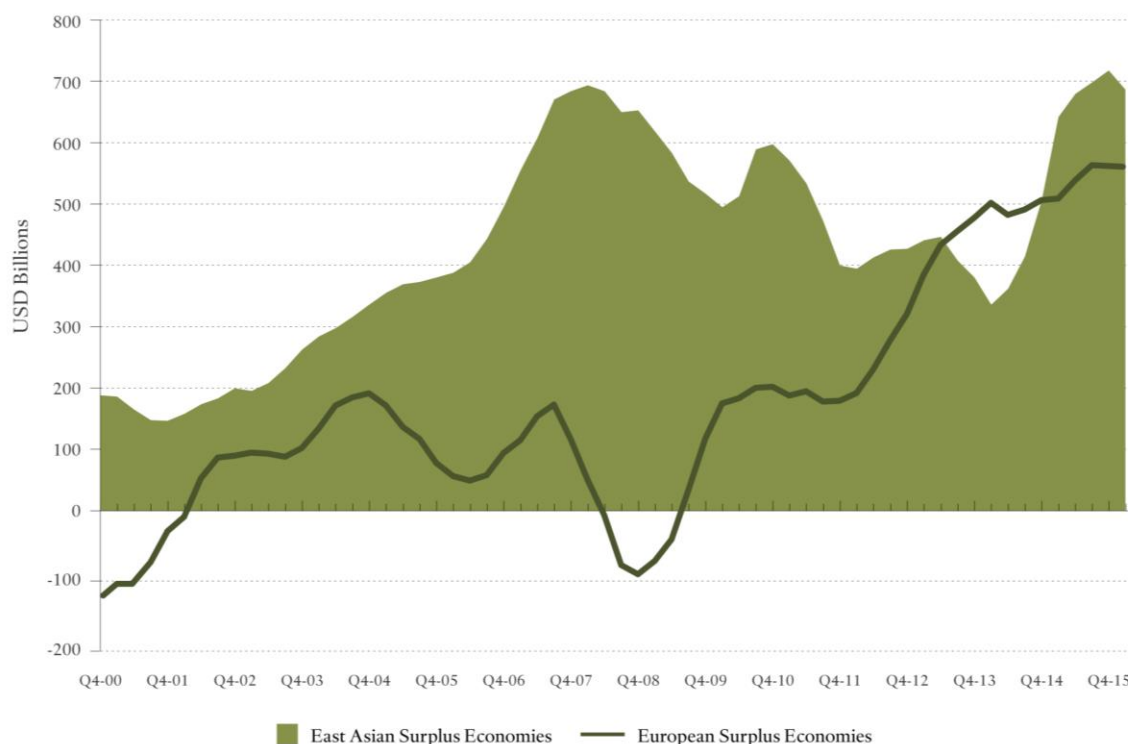
Among those who worry about the risks associated with global payments imbalances and suspect that large imbalances played a supporting role in the 2008 financial crisis, there has been a broad consensus on two points:

- Europe has replaced East Asia as the main source of concern.⁵ In the years following the global financial crisis, the eurozone solved its internal imbalances by getting rid of deficits in deficit countries without getting rid of surpluses in surplus countries. Germany's surplus is larger now than it has ever been, even though the deficits in France, Italy, Spain, and other smaller eurozone economies have disappeared. As a result, Europe's combined surplus with the rest of the world soared. In the meantime, East Asian surpluses—notably those of China and Japan—fell to more reasonable levels as a share of each country's GDP.
- Overall global imbalances have fallen significantly and pose less of a risk than prior to the global financial crisis.⁶

Both arguments now need to be updated. The aggregate surplus of the main East Asian surplus economies—China, Japan, South Korea, Taiwan, Hong Kong, and Singapore—topped \$700 billion in 2015, higher than pre-financial crisis figures from 2007 and also larger than the \$470 billion combined surplus of the eurozone, Denmark, Sweden, and Switzerland (figure 1). China alone accounts for more than two-fifths of this amount, and official data may understate its real surplus, as the significant reported rise in China's services deficit may partly reflect disguised capital outflows. Japan's surplus of just under \$150 billion appears to be heading back to its precrisis level. The combined surplus of the other four economies has doubled from \$120 billion to \$250 billion, since 2007.

The aggregate surplus of East Asia's main surplus economies rose to about 4 percent of their combined GDP in 2015. That is larger, as a share of GDP, than the eurozone's surplus—and larger than the combined surplus of the eurozone, Denmark, Sweden, and Switzerland.

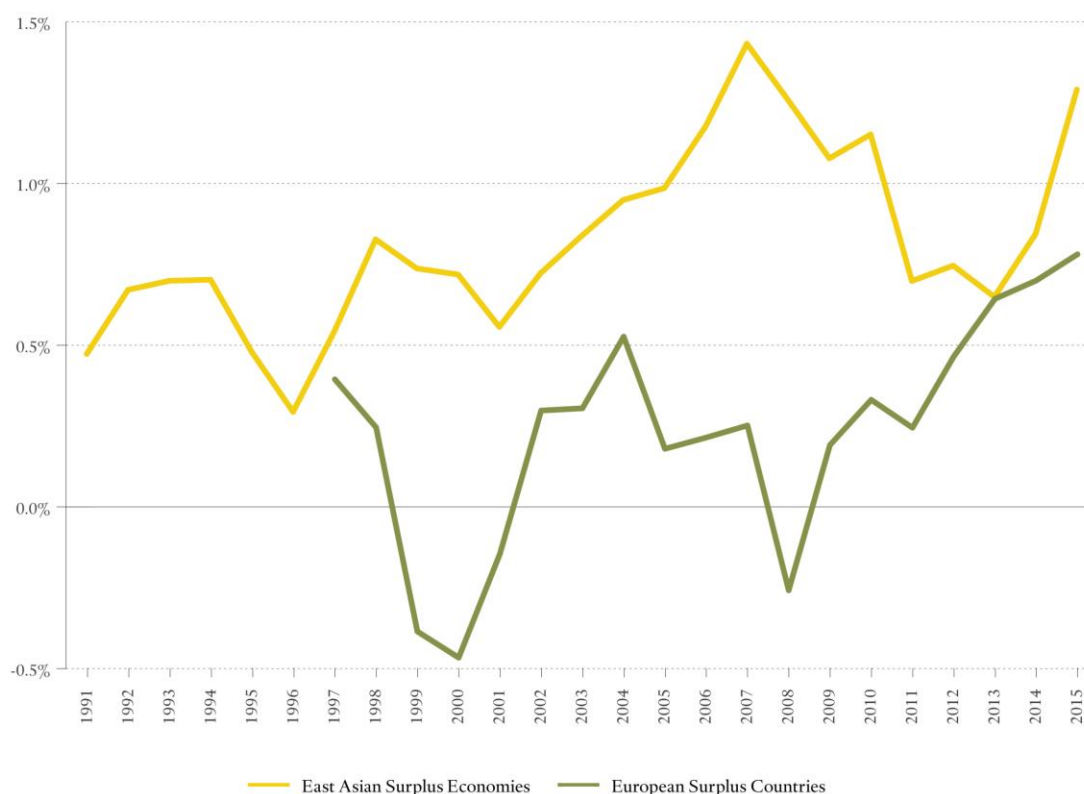
Figure 1. Current Account Surplus in East Asian Surplus Economies Versus European Surplus Economies, in USD Billions



Sources: International Monetary Fund (IMF); Eurostat; European Central Bank; Bank of Japan; Central Bank of the Republic of China (Taiwan); Bank of Korea; Singapore Department of Statistics; State Administration of Foreign Exchange; Hong Kong Census and Statistics Department; Haver Analytics.

The East Asian surplus is still below its precrisis high of 7 percent of its GDP, but there are other, more relevant measures of its global effect. The combined surplus of the main East Asian surplus economies is now roughly equal to 1 percent of world GDP, only slightly below its precrisis high. That figure arguably understates East Asia's effect on the world, as the main economies in the region all run surpluses and thus do not help to absorb each other's surpluses. If East Asia's own GDP is taken out of the world GDP to focus on the impact of East Asia's surplus on its trading partners, then the size of the deficit that the rest of the world would have had to run in 2015 to offset East Asia's surplus is close to precrisis level (figure 2).

Figure 2. Current Account Surplus in East Asian Surplus Economies Versus European Surplus Economies, as Shares of Global Trading Partners' Aggregate GDP



Source: IMF; State Administration of Foreign Exchange; Haver Analytics.

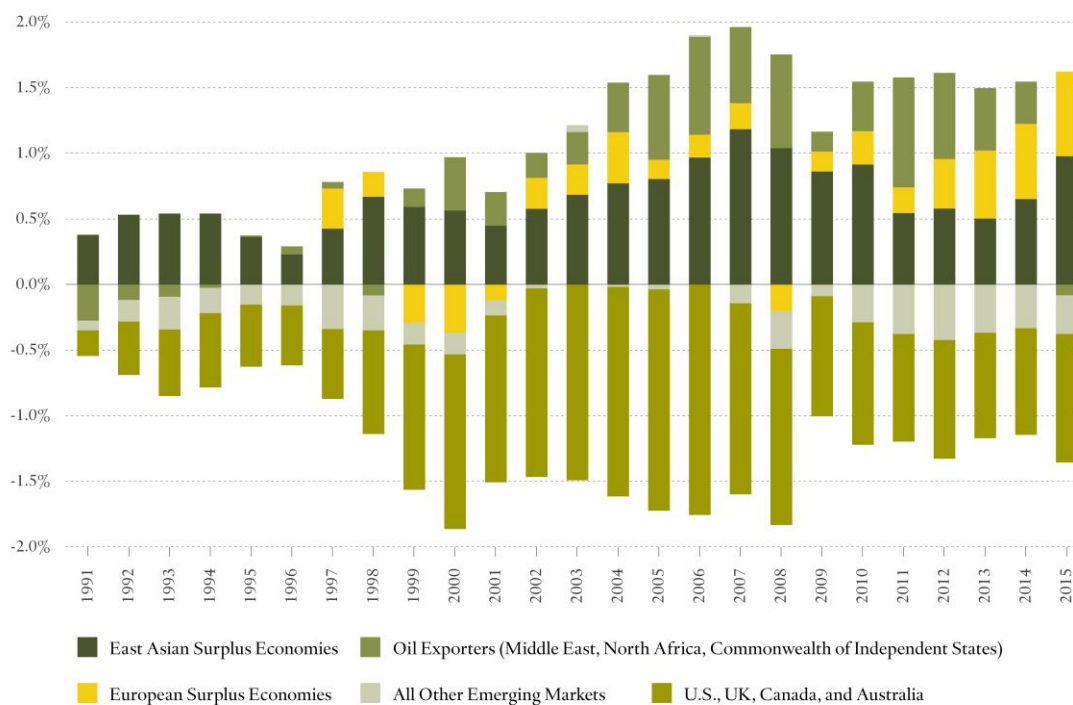
There is also growing reason to think that the fall in East Asia's surplus, from its precrisis level of around \$600 billion to a low of just over \$300 billion in the aftermath of the global financial crisis, may have been temporary and that the underlying surplus, absent policy changes, will remain at its current level of around 1 percentage point of world GDP or higher. The postcrisis fall in East Asia's surplus stemmed in part from high prices for commodities, of which the region is a large net importer. East Asia's underlying surplus in manufactures fell during the global financial crisis but quickly recovered; the surplus is now as large as ever. Commodity traders now expect that the price of iron and oil will remain significantly below the postcrisis highs: futures markets suggest that oil will remain under \$60 a barrel through 2020, and metal market analysts believe low-cost Australian iron production will keep the price of iron close to \$50 a ton. Recent terms of trade gains are expected, in large part, to be permanent.

Moreover, the fall in the surplus in the immediate aftermath of the global financial crisis came from an unusually high level of investment in China and an unusually large fiscal deficit in Japan that put more of East Asia's savings to work at home.⁷ Other high-saving East Asian economies have retained a tendency toward large surpluses.⁸ If China reduces its level of investment and Japan reduces its fiscal deficits, their surpluses could easily rise further.

Usually, an increase in the surplus of one large manufacturing-exporting and commodity-importing region could be expected to come at the expense of its competitor. However, the global

effect of the surpluses of the main East Asian economies is magnified by the fact that both East Asia and Europe are running large surpluses simultaneously. The surpluses of the eurozone, Denmark, Sweden, Switzerland, and the six East Asian powers appear to be at an all-time high in dollar terms and at a thirty-plus-year high as shares of the world economy. As a result, the world's aggregate current account surplus is correspondingly large, even in the absence of a significant surplus in the world's oil exporting economies (figure 3).

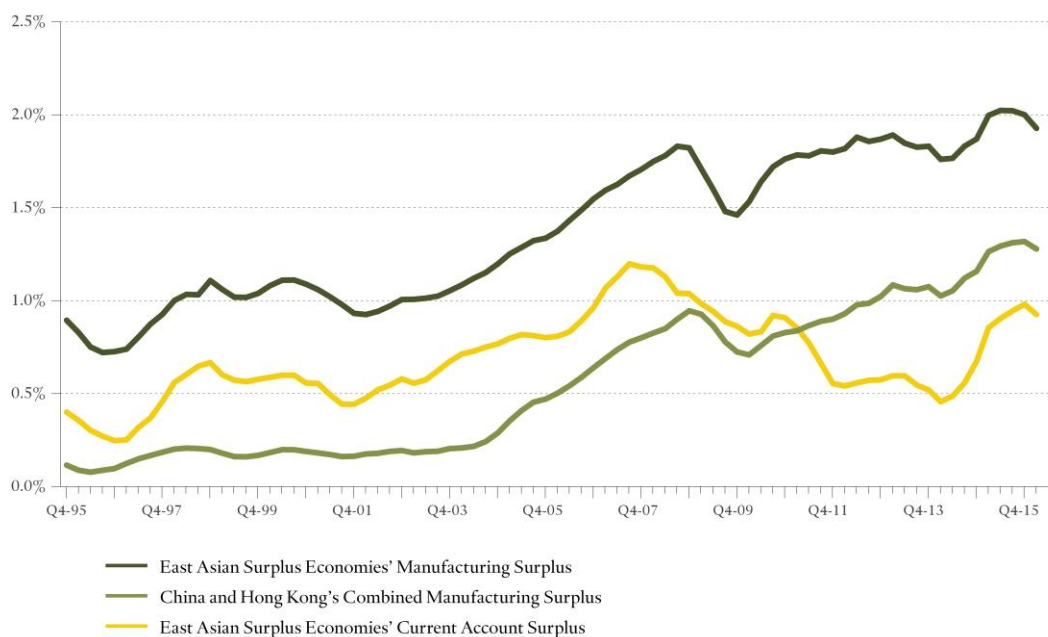
Figure 3. Global Current Accounts, as Shares of World GDP



Source: IMF; State Administration for Foreign Exchange; Haver Analytics.

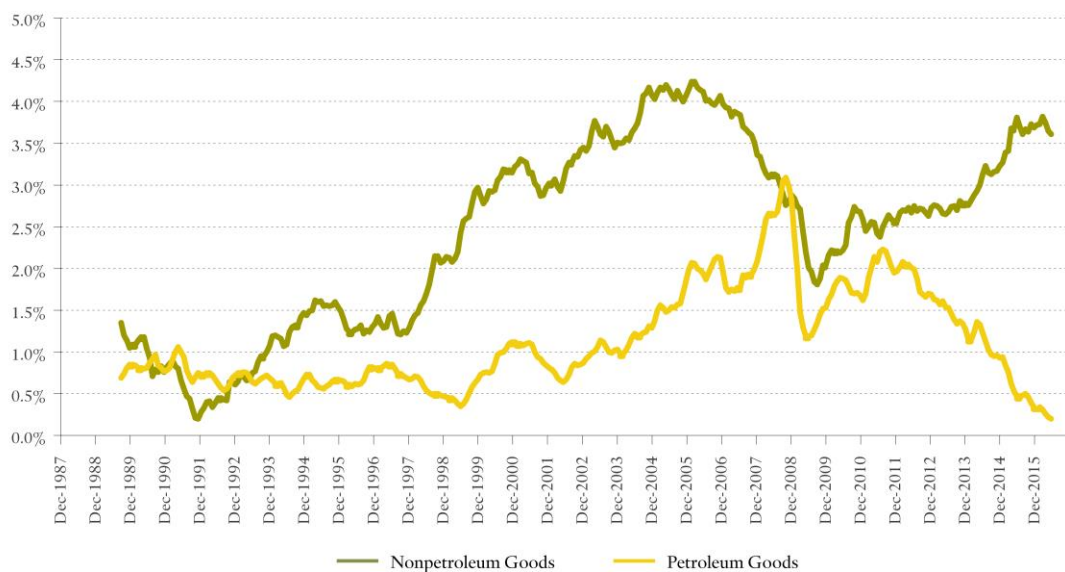
Large, simultaneous surpluses in East Asia and Europe result in a significant net drain of manufacturing demand away from other parts of the world economy. East Asia's manufacturing surplus remains as a large, relative to world GDP, as it was prior to the global crisis (figure 4). The offsetting deficits are now found in Australia, Canada, the UK, and the United States, a subset of oil-importing emerging economies such as Turkey, and some oil exporters. Canada and the UK play a bigger role in offsetting East Asia's surplus than in 2005, with the UK's 5 percent of GDP deficit in 2015 especially notable.⁹ Meanwhile, the U.S. deficit plays a smaller role than it did a decade ago. The U.S. deficit has shrunk, both as a share of U.S. GDP and as a share of world GDP. This decrease is largely due to the rise in domestic U.S. oil production and to lower global oil prices. The U.S. deficit in nonpetroleum goods is almost as large as its precrisis peak (figure 5).

Figure 4. Current Account and Manufacturing Surplus of East Asian Surplus Economies, as Shares of World GDP



Source: IMF; State Administration of Foreign Exchange; Bank of Korea; Hong Kong Census and Statistics Department; Central Bank of the Republic of China (Taiwan); Haver Analytics.

Figure 5. U.S. Trade Deficit (Sign Reversed), as a Share of GDP



Source: Haver Analytics, Bureau of Economic Analysis.

For the deficit countries, the need to absorb East Asian and European surpluses poses three problems. First, large capital imports and correspondingly low interest rates may lead to incautious investments that will later sour. In the run up to the global financial crisis, the exceptionally large U.S. trade deficit was associated with the housing bubble. Moreover, much of the risk associated with intermediating between global savings and property-related borrowing was borne by undercapitalized U.S. and European banks.¹⁰ Currently, no comparable internal financial imbalances are evident in the United States, even if there is a bit of froth in commercial real estate. Still, a global savings glut heightens the risk of future financial instability.

Second, large surpluses in surplus economies push down interest rates globally and make it more difficult for monetary policy in all countries to respond effectively to economic shocks and the business cycle, due to the difficulty in pushing interest rates significantly below zero. Large trade surpluses when interest rates are low consequently add to the risk that deficit countries will get caught in what economists call a liquidity trap, where monetary policy loses effectiveness and countries running external deficits cannot maintain their economies at full employment.¹¹ Moreover, there are growing concerns that low interest rates are not simply a temporary byproduct of a weak recovery, but rather reflect a persistent tendency for savings to exceed investment in many advanced economies. In such conditions, persistent external surpluses are an ongoing drag on the global economy. Gauthi Eggertsson, Neil Mehrotra, and Lawrence Summers recently wrote:

In a global secular stagnation, neo-mercantilist policies—policies that attempt to improve one country's net foreign asset position relative to another or run persistent current account surpluses—are beggar-thy-neighbor. Neo-mercantilist policies alleviate the secular stagnation of the country pursuing them by exporting savings, but at the expense of the trading partner.¹²

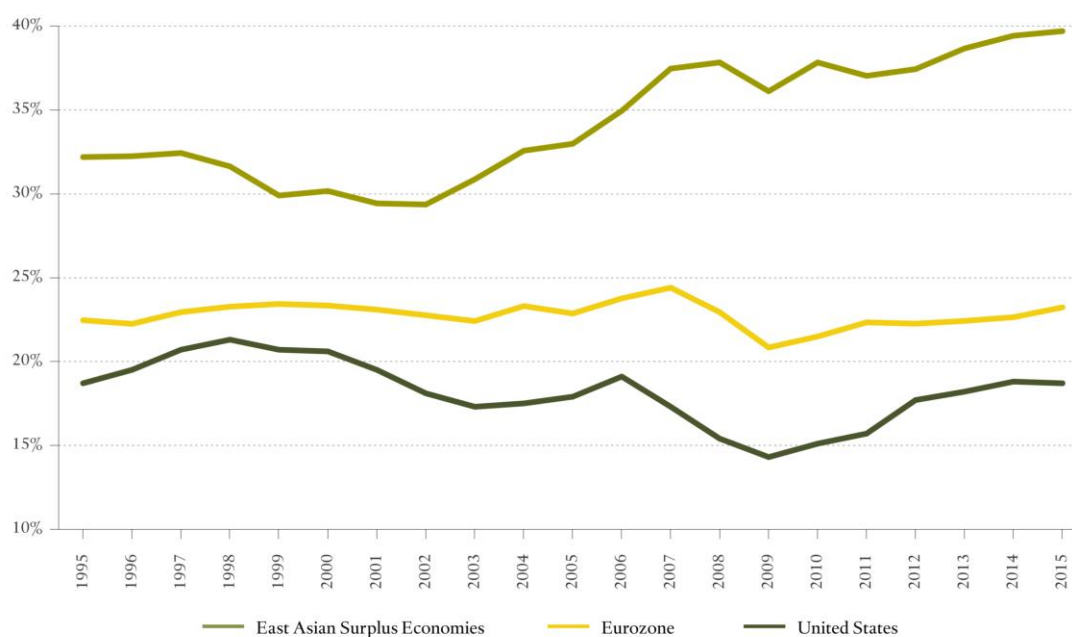
Put simply, the countries now importing savings are having difficulty putting those savings to good use, and do not really gain from borrowing from abroad.

The third problem stemming from the savings glut is that manufacturing employment in the deficit countries will face ongoing pressure. As the sharp rise in the U.S. nonpetroleum deficit shows, currently the United States has to contribute to global demand for manufactures if the world's payments are to come close to adding up. This has substantial distributional consequences, as it gives rise to dislocations in manufacturing-centric regions of the United States. Moreover, to the extent that productivity growth in manufacturing is stronger than productivity growth in other sectors of the economy, there may also be an effect on aggregate U.S. economic performance.

The Evolution of East Asian Savings

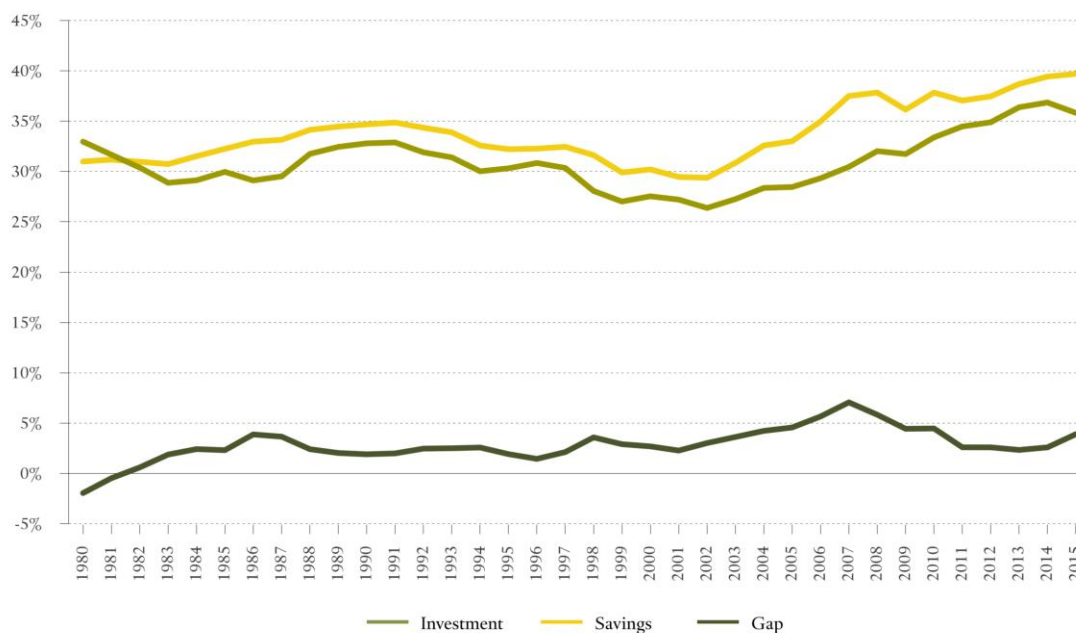
In 2000, aggregate savings in the East Asian surplus economies stood at about 30 percent of their combined GDP. Five years later, it had risen to around 35 percent, leading Bernanke to diagnose a savings glut. Today, the ratio is close to 40 percent. China's rising share of regional output has overwhelmed the modest fall, observed in the past few years, in its savings rate, which remains substantially higher than the savings rates of its neighbors (figures 6 and 7). In contrast, national savings in the eurozone stands at 23 percent of GDP. National savings in the United States is 19 percent, up from its precrisis lows. In the UK, the ratio is 13 percent.

Figure 6. Savings of Three Major Global Regions, as Shares of Regional GDP



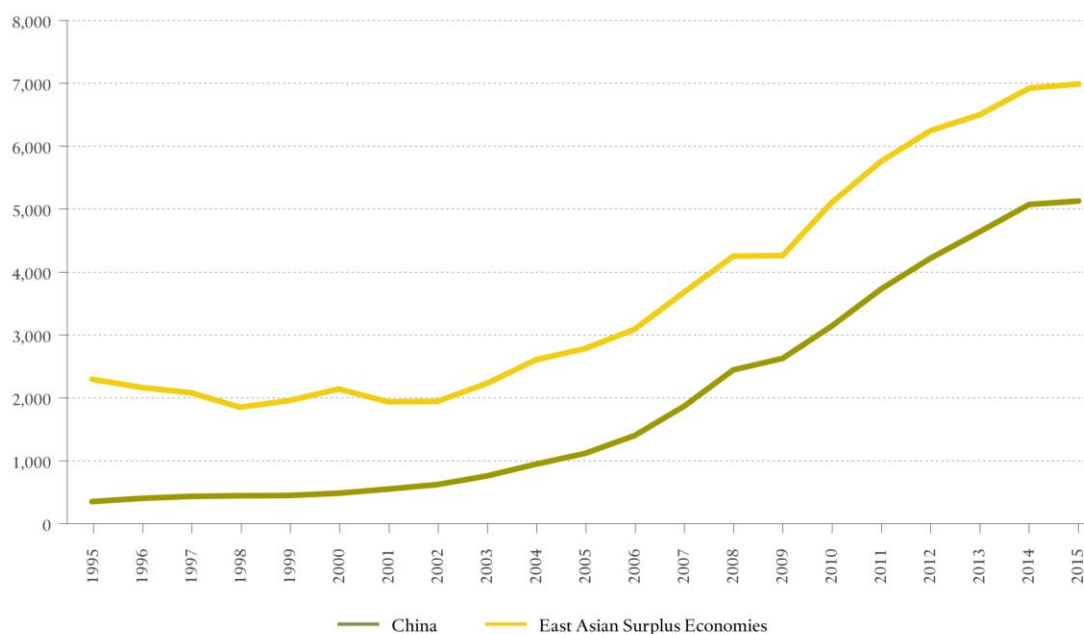
Source: IMF; State Administration of Foreign Exchange; Haver Analytics.

Figure 7. Savings and Investment of East Asian Surplus Economies, as Shares of Regional GDP



Source: IMF; State Administration of Foreign Exchange; Haver Analytics.

Figure 8. Savings of East Asian Surplus Economies, in USD Billions



Source: IMF; State Administration of Foreign Exchange; Haver Analytics.

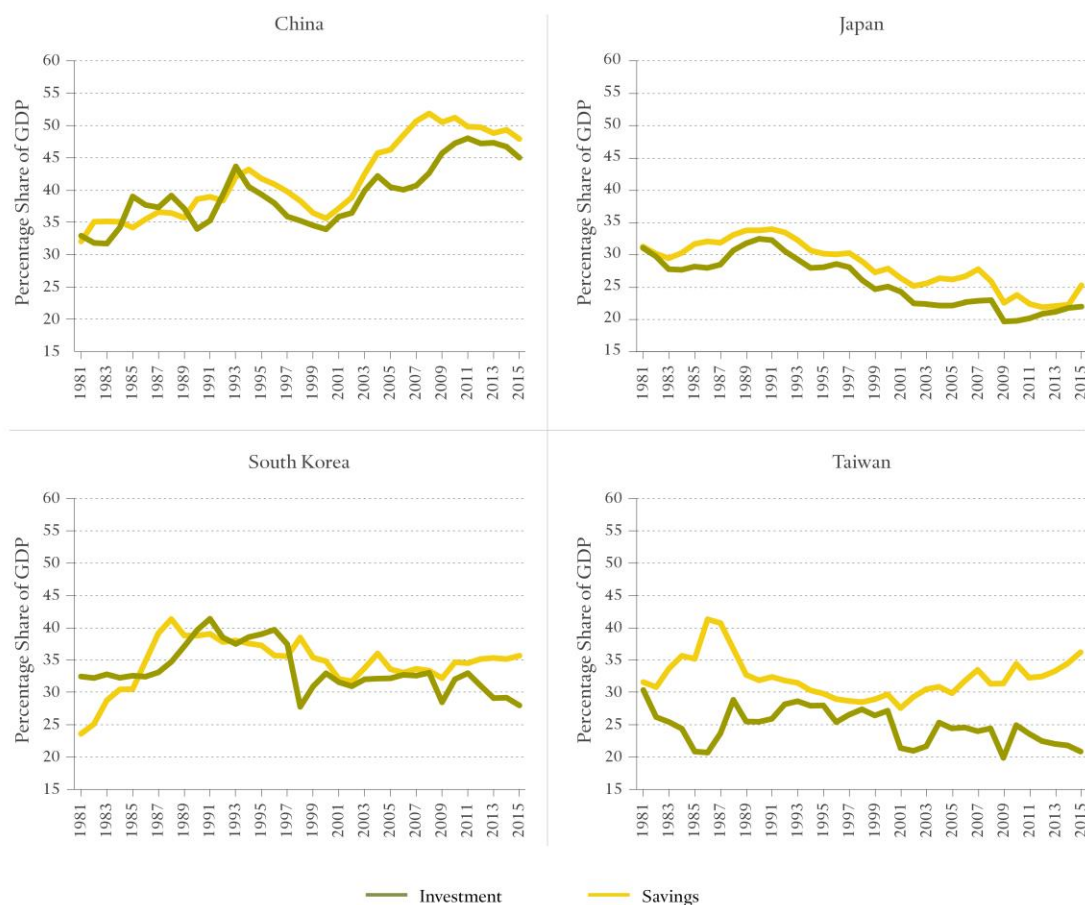
A basic economic identity relates a country's surplus in its external accounts—a trade surplus, or a surplus in investment income from large holdings of foreign assets—to its savings and investment balance. An external surplus implies a country is saving more than it invests, but it does not indicate

whether the surplus stems more from high levels of savings—and low levels of consumption—or from low levels of investment. For the main surplus economies in East Asia, though, there is little doubt that the external surplus stems far more from unusually high levels of savings rather than from low levels of investment.

East Asia's regional aggregate blurs distinct national stories. China's national savings rate has fallen a bit recently, but it remains staggeringly high, at almost 48 percent of 2015 GDP. It was only 35 percent of China's GDP back in 2000. China's only real competition in the high savings sweepstakes is Singapore, which has a series of policies—little government borrowing, forced savings through provident funds, and reinvestment of profits from sovereign wealth funds—that almost seem designed to assure an unusually high level of national saving. Even Norway—an oil exporter with a prudent policy of saving the current income from its oil and gas fields—has never saved more than 40 percent of its GDP.¹³

South Korea and Taiwan save just over a third of their national output; while high, it is not as exceptional as China's savings rate. Japan saves around 25 percent of annual output, or just a bit more than Europe, but this masks a highly abnormal distribution. Japan's fiscal deficit has averaged over 6 percent of GDP over the past fifteen years—an extraordinarily high level—yet Japan never ran an external deficit. Its enormous government dissaving is matched by a savings surplus in the corporate sector; companies, which are usually expected to borrow from other sectors in order to invest and create jobs, are net lenders instead. Gross savings of Japan's corporations have consistently topped 20 percent of Japan's GDP, and net savings of the corporate sector have been between 5 percent and 10 percent of Japan's GDP. Martin Wolf, the chief economics commentator of the *Financial Times*, has noted that “so long as the corporate sector runs a structural financial surplus, macroeconomic balance is likely to require fiscal deficits. Moreover, if the corporate sector is unable to invest even its own savings, savings in the rest of the economy are bound to have a low marginal value.”¹⁴ Japan does have a problem of excess saving, but it is sectoral, not national.

Figure 9. National Savings and Investment Rates in East Asian Surplus Economies, as Shares of GDP



Source: IMF; State Administration of Foreign Exchange; Haver Analytics.

In dollar terms, the rise in East Asian savings over the last ten years has been enormous (figure 8). In 2005, East Asia's annual savings totaled around \$3 trillion, or 6 percent of world GDP. Currently, the amount is around \$7 trillion, or 10 percent of world GDP. China alone accounted for \$3.5 trillion of this \$4 trillion increase; its national savings rose from \$1.5 trillion to over \$5 trillion. Only an investment surge has kept East Asia's current account surplus from topping its precrisis levels.

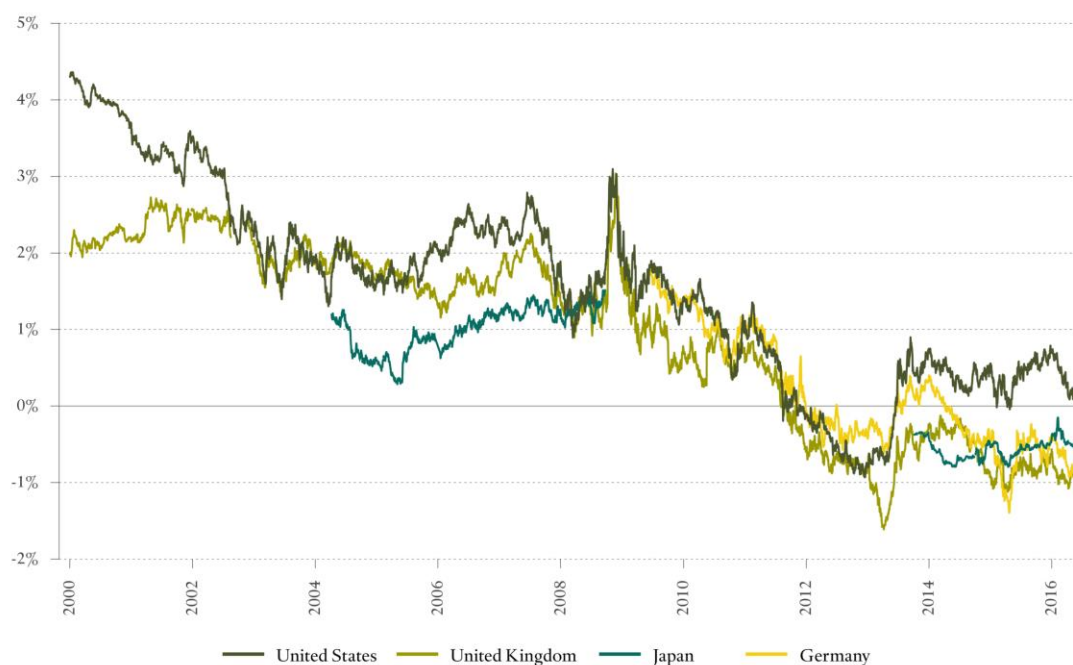
Between 2005 and 2008, the main East Asia surplus economies exported about 15 percent of their savings to the world, with a peak ratio of close to 20 percent. A return to savings exports of 15 percent of total savings would bring the region's current account surplus from around \$700 billion to over \$1 trillion, or from around 1 percent to over 1.5 percent of world output.

High savings mobilized through domestic banks have been a critical component of East Asia's various growth miracles.¹⁵ They have allowed high levels of domestic investment—vital for rapid catch-up growth—to be financed without relying in net terms on foreign capital, let alone easily reversible forms of foreign financing such as short-term, cross-border bank flows. The high-saving Asian economies generally boasted a savings rate between 30 percent and 40 percent of GDP during their respective rapid growth stages in the second half of the twentieth century (figure 9).¹⁶

Similarly, current account surpluses and the associated export of savings are not necessarily bad. Standard macroeconomic theory states aging countries should invest in young economies, and rich countries in poorer countries. Importing savings to finance high levels of domestic investment can be healthy, as high levels of investment generate future income to repay external debts.

However, it is possible to have too much of a good thing. The absolute level of savings is high even relative to the East Asia's high-saving history. The aggregate savings rate of 40 percent observed across the main East Asian surplus economies is the highest in the thirty-five years covered by the World Economic Outlook data from the International Monetary Fund (IMF). High savings bring weak domestic consumption; East Asian consumers are not enjoying the full fruits of their countries' economic advance. This will be an even bigger problem for East Asia if, as generally believed, China needs to reduce its level of investment and less of East Asia's savings is absorbed at home. Moreover, the main users of savings globally—Canada, Turkey, the UK, the United States, and a few other emerging countries—are generally not borrowing from abroad, as a result of an especially strong level of national investment. Interest rates globally are low (figure 10). In these circumstances, the export of savings by surplus countries is likely to have harmful spillovers as it pulls down already low interest rates and more generally provides savings that the receiving countries will not be able to put to good use.

Figure 10. Ten-Year Real Interest Rate, Implied by Inflation-Linked Bonds



Source: Bloomberg.

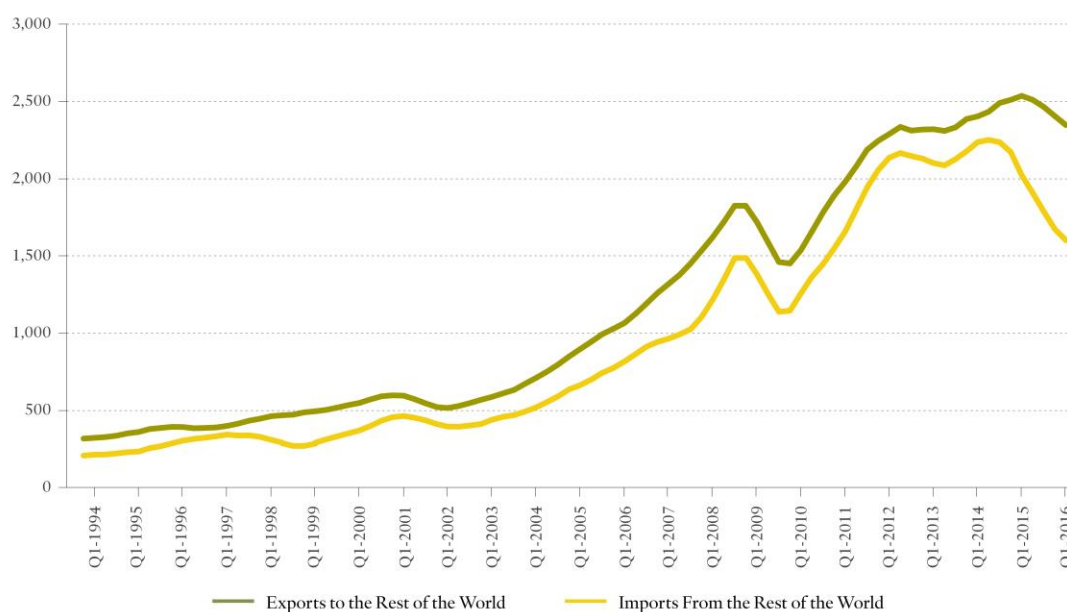
Policy Recommendations for East Asia

The current large external surplus in East Asia comes in a different context than the large precrisis surplus. The 2004–2007 surplus reflected the region’s economic strength. Exports were rising rapidly, overwhelming strong import expansion. Outside Japan, growth was strong—particularly that of China. Private funds were flowing into East Asia. Amid all this exuberance, domestic policies, in China especially, sought to slow the pace of internal credit growth—and thus suppress domestic demand—to slow inflation.

These circumstances set up a policy dynamic that dominated international economic debates about East Asia. Rapid growth pulled in foreign capital, as did high interest rates and the expectation of a stronger currency. The region’s government could have accepted these inflows and the resulting currency appreciation: stronger currencies would have dampened export growth and reduced the risk of overheating. They would simultaneously have limited surpluses, easing global imbalances. But, seeking to support export industries, the East Asian authorities chose instead to intervene heavily in the foreign currency market. China’s “shadow” intervention—conducted by mandating the state banks to hold their required reserves in foreign currency—involved annual purchases of foreign assets worth well over 10 percent of its GDP.¹⁷ Other East Asian governments intervened too, albeit on a lesser scale.

Today’s East Asian surplus reflects weakness more than underlying strength. The region’s exports are performing poorly; measured in nominal dollars, they have fallen. As well, imports have collapsed, resulting in East Asia’s rising trade surplus (figure 11). Sluggish demand for imports reflects sluggish demand in general. Private demand growth in Japan has been weak since the 2014 increase in the consumption tax. It also has slowed in China—at least relative to the boom years immediately after the global financial crisis. Although Chinese consumers are spending more, Chinese businesses, especially private businesses, are spending less—a fact that reflects the unsustainability of the earlier surge in investment.¹⁸

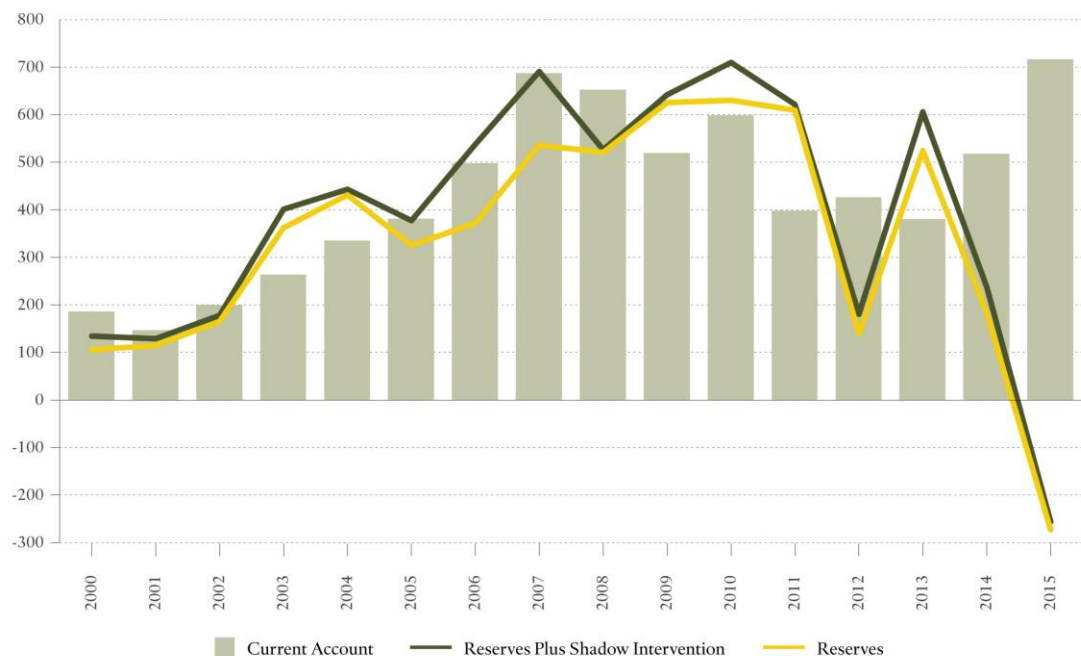
Figure 11. Trade of East Asian Surplus Economies With Intra-Regional Flows Netted Out, in USD Billions



Sources: China Customs; Hong Kong Census and Statistics Department; Korean Statistical Information Service; International Enterprise Singapore; Central Bank of the Republic of China (Taiwan); Ministry of Finance, Republic of China (Taiwan); Japanese Ministry of Finance; Haver Analytics.

In contrast with the precrisis period, private funds are now leaving East Asia, and China in particular (figure 12). Weak East Asian demand growth and associated monetary easing have encouraged East Asia's private investors, and its large state pension funds, to hold even low-yielding foreign assets. The Chinese authorities are again intervening—but in the opposite direction. Counting its shadow intervention in the foreign exchange market, China sold about 5 percent of GDP in reserves in 2015. Facing less dramatic swings in capital flows, other East Asian surplus economies have not been selling reserves systematically. South Korea has both bought and sold foreign currency over the past year in response to gyrations in its currency, although recently it looks to have bought more than it sold. Taiwan is the only East Asian country that continues to steadily buy reserves to stem the appreciation of the currency.

Figure 12. East Asian Surplus Economies' Current Account Surplus Versus Official Asset Growth, in USD Billions



Sources: IMF; State Administration of Foreign Exchange; Hong Kong Census and Statistics Department; Bank of Korea; Singapore Department of Statistics; Bloomberg; Haver Analytics.

A surplus that stems from weakness can be as harmful to the global economy as a surplus that reflects repressed strength combined with currency intervention. However, the policy shifts needed to bring down surpluses that stem from weak demand are different. They go beyond ending currency intervention and allowing market pressures to determine the level of a currency; they need to seek to reduce saving and boost spending directly. The following recommendations draw heavily on work by the IMF, the Organization for Economic Cooperation and Development (OECD), and the World Bank. Because each economy's savings surplus has different underlying sources, the needed reforms also vary.

CHINA

No single sector on its own accounts for China's exceptional level of national savings. Rather, the national savings rate is supported by significant household, firm, and government savings, offset in part by a high level of government investment. Therefore, a strategy to reduce savings and boost consumption should be broad.

Increase Government Spending on Health Care

Chinese government spending on health is around 1.5 percent of GDP, one of the lowest rates in the Group of Twenty (G20). The rate in the United States is around 7.5 percent of GDP, and in the

eurozone it is over 8 percent of GDP. Health-care spending directly reduces government savings by increasing public expenditure. It also reduces private savings by alleviating households' need to put money aside for future health care. Research from the IMF confirms that public spending on health has a large effect on the savings rate and, therefore, on the current account surplus.

Increase Government Spending on Pensions

Eligibility should be broadened and benefits should be made more generous. The World Bank's *China 2030* report observes that China's pension coverage has been well below that expected of a country with its per capita income. A rural pension did not exist until recently, and urban schemes do a poor job of reaching migrant workers and those in the informal sector, who account for 30 percent to 40 percent of the urban labor force.¹⁹ As with expanded health provision, expanding pension benefits reduce government savings and also the need for prudential private savings.

Reform Hukou

Migrants often have only limited access to public education, health, housing, and pensions because they are not registered where they live and work. This increases the need for private prudential saving. *Hukou* (household registration) reform would have the additional benefit of easing China's transition from heavy industry, as it would allow workers employed in coal, steel, aluminum, and other oversupplied sectors to find jobs in other provinces.

Reform Local and Provincial Finances

Provincial and sub-provincial governments provide most social services but lack the revenue base of the central government. These strains limit welfare spending and are a reason why it is difficult to move more rapidly on *hukou* reforms; provinces with large numbers of migrants do not want to bear the cost of providing them full access to public services.

Enact a More Progressive Tax System

Currently, China relies heavily on payroll taxes and value-added tax for revenue. It collects only about 1 percent of GDP in income tax, compared to the United States, where the federal government collects about 8 percent of GDP in income tax and some states collect an additional levy. By relying more on a progressive income tax, China could redistribute resources to households with a higher propensity to consume.

Pay Dividends From Profitable Centrally Managed State-Owned Enterprises

China has over one hundred central state-owned enterprises (SOEs) that, historically, have had quasi-monopoly positions in sectors such as energy, power, and telecommunications. These generated profits of well over \$200 billion, or 2 percent of GDP, in 2014 and 2015, with lower but still substantial profits in 2016.²⁰ Dividend payments from these centrally owned SOEs have been low: the government plans to raise them from their current level of between 5 percent and 15 percent of profits to around 30 percent of profits by 2020. However, this would still be well below the 40 percent to 50 percent that U.S. firms pay out.²¹ Larger dividends would directly reduce saving by

SOEs, and they could help the central government pay for a stronger social safety net or replace some worker contributions to the social security fund.

Limit the Fiscal Burden on Households From a Necessary Recapitalization of the Banks

The IMF has estimated that banks' losses on lending to companies could reach 7 percent of GDP; many private estimates are larger.²² Finding ways of paying for the needed cleanup of the banks that do not weigh on household income would help sustain household consumption.²³ One option, for example, would be to use dividends from the central SOEs to provide the initial capital for a new bank recapitalization fund. Almost all of these proposals require increased spending by China's central government, whether directly or through the provision of additional support to provinces as they increase social spending on the safety net. Fortunately, China's central government has ample fiscal space to support the needed additional spending. Until underlying levels of savings come down, the central government may need to run sustained fiscal deficits to support household demand, and, in the process, increase the supply of safe assets and help keep China's savings at home. Willem Buiter, global chief economist at Citigroup and CFR adjunct senior fellow, has called for a fiscal stimulus of several points of GDP, directed at boosting consumption.²⁴

J A P A N

Japan's savings surplus stems from high levels of corporate saving rather than high savings across all sectors of the economy. Still, policies to support consumption and discourage savings can be aimed at households and the public sector as well as corporations.

Shift the Tax Burden From Consumers to Companies

Japan's recent attempt to control the government budget deficit by raising the consumption tax has led, unsurprisingly, to less household consumption. It would be better to reduce the deficit by increasing taxes on companies because money left on corporate balance sheets tends to be saved. A particularly promising idea is to tax undistributed corporate profits to encourage both investment, which directly reduces Japan's surplus, and the distribution of firms' profits to shareholders, who would be likelier to spend them.²⁵

Increase the Wage Bargaining Power of Workers With Temporary Contracts

Japan's wage growth has lagged behind labor productivity growth, leaving cash locked up in high-saving companies and limiting the growth in household demand. Lagging wages reflect the fact that 37 percent of workers are employed under nonregular contracts, a much higher share than in comparable economies. The large stock of nonregular workers likely has led permanent workers to moderate their wage demands, which has contributed further to wage stagnation and depressed household consumption.²⁶ Reform of labor contracts, like the proposed shift in the tax burden, would push resources from high-saving companies to high-spending consumers.

Take Direct Measures to Increase Wages

Firms controlled by the government could take the lead; when Japan Post held wages constant this year, it sent a signal to other employers to do the same.²⁷ Japan could also introduce tax penalties for private firms that do not raise domestic wages in line with expected inflation—a radical measure, but one that is perhaps justified by Japan’s prolonged stagnation and the limits on the effectiveness of further monetary easing.

Eliminate Structural Barriers to Residential Investment

Limits on the conversion of agricultural land are the most obvious impediments. A push to upgrade Japan’s housing stock and renovations to adapt to an aging population could stimulate consumption.

Finally, Japan should resist the temptation to reduce the fiscal deficit prematurely, and in the process raise national savings. The country lacks the obvious fiscal space of China, South Korea, and Taiwan. But with a comparatively low interest burden, it does have some space, especially as long as the Bank of Japan is committed to holding ten-year government borrowing rates at zero. It should carefully balance the pace of any future fiscal consolidation against the evolution of real wages and the ability of household demand to take over from public spending as a source of demand growth.

SOUTH KOREA

South Korea’s surplus begins with the government, which is a persistent net saver. These savings have been offset by net borrowing by the corporate sector. South Korea’s large external surplus emerged when corporate investment fell, and Korean firms stopped borrowing as much from other sectors of the domestic economy.²⁸ Corporate investment is unlikely to recover, given the maturation of Korea’s economy. Bringing down the surplus, therefore, requires lower savings by the government and households.

Increase Public Spending on Health Care

The IMF reports that public spending on health is comparatively low in South Korea, at 4 percent of GDP—roughly half the level of most advanced economies.²⁹ This is a symptom of broader weakness in the social safety net, which claims only around 10 percent of GDP, among the lowest ratios in the OECD. This weakness matters increasingly given the poor outlook for some legacy industrial sectors.

Support Low-Income Workers With Greater Use of the Tax System

South Korea’s version of the U.S. earned income tax credit, a tax subsidy for low-wage work, was worth only 0.1 percent of GDP in 2015. The redistributive effect of tax and transfers in Korea is among the smallest in the OECD.³⁰

Expand the Access of Nonregular Workers to Social Insurance and Raise the Basic Pension

Nonregular workers make up about a third of Korea's labor force, and participation in social insurance programs is far from complete. This limits access to unemployment benefits and reduces expected retirement income, which in turn boosts prudential saving. Korea's basic pension is comparatively low.³¹

Run a Sustained "On Budget" Fiscal Deficit

An "on-budget" fiscal deficit will offset the effect of the national pension system, which currently has a surplus of about 3.5 percent of GDP and which is expected to collect more in contributions than it pays out in benefits for the next thirty years.³² One proposal would be to target a central government fiscal deficit that is as big as or bigger than the ongoing surplus in the national pension system so as to avoid running a structural government surplus.³³ This would require abandoning the goal of budget balance, as targeting headline fiscal balance when the pension system is generating large off-budget surpluses results in tight overall fiscal policy.

Change the Investment Policy of the National Pension System

Currently, the Korean government invests mandatory worker contributions in foreign assets: its balance of payments data shows up to \$15 billion a year in government purchases of foreign portfolio equities, or an outflow of roughly 1 percent of South Korea's GDP. Other countries that have built up surpluses in their pension systems have made different choices. The Security Trust Fund in the United States, for example, has been entirely invested in domestic government bonds, not foreign assets. Slowing the pace of buildup of foreign assets in Korean retirement funds and investing more at home would likely reduce the export of Korea's savings surplus.

Refrain From Intervention to Cap Currency Appreciation

Korea has been exceptionally active in the foreign currency market in the aftermath of the financial crisis. During recent periods of uncertainty about China, Korea intervened to limit won depreciation; typically, it intervenes to cap the won's strength. For example, Korea appears to have bought dollars in October 2015, April 2016, and again in July and August of 2016 to set a ceiling on the won's strength.³⁴ Interventions such as holding down the won, reducing domestic purchasing power, and boosting export competitiveness and the profits of exporting firms contribute to Korea's savings surplus.

TAIWAN

Taiwan is not a member of many international organizations, and so there is a relative dearth of analysis on its structural policies that encourage savings. However, Taiwan certainly has scope to strengthen its social safety net and run a more expansionary fiscal policy. Close analysis would likely find that many of the recommendations for strengthening Korea's social safety net have parallels in

Taiwan. Taiwan's level of investment is also relatively low, suggesting more scope than elsewhere in East Asia for an agenda that focuses on raising investment.

Additionally, Taiwan is the East Asian country with the most consistent pattern of intervention in the foreign exchange market. Based on the available (though incomplete) data, Taiwan has added to its reserves nearly continuously over the last seven years.³⁵ Refraining from further intervention would help reduce Taiwan's unusually large 14 percent of GDP external surplus. The U.S. Treasury's analysis of Taiwan has also highlighted the role that its life insurers play in sustaining the large outflow of portfolio capital.³⁶ Taiwan's life insurers have \$400 billion in assets and have raised their allocation to foreign assets from 30 percent to 45 percent since the financial crisis.

Policy Recommendations for the United States

The United States should make reducing East Asia's savings surplus an economic and foreign policy priority, both bilaterally and in multilateral forums such as the G20. The United States can draw global attention to the spillovers from the policies that have sustained East Asia's exceptional level of savings in a world economy that remains short on demand, and signal that these policies matter to the broader relationship between the United States and the main East Asian economies. U.S. trading partners have reason to listen, as trade imbalances—notably the rise in China's surplus in manufacturing prior to the global crisis—have contributed to the erosion of political support for open trade. The United States also can encourage the IMF to focus its advice on policies that would reduce East Asia's excess savings, not just on policies that would reduce the risks from rapid credit growth in China and fiscal deficits in Japan.

The policies that support high levels of national savings go well beyond the exchange rate policies that have traditionally—and appropriately—been the focus of U.S. concern in Asia. They reflect decisions about the scope, design, and financing of national social programs, the nature of labor contracts, and the portfolio choices of savings institutions. Such policies are not negotiated globally, nor should they be. Real change will only come when East Asian governments conclude that weakness in consumption creates a substantial impediment to growth.

Nonetheless, a determined U.S. focus on East Asia's savings surplus would make a difference. National policy agendas are influenced by global policy debates, and shifts in the global consensus can affect national choices. For example, in 2015, the growing global recognition of the role of fiscal stimulus when monetary stimulus faces diminishing returns may have helped to overcome the Chinese Ministry of Finance's concerns about allowing a bigger budget deficit. Equally, it may have helped Japan's prime minister push for a larger fiscal stimulus in the face of resistance from Japan's Ministry of Finance.

Bilaterally and in forums such as the G20, the United States can put policies to reduce high levels of national savings on the policy agenda and highlight how reducing East Asia's savings surplus would contribute to a healthier, more balanced global economy and reduce frictions from trade. The G20 in particular has lost focus and is in need of reinvigorating.³⁷ The surplus countries will resist efforts to put the global spillovers from excess savings at the forefront of the G20 agenda; with roughly as many surplus countries as deficit countries at the table, the discussions will be difficult. However, the G20 will not fulfill its potential if continues to find an easy consensus by listing the national structural policy goals of its members while avoiding big macroeconomic challenges.

The United States should also use its voice on the IMF board and its dialogue with the IMF's top management to encourage the IMF to give more weight to reducing East Asia's savings surplus in its policy recommendations. This would involve a significant shift; many of the current consensus international policy recommendations for East Asia—recommendations that generally can be found in the IMF's annual surveillance reports—would raise, rather than lower, East Asia's savings surplus. In China, the IMF's recent surveillance reports have emphasized the risks associated with high levels of

investment far more than the risks from high levels of national savings.³⁸ Policy recommendations from the IMF have focused on curbing credit growth and reducing China's augmented fiscal deficit. Calls to strengthen China's social safety net have lost prominence. In Japan, the IMF supported the initial increase in the consumption tax, which perversely boosted national saving. The IMF continues to emphasize the need for further increases in the consumption tax over time—though the IMF's latest report did emphasize the need for more gradual future fiscal consolidation and put more emphasis on policies that would strengthen wage growth.³⁹ In South Korea, where public debt is not a concern, the IMF did not strongly condemn a policy trajectory that would bring Korea's general government balance back into modest surplus.⁴⁰ Such consolidation would put South Korea's long-term general government surplus back above that of Germany and would also raise its already large savings surplus.

Policies that lower domestic demand can reduce domestic risks, notably the risks from China's credit boom and Japan's high public debt, but the IMF also needs to consider how its national policy recommendations interact. The combined effect of credit consolidation in China and long-run fiscal consolidation in Japan and Korea would be a reduction in East Asian demand at a time when the world, as a whole, is still short on demand, and would put additional downward pressure on global inflation and global interest rates. No one will benefit if a reduction in East Asia's internal imbalances results in a further expansion of external imbalances. As the IMF's largest shareholder, the United States should use its leverage to push the IMF to focus squarely on the challenge of East Asian savings.

Two additional points are worth emphasizing. First, the United States needs to be willing to criticize the policies of its East Asian allies, not just the policies of China. South Korea, Taiwan, and Singapore run the largest current account surpluses, as a share of GDP, in Asia—and some of the largest surpluses globally. Over the past two years, South Korea and Taiwan also appear to have intervened in the currency market to resist pressure on their currencies to appreciate—a beggar-thy-neighbor offense of which China has not recently been guilty. The Trans-Pacific Partnership's prospects are uncertain, but if the U.S. Congress approves it, neither Korea nor Taiwan should be invited to join until they commit to the policies needed to lower their external surpluses.

Second, an agenda for U.S. economic policy toward East Asia that focuses on the gains from further trade integration, together with stronger protections for intellectual property rights and investment, is too narrow. Further liberalization of trade and investment will not, on its own, lead to larger trade imbalances. But further liberalization of trade and investment also will not close trade imbalances that stem from demand and savings imbalances.⁴¹ Large trade surpluses are the flip side of a savings surplus, as high savings means low consumption; a surplus of savings versus investment means that strong investment demand is not making up for weak consumption demand. The concerns many Americans have about trade are unlikely to be addressed if East Asia's savings surplus does not fall, and could increase if a rise in Asia's savings surplus leads to a bigger U.S. trade deficit. Support for further trade liberalization—and trade—will fall if important countries in the global economy look to exports to boost growth at the expense of other regions.

Promoting policies that reduce national savings does not always come naturally to U.S. diplomats, who often are more comfortable discussing trade and investment than demand and savings. However, in a global context where demand is in short supply, deflationary pressures are more obvious than inflationary pressures, many safe assets have negative nominal yields, and the real return on savings is low, there is no escaping the challenge of macroeconomic imbalances.

Conclusion

Excess savings in East Asia contributes to financial fragilities, both within the region and globally. Before the financial crisis, excess East Asian savings stoked the U.S. housing bubble and helped to create internal imbalances in the United States and the eurozone, which were sustained only through the accumulation of toxic risks in the U.S. and European banking systems. Since the crisis, they have contributed to bubbles and bad debts within the region, notably in China. Throughout, the need to rely on exports to offset the weakness in demand that often comes with high levels of savings has put pressure on trade-exposed manufacturing communities in other regions, with political consequences that have been underappreciated until recently. Without policy changes, the world may witness new troubles that stem from East Asian exports of savings.

Before the financial crisis, allegations of currency manipulation by China and its neighbors received extensive attention. Today, the debate has shifted, and the United States and global institutions are focusing more on the risks of Chinese financial fragility and Japan's government deficit; a parallel debate is occurring, seemingly unconnected to the first one, about the crisis of populism in Western democracies. The underlying problem of East Asia's savings rate deserves far more attention. All possible rationalizations for this high rate have been exhausted. China and its neighbors are no longer in the high-investment, catch-up phase of their development; they have no need for such high levels of savings. Yet, far from subsiding, the savings rate of the main East Asian surplus economies has risen: from about 30 percent of the region's GDP in 2002 to today's level of close to 40 percent. East Asia's savings glut was a source of legitimate concern before the financial crisis. It demands even more attention now.

About the Author

Brad W. Setser is a senior fellow and acting director of the Greenberg Center for Geoeconomic Studies at the Council on Foreign Relations. He is the author of *Sovereign Wealth and Sovereign Power* and the coauthor, with Nouriel Roubini, of *Bailouts and Bail-ins: Responding to Financial Crises in Emerging Economies*.

Endnotes

1. Joachim Fels of PIMCO writes that “the term ‘savings glut’ is short code for a situation in which the world’s desired saving exceeds desired investment.” Joachim Fels, “No End to the Savings Glut,” *PIMCO Macro Perspectives*, September 2015, <http://pimco.com/insights/economic-and-market-commentary/macro-perspectives/no-end-to-the-savings-glut>; Ben S. Bernanke, “Global Imbalances: Recent Developments and Prospects: Ben S. Bernanke, Chairman of the U.S. Federal Reserve,” speech delivered at the Bundesbank Lecture, September 11, 2007, <http://www.federalreserve.gov/newsevents/speech/bernanke20070911a.htm>.
2. Jared Bernstein, “Getting Straight About the Costs of Trade,” *Washington Post*, May 12, 2015.
3. David Autor et al., “Importing Political Polarization?: The Electoral Consequences of Rising Trade Exposure,” April 23, 2016; Nelson D. Schwartz and Quoc Trung Bui, “Where Jobs Are Squeezed by Chinese Trade, Voters Seek Extremes,” *New York Times*, April 25, 2016.
4. Joseph E. Gagnon, “The Elephant Hiding in the Room: Currency Intervention and Trade Imbalances,” Peterson Institute for International Economics Working Paper, no. 13-2, March 2013.
5. Ben S. Bernanke, “Why Are Interest Rates So Low, Part 3: The Global Savings Glut,” Brookings Institution, April 1, 2015, <http://www.brookings.edu/blogs/ben-bernanke/posts/2015/04/01-why-interest-rates-low-global-savings-glut>; Ben S. Bernanke, “Germany’s Trade Surplus Is a Problem,” Brookings Institution, April 3, 2015, <http://brookings.edu/blogs/ben-bernanke/posts/2015/04/03-germany-trade-surplus-problem>.
6. International Monetary Fund, *World Economic Outlook: Too Slow for Too Long* (Washington, April 2016).
7. China also arguably ran large fiscal deficits. The IMF’s measure of China’s augmented fiscal deficit shows deficits of close to 10 percent of GDP. Much depends on the accounting for China’s local government financing vehicles and whether the high levels of investment sponsored by China’s provincial and municipal governments is counted in the fiscal balance. The central government fiscal deficit has consistently been small.
8. South Korea added to its reserves nearly continuously from 2009 onward, with the exception of small sales in aftermath of the 2011 intensification of the eurozone financial crisis. Subsequent to China’s August 2015 devaluation, South Korean intervention has been more balanced—with periods of significant sales during times of global and Chinese policy uncertainty and periods of significant purchases. Judging from the balance of payments data and the evolution of its forward book, South Korea appears to have sold dollars at a level of 1,220 against the dollar in January 2016 and bought dollars in April 2016 at a level of around 1,140 against the dollar. The balance of payments data indicates that Taiwan added to its reserves from 2009 through 2015.
9. Some of the adjustment globally has also come in the aggregate error term. The surpluses of the surplus countries and regions are larger than the deficits of the deficit countries and regions, and the size of the global surplus has increased recently.
10. Martin Wolf, *The Shifts and the Shocks: What We’ve Learned—and Have Still to Learn—from the Financial Crisis* (New York: Penguin Books, 2014); Anton Brender and Florence Pisani, *Global Imbalances and the Collapse of Globalised Finance* (Brussels: Center for European Policy Studies, 2010).
11. Ricardo J. Caballero, Emmanuel Farhi, and Pierre-Olivier Gourinchas, “Global Imbalances and Currency Wars at the ZLB,” National Bureau of Economic Research Working Paper, no. 21670, October 2015.
12. Gauthi B. Eggertsson, Neil R. Mehrotra, and Lawrence H. Summers, “Secular Stagnation in the Open Economy,” NBER Working Paper, no. 22172, April 2016.
13. Norway’s government investment fund now has assets of \$873 billion, or 7 trillion Norwegian krone, almost 200 percent of Norway’s GDP.
14. Martin Wolf, “Corporate Surpluses Are Contributing to the Savings Glut,” *Financial Times*, November 17, 2015.
15. Paul Krugman, “A Moveable Glut,” *New York Times*, August 24, 2015.
16. World Bank, *China 2030: Building a Modern, Harmonious, and Creative Society* (Washington, D.C.: World Bank, March 2013), p. 11.
17. Brad W. Setser and Arpana Pandey, “China’s \$1.5 Trillion Bet: Understanding China’s External Portfolio,” Council on Foreign Relations Working Paper, May 2009. The estimate comes from adding the increase in portfolio debt holdings in the balance of payments (BOP) and the rise in other “other foreign assets” in the BOP to reserve changes in the BOP. “Other” clearly reflects required reserves that the People’s Bank of China forced the banks to hold in foreign exchange in 2007 and 2008, and the state banks’ balance sheet indicates that they purchased offshore debt securities in 2006, likely hedged via swaps with the People’s Bank. Total increase in reserves at peak was around 10 percent of GDP, or just under \$500 billion, over four quarters, and total increase in official assets was around 15 percent of GDP, or \$650 billion.

18. Goldman Sachs, "Asia Economics Analyst: Tracking China's True Investment," Goldman Sachs Economics Research, April 22, 2016.
19. World Bank, *China 2030*.
20. Zheng Yangpeng, "China Central SOE Profits Turn Around With 4.7% Rise in Jan, Feb," *China Daily*, March 12, 2016.
21. Curtis J. Milhaupt and Wentong Zheng, "Why Mixed-Ownership Reforms Cannot Fix China's State Sector," memorandum from Paulson Institute, January 2016, http://paulsoninstitute.org/wp-content/uploads/2016/02/PPM_SOE-Ownership_Milhaupt-and-Zheng_English.pdf.
22. International Monetary Fund, *Global Financial Stability Report-Potent Policies for a Successful Normalization* (Washington, April 2016).
23. Michael Pettis has consistently emphasized the need to avoid shifting the cost of bank recapitalization to households on his blog, China Financial Markets, <http://www.blog.mpettis.com>.
24. Willem Buiter, "Global Economics View: Is China Leading the World Into Recession?" Citi Research, September 8, 2015.
25. Martin Wolf, "Japan's Unfinished Policy Revolution," *Financial Times*, April 9, 2013.
26. Davide Porcellacchia, "Wage-Price Dynamics and Structural Reforms in Japan," International Monetary Fund Working Paper, no. 16/20, February 2016.
27. Takahiko Hyuga, "Japan Post Rejects Pay Increase Request Amid Negative Rates," *Bloomberg*, March 17, 2016.
28. OECD, *OECD Economic Surveys: Korea 2016* (Paris, France: OECD Publishing, May 2016).
29. Selim Elekdag, "Social Spending in Korea: Can It Foster Sustainable and Inclusive Growth?" International Monetary Fund Working Paper, no. 12/250, October 2012.
30. Ibid.
31. OECD, *Economic Surveys: Korea 2016*.
32. Ibid.
33. International Monetary Fund, "Republic of Korea: Staff Report for the 2015 Article IV Consultation," IMF Country Report, no. 15/130, May 2015.
34. South Korea is unwilling to disclose its intervention, so these dates are estimated using balance of payments data and disclosed changes in forwards.
35. Taiwan neither reports on nor currently publishes data on the forward position of its central bank. Its derivative positions are, consequently, a mystery.
36. U.S. Department of the Treasury, "Report to Congress on International Economic and Exchange Rate Policies," Office of International Affairs, October 19, 2015.
37. Tristram Sainsbury, "A US\$24b summit about a staircase: lessons for Germany and the 2017 G20 leaders," *The Conversation*, September 8, 2016.
38. For example, the need to reduce household savings through strengthening social safety nets featured much more prominently in the IMF's 2010 report on China than in its 2014 or 2015 reports, which put more emphasis on credit excesses. International Monetary Fund, "The People's Republic of China: Staff Report for the 2010 Article IV Consultation," IMF Country Report, no. 10/238, July 2010; International Monetary Fund, "The People's Republic of China: Staff Report for the 2014 Article IV Consultation," IMF Country Report, no. 14/235, July 2014; International Monetary Fund, "The People's Republic of China: Staff Report for the 2015 Article IV Consultation," IMF Country Report, no. 15/234, August 2015; International Monetary Fund, "The People's Republic of China: Staff Report for the 2016 Article IV Consultation," IMF Country Report, no. 16/270, August 2016.
39. International Monetary Fund, "Japan: Staff Report for the 2014 Article IV Consultation," IMF Country Report, no. 14/236, July 2014; International Monetary Fund, "Japan: 2016 Article IV Consultation," IMF Country Report, no. 16/267, August 2016.
40. International Monetary Fund, "External Balance Assessment (EBA): Data and Estimates from the Pilot Exercise," IMF Research Department, August 2015; International Monetary Fund, "2015 External Sector Report-Individual Economy Assessments," IMF Research Department, July 2015.
41. South Korea's trade and investment agreements with Europe and the U.S. in 2011 and 2012, for example, did not prevent South Korea's current account surplus from rising to close to 8 percent of its GDP in 2015. The impact of further trade liberalization is ambiguous. Most East Asian countries have higher tariffs on U.S. exports than the United States now imposes on East Asian imports, but the certainty created by a trade agreement can also encourage firms to locate production in low-wage countries. For example, see the surge in investment in China's export sector after accession to the World Trade Organization: Justin R. Pierce and Peter K. Schott, "The Surprisingly Swift Decline of U.S. Manufacturing Employment," *American Economic Review* 106, no. 7, July 2016, pp. 1632-1662, http://www.justinrpierce.com/index_files/pierce_schott_pntr_2016.pdf.