



ADB Working Paper Series

Transpacific Imbalances and Macroeconomic Codependency

Willem Thorbecke

No. 299
July 2011

Asian Development Bank Institute

Willem Thorbecke is a senior research fellow at ADBI in Tokyo. The author would like to thank Ron Denato, Atsuyuki Kato, Peter Morgan, and participants at the Symposium on Growth and Integration in Asia at the University of South Australia for many helpful comments.

The views expressed in this paper are the views of the authors and do not necessarily reflect the views or policies of ADBI, the Asian Development Bank (ADB), its Board of Directors, or the governments they represent. ADBI does not guarantee the accuracy of the data included in this paper and accepts no responsibility for any consequences of their use. Terminology used may not necessarily be consistent with ADB official terms.

The Working Paper series is a continuation of the formerly named Discussion Paper series; the numbering of the papers continued without interruption or change. ADBI's working papers reflect initial ideas on a topic and are posted online for discussion. ADBI encourages readers to post their comments on the main page for each working paper (given in the citation below). Some working papers may develop into other forms of publication.

Suggested citation:

Thorbecke, W. 2011. Transpacific Imbalances and Macroeconomic Codependency. ADBI Working Paper 299. Tokyo: Asian Development Bank Institute. Available: <http://www.adbi.org/working-paper/2011/07/27/4668.transpacific.imbalances.macroeconomic.codependency/>

Please contact the authors for information about this paper.

Email: wthorbecke@adbi.org

Asian Development Bank Institute
Kasumigaseki Building 8F
3-2-5 Kasumigaseki, Chiyoda-ku
Tokyo 100-6008, Japan

Tel: +81-3-3593-5500
Fax: +81-3-3593-5571
URL: www.adbi.org
E-mail: info@adbi.org

© 2011 Asian Development Bank Institute

Abstract

Current account deficits in the United States (US) and current account surpluses in East Asia are an enduring part of the global economic landscape. They are supported by low saving in the US and by reserve accumulation in Asia. This paper argues that this strategy is causing macroeconomic problems for the People's Republic of China (PRC). Inflation is rising, and interest rates are set too low because the yuan is closely linked to the US dollar. Low interest rates have fueled overinvestment in physical capital and rising real estate prices. They also cause savers to earn negative returns on their bank deposits. Greater exchange rate flexibility would allow more decoupling between the PRC's interest rates and US interest rates, helping the People's Bank of China to implement monetary policy that is appropriate for the PRC. Since exchange rate appreciations would be contractionary for the PRC, they should be combined with domestic absorption-increasing policies such as spending on education, health care, and urban transportation. Interest rates and exchange rates that are more determined by market forces would also help the PRC to move away from an overly capital-intensive growth path to one that is more beneficial for smaller firms and ordinary workers.

JEL Classification: F30, F32

Contents

1.	Introduction.....	3
2.	The Evolution of Current Account Imbalances in the US and East Asia	4
3.	Understanding the PRC's Trade Surplus	11
4.	Reserve Accumulation and Macroeconomic Management	15
5.	Rebalancing Growth in Asia	17
6.	Conclusion.....	19
	References.....	21

1. INTRODUCTION

Five years ago, many people warned that trade patterns between East Asia and the West were unsustainable. From 2005 to 2008, the People's Republic of China (PRC)'s bilateral surplus with the United States (US) increased by 41%, and its trade surplus with Europe more than doubled.¹ After falling in 2009, the PRC's surplus with the US and Europe increased by 32% and 16%, respectively, in 2010. Someone who fell asleep in August 2008 and woke up in 2010 would probably never have guessed that there had been any interruption whatsoever in the PRC's burgeoning imbalances with the West.

Another way to see this is by looking at trade between East Asian and non-East Asian countries and the US before and after the Lehman Brothers shock in September 2008. Exports and imports around the world collapsed beginning in October 2008. Table 1 presents data on the trade balance in the pre-crisis period (October 2007–September 2008) and then in the first, second, and third years after the crisis. The first year extends from October 2008–September 2009, the second from October 2009–September 2010, and the third is a forecast for the October 2010–September 2011 period using data from the first seven months. For non-East Asian countries, the trade deficit fell by 76% during the first year after the Lehman shock and equaled \$227 billion. For the PRC, the trade deficit fell by less than 12% and equaled \$237 billion. During the second year after the Lehman shock the US deficit with the PRC regained its pre-crisis level and remained at its pre-crisis level during the third year after the shock. By contrast, the US trade deficit with non-East Asian countries remained 55% below its pre-crisis level even in the third year after the crisis started.

Researchers writing in 2005 warned that imbalances between the US and East Asia were unsustainable, noting that they were driven by excess spending in the US and undervalued exchange rates in East Asia. Excess spending was fueled by a deterioration of the US fiscal balance, from a surplus of 2% of gross domestic product (GDP) in 2000 to a deficit of 4% of GDP in 2004. Undervalued exchange rates in Asia were supported by accumulated reserves of almost \$1 trillion in the PRC, plus hundreds of billions of dollars elsewhere in the region.

Since 2005, US budget deficits have increased by another 6% of GDP, while the PRC's external reserves have increased by \$2 trillion. Continued borrowing by the US and reserve accumulation by the PRC at this scale are undesirable. This paper highlights some of the problems that this combination is causing for East Asia, and recommends policy changes to help ensure that growth in the region is strong, sustainable, and balanced.

The next section seeks to shed light on current account imbalances by examining saving and investment behavior on both sides of the Pacific. Section III focuses on the PRC's trade surplus, and shows that it is still driven by trade with the West. Section IV documents that the demand for net exports in the US over the last ten years has been sustained by foreign official purchases exceeding \$3 trillion, and argues that reserve accumulation in Asia has stoked inflation, restricted the access of smaller firms to credit, and produced an inefficient allocation of resources. Section V advocates channeling the PRC's saving away from external reserves towards investments in education, health care, public transportation, and affordable housing. It also argues that ASEAN should improve the investment climate in ASEAN. Section VI concludes.

¹ In these data Europe includes Austria, Belgium, Denmark, Finland, France, Germany, Greece, Luxembourg, Netherlands, Italy, Portugal, Spain, and Sweden.

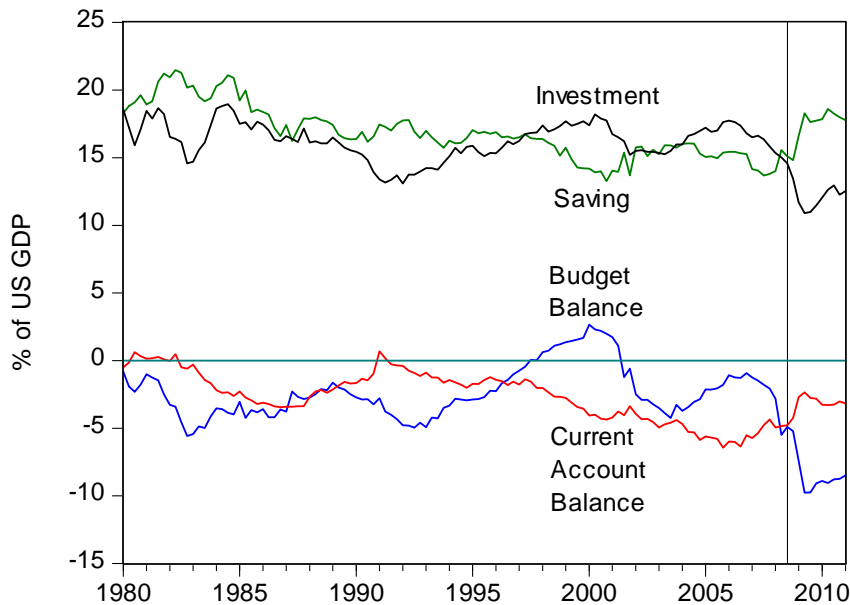
2. THE EVOLUTION OF CURRENT ACCOUNT IMBALANCES IN THE US AND EAST ASIA

Current account deficits in the US and current account surpluses in emerging and developing East Asia both emerged beginning in 1997–98. They have remained large ever since. This section traces the evolution of current account balances in the US and Asia based on changes in their saving and investment behavior.

A. US Current Account Deficits

As Figure 1 shows, the US current account deficit reached 2.5% of GDP in 1998, and has been above this level ever since. The imbalances in the late 1990s were driven by an investment boom. Investment as a share of GDP rose almost 3 percentage points over the 1997–2000 period as compared to the 1990–1996 period (Figure 1). Businesses investment was concentrated in information and communications technology. These investments lowered firms' costs and raised total factor productivity (TFP) (Bailey, 2003). TFP growth between 1995 and 2000 averaged 1.13% per year, after growing only 0.38% per year between 1973 and 1995. Rising productivity growth in turn contributed to the doubling of the Standard & Poors' 500 and the Dow Jones Industrial Average between January 1995 and March 2000 and the 200% increase in the NASDAQ Stock Index over this period.

Figure 1: US Investment, Private Saving, Budget Balance, and Current Account Balance



Source: Federal Reserve Bank of St. Louis FRED Database

Aggregate stock market capitalization in the US increased from 100% of GDP in 1997 to more than 200% of GDP in 2000. Econometric estimates indicate that a one hundred dollar increase in private wealth increases spending by about six dollars.² Thus these stock price increases

² See Belsky and Prakken (2004) and the references contained therein.

substantially raised spending relative to income and reduced private saving as a share of GDP (see Greenspan, 2003).

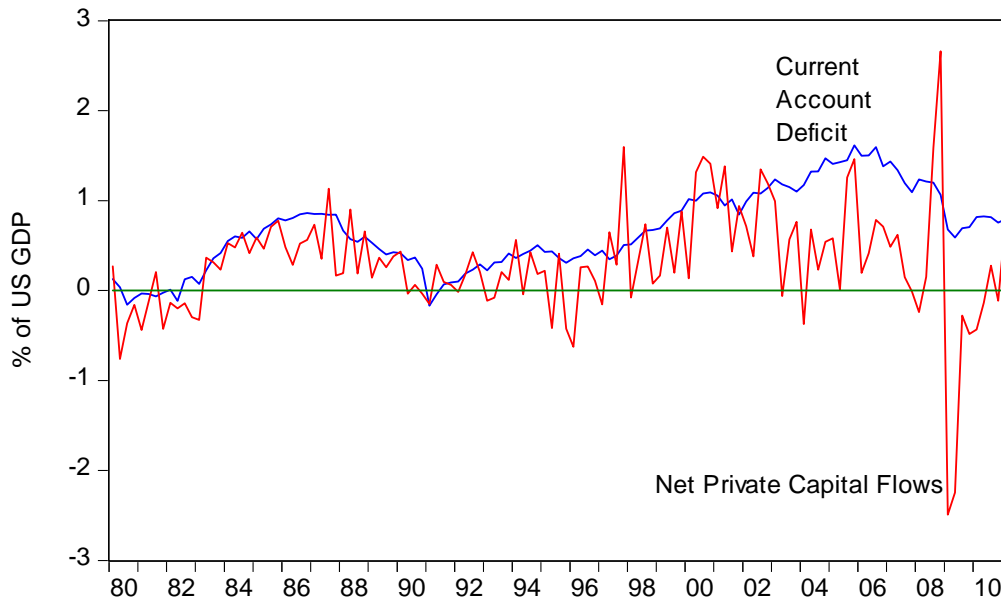
Before 2001 fiscal policy did not contribute to the decline in national saving in the US. Unlike the experience of the “twin deficits” in the 1980s, the increase in the trade deficit in the late 1990s was associated with a falling budget deficit and even with budget surpluses until the second half of 2001. After the US recession of 2000–01, the combination of expansionary Keynesian and increased military expenditures led to large budget deficits. The fiscal balance deteriorated by 6% of GDP between 2000 and 2004, moving from a surplus of 2% to a deficit of 4%.³ As Figure 1 shows, this deterioration in the fiscal balance was associated with a decline in national saving and a further deterioration of the current account deficit after 2001.

The increase in the trade deficit after 2004 was associated with a decrease in private saving and an increase in residential investment. Both were driven by soaring housing prices. Housing wealth in 2000 equaled about 100% of GDP, and increased by more than 50% over the next five years. As with the increase in stock market wealth between 1997 and 2000, this led to a decrease in private saving. The housing bubble also generated a surge in housing construction.

The US current account deficit then shrank with the onset of the global financial crisis (GFC) in the third quarter of 2008. US income in the last quarter of 2008 experienced its largest percentage drop over the post-World War II period, causing imports to collapse. Investment as a share of GDP fell by almost 4 percentage points, and private saving as a percentage of GDP grew by more than 3 percentage points. This painful process contributed to a fall of the current account deficit from an average of 5.5% of GDP during the four years before the GFC to an average of 3.2% over the 2010q1–2011q1 period. In an arithmetic sense, the current account deficit would have shrunk a lot more if the budget deficit relative to GDP had not increased by 4 percentage points.

Are current account deficits of 3.2% of GDP sustainable for the US over the long run? One perspective is that there is a fundamental equilibrium when private capital inflows are sufficient to finance current account deficits over the cycle (see Williamson, 1983). As Figure 2 indicates, it is not clear that US current account deficits are sustainable based on this criterion. In any case, US budget deficits of almost 10% of GDP are clearly unsustainable (CBO, 2011). The US will thus need to implement expenditure-reducing policies before too long.

³ The Congressional Budget Office reports that 1.4% of this shift was due to cyclical factors.

Figure 2: US Current Account Deficit and Net Private Capital Flows

Source: US Bureau of Economic Analysis

B. East Asian Current Account Surpluses

While Japan has run current account surpluses since the 1980s, current account surpluses in emerging East Asia developed in two distinct stages (Adams and Park, 2009). The first stage started after the 1997 Asian Crisis, and occurred especially in crisis-hit economies. The second stage began in 2003, and took place in the PRC. This section first reviews saving and investment behavior in the crisis-hit countries and then considers saving and investment in the PRC.

Before the 1997–98 Crisis, Asian countries rapidly assimilated new technologies and TFP in the manufacturing sector grew rapidly. Manufacturing exports became a major engine of growth for the region. Investment functioned as a second engine of growth, and East Asian companies financed investment using short-term, dollar-denominated foreign capital inflows. These inflows were channeled into long-term investments in real estate and manufacturing. Both currency and maturity mismatches thus developed on domestic balance sheets.

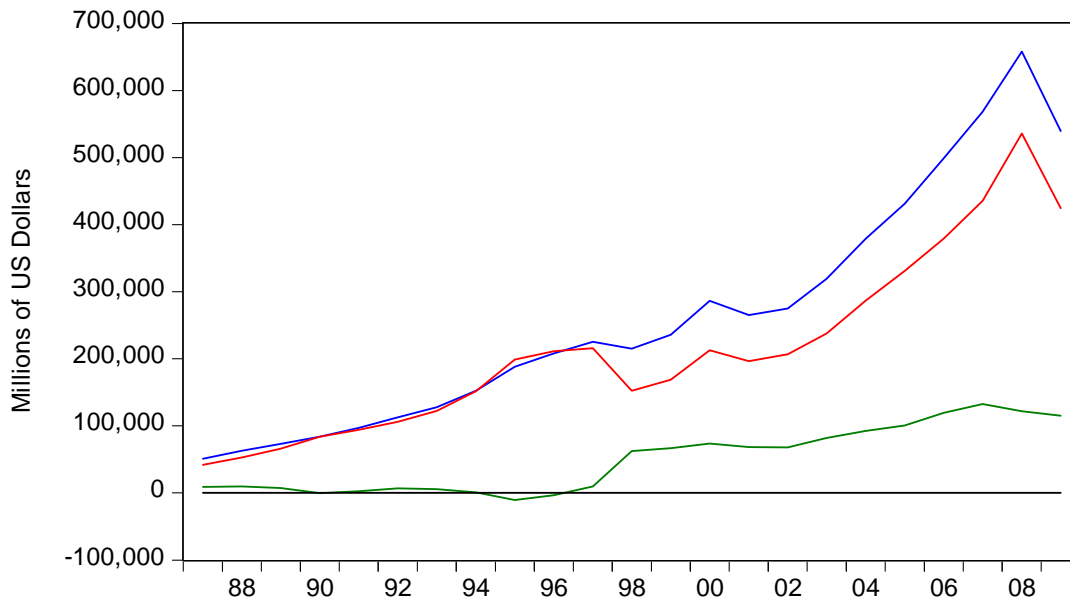
The surge in credit creation was accompanied by a downplaying of risks. Local residents borrowed in foreign currency at interest rates up to one thousand basis points below domestic rates. By and large, though, they did not hedge against the associated exchange rate risks. Foreign investors, lending in dollars at low rates, incorporated low default risk premiums into the returns they required to lend to the region. In retrospect it is clear that risks were underpriced. Asset price bubbles developed, with stock and real estate prices doubling in ASEAN countries between 1991 and 1993 (Yoshitomi, 2003).

Between 1993 and 1996 stock and real estate prices in Thailand fell more than 70% and real estate prices in Indonesia fell by more than 40% (Yoshitomi, 2003). Capital inflows also dried up. The dearth of foreign capital combined with emerging current account deficits created deficits in the overall balance of payments and decreased foreign reserves. As foreign reserves shrank, speculators attacked currencies in the region. Central banks abandoned their pegs, and Asian currencies depreciated. Given the currency mismatches on domestic balance sheets, currency depreciations expanded liabilities and shook investor confidence. This in turn led to

massive capital outflows. Asian currencies then fell by 50% or more within a few months of the crisis.

The swing from capital inflows to capital outflows equaled 15–20% of GDP. These massive reversals produced domestic banking crises and caused domestic absorption to fall by 20–30% in 1997–1998. This in turn reduced imports, causing the current account to shift from deficit to large surplus in just one year. Large current account surpluses were thus achieved because import spending collapsed (see Figure 3a and 3b).

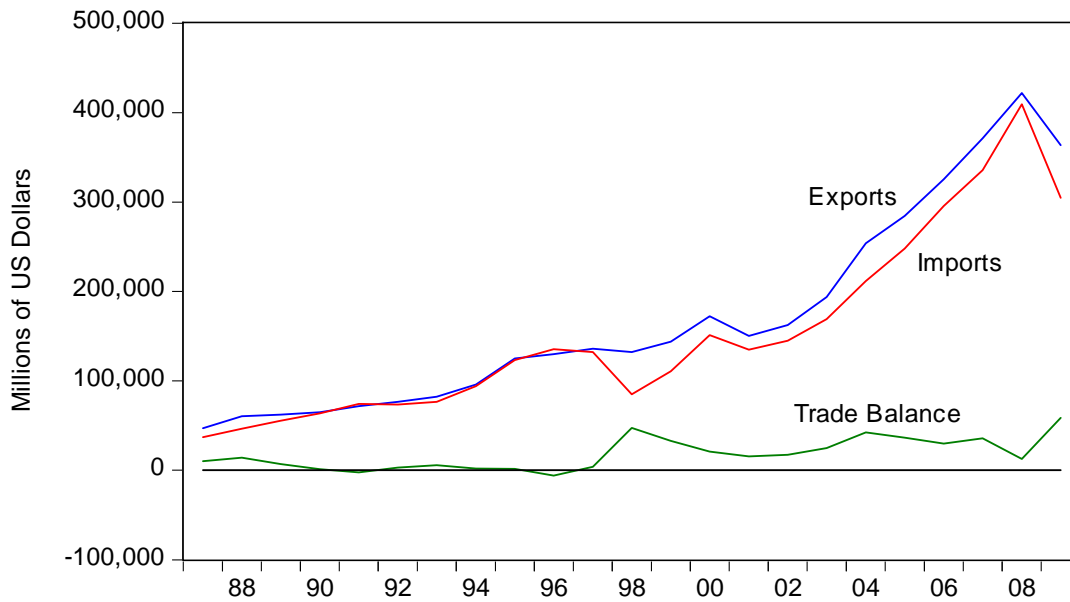
Figure 3a: Exports, Imports, and the Trade Balance of ASEAN Countries



Notes: ASEAN includes Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam

Source: CEPII-CHELEM Database

Figure 3b: Exports, Imports, and the Trade Balance of Republic of Korea

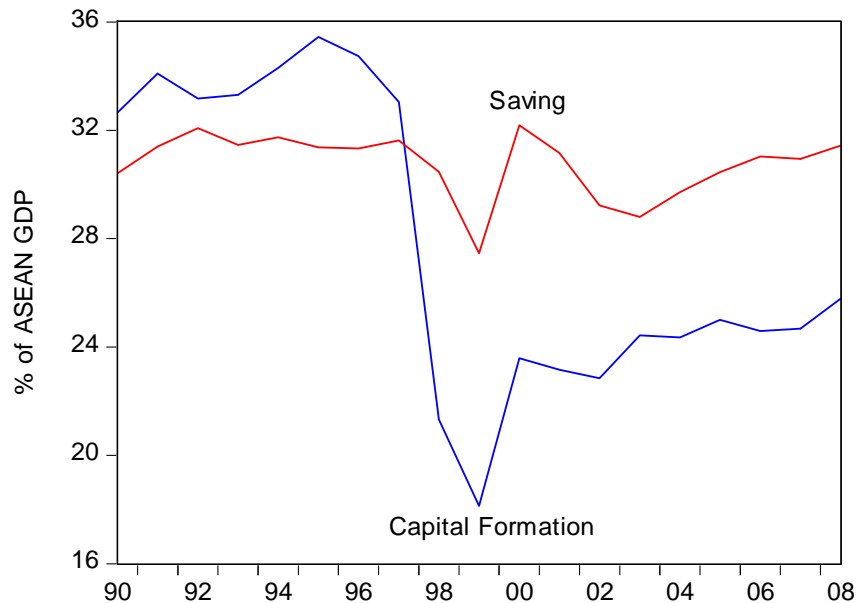


Source: CEPII-CHELEM Database

Investment spending, which had been excessive during the bubble period, plummeted during the crisis. This occurred not just because of the banking crisis but also because exploding local currency debts left private firms with little breathing room to focus on production.

Figure 4a and 4b shows that, while saving as a share of GDP remained more or less stable in crisis-hit countries, investment relative to GDP fell. This led to large current account surpluses, in contrast to the current account deficits in crisis-hit economies before 1997. In ASEAN countries, investment relative to GDP has remained low to this day.

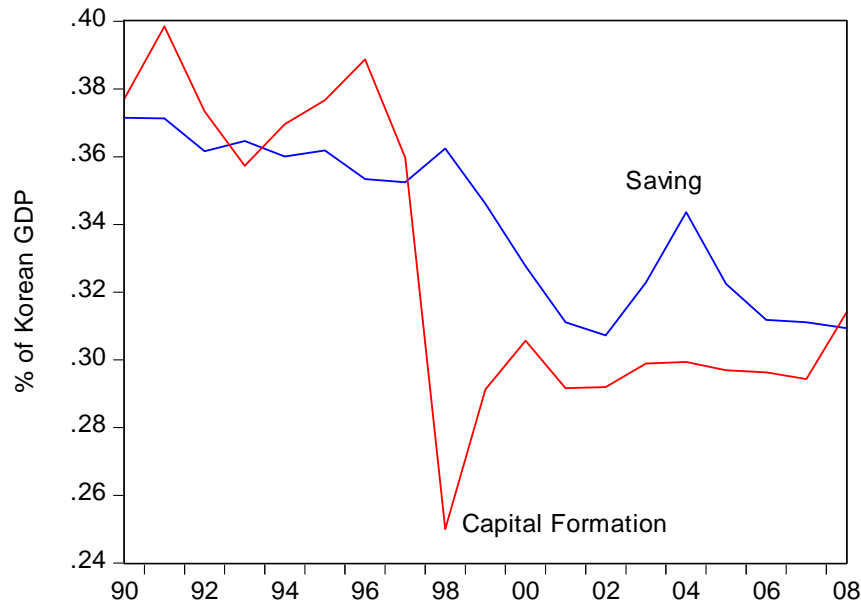
Figure 4a: Gross Capital Formation and Gross Saving as a % of GDP for ASEAN Countries



Notes: ASEAN includes Indonesia, Malaysia, the Philippines, Thailand, and Viet Nam

Source: ADB Key Indicators for Asia and the Pacific 2009

Figure 4b: Gross Capital Formation and Gross Saving as a % of GDP for Republic of Korea

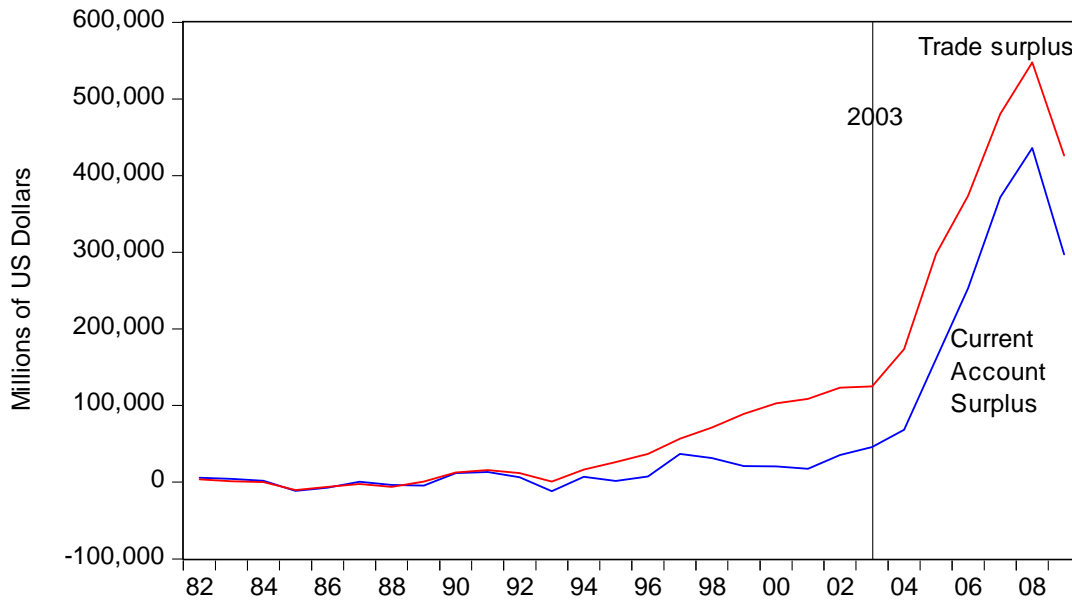


Source: World Economic Outlook Database and CEIC

The PRC's trade surplus only began increasing rapidly in 2003 (see Figure 5a). The PRC's global current account surplus increased from \$35 billion in 2002 to \$435 billion in 2008. Although it decreased during the crisis, at \$305 billion it was still the largest in the world in 2010.

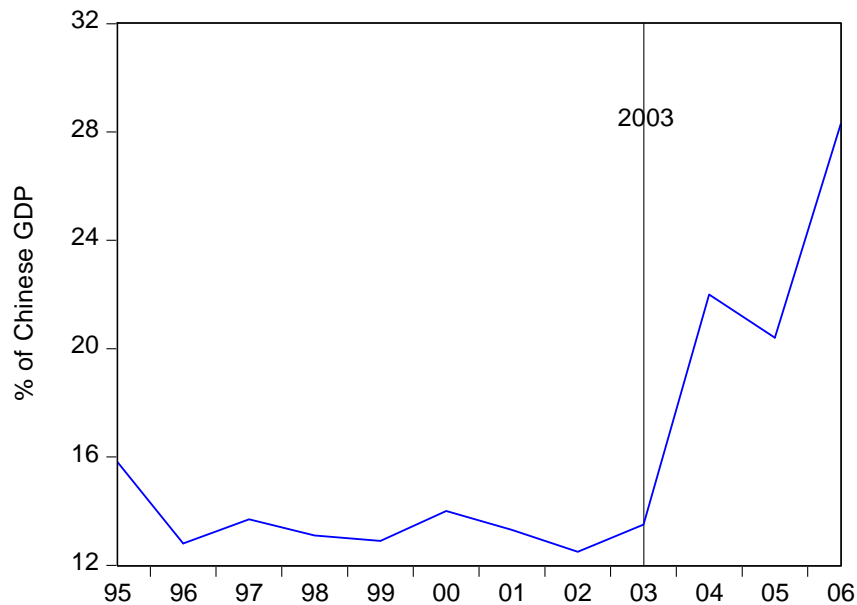
From the perspective of saving and investment, one of the key variables accounting for these imbalances was a rise in corporate saving. As Figure 5b shows, corporate saving in the PRC rose from 12.5% of GDP in 2002 to more than 28% in 2006. On the other hand, as Xing (2009) noted, the household saving rate has remained constant at around 20% of GDP for many years and government saving has only increased modestly since 2003.

Figure 5a: The PRC's Trade and Current Account Surplus



Source: CEIC and CEPII-CHELEM Databases

Figure 5b: Corporate Saving in the PRC as a % of GDP



Source: Asian Development Outlook 2009

What caused corporate saving to increase so rapidly? The Asian Development Outlook (2009) reported that after-tax corporate profits relative to GDP rose by 6 percentage points between 2003 and 2006. Part of this increase was due to rapid economic growth and rising output prices that increased the profitability of state-owned enterprises (SOEs) and private firms. Since SOEs in the past did not pay dividends, higher profits directly increase the firms' gross saving.

Several other factors also contributed to high and rising saving rates among SOEs. Many have monopolies in various sectors, such as China Mobile in telecommunications and China National Petroleum Corporation in oil. As Xing (2009) discussed, the resulting monopoly profits

contribute to high corporate savings, extraordinarily high compensation among executives at SOEs, and a skewed income distribution. In addition, Huang (2009) noted that several factors transfer wealth from the household sector to large corporations. These include artificially low prices for land, labor and credit; environmental regulations that are not adequately enforced; and an undervalued exchange rate.

3. UNDERSTANDING THE PRC'S TRADE SURPLUS

In recent years the PRC's current account surplus has equaled or exceeded the current account surpluses of Japan, the Association of Southeast Asian Nations (ASEAN)⁴, and the newly industrialized economies (NIEs)⁵ together. Figure 5a indicates that the PRC's current account surplus is driven largely by its merchandise trade surplus. This section thus examines the PRC's trade surplus in more detail.

China's Customs Statistics divides the PRC's merchandise trade into two major categories, processing trade and ordinary trade. Imports for processing are goods that are brought into the PRC for processing and subsequent re-export. Processed exports are goods that are produced in this way. Imports for processing are imported duty free and neither the imported inputs nor the finished goods produced using these imports can enter the PRC's domestic market. By contrast, ordinary imports are goods that are intended for the domestic market and ordinary exports are goods that are produced primarily using local inputs.

In the last few years, the PRC's surplus has been concentrated in processing trade. For instance, in 2010 the PRC ran a surplus of \$322 billion in processing trade and a deficit of \$48 billion in ordinary trade.

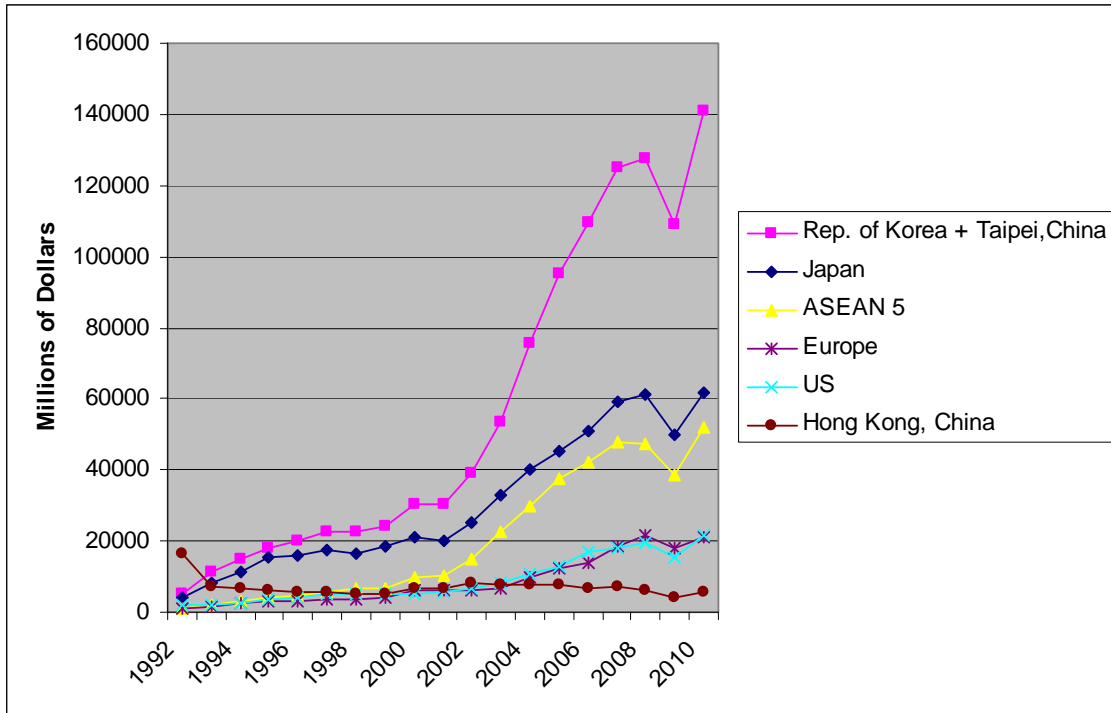
The surpluses in processing trade are generated primarily within East Asian production networks. Figure 6a shows that the lion's share of imports for processing come from Japan; Republic of Korea; Taipei,China; and ASEAN. Figure 6b shows that processed exports flow primarily to the US; Europe; Japan; and Hong Kong, China. However, most of the PRC's processed exports to Hong Kong, China are trans-shipped to advanced economies. Thus processing trade involves firms in East Asia shipping parts and components to the PRC for assembly and re-export to advanced economies. Figure 6c shows that because of these "triangular trading patterns," the PRC ran deficits of more than \$100 billion in processing trade with East Asia and surpluses of \$100 billion with Europe and \$150 billion each with the US and Hong Kong, China.

Figures 6a-c also indicate that there was some rebalancing in the PRC's processing trade surplus in 2009. However, the surpluses rebounded in 2010 and far exceeded the pre-crisis levels.

⁴ ASEAN includes Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

⁵ The NIEs include the Republic of Korea and Taipei,China.

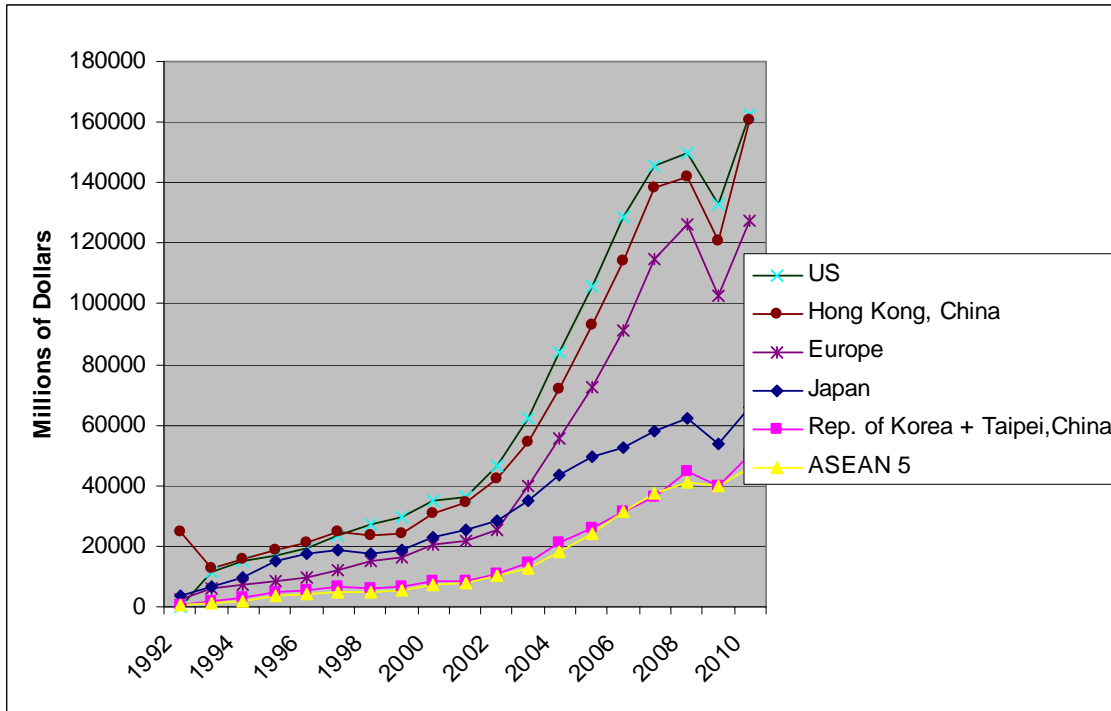
Figure 6a: The PRC's Processed Imports by Country and Region



Source: China Customs Statistics.

Note: ASEAN 5 includes Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

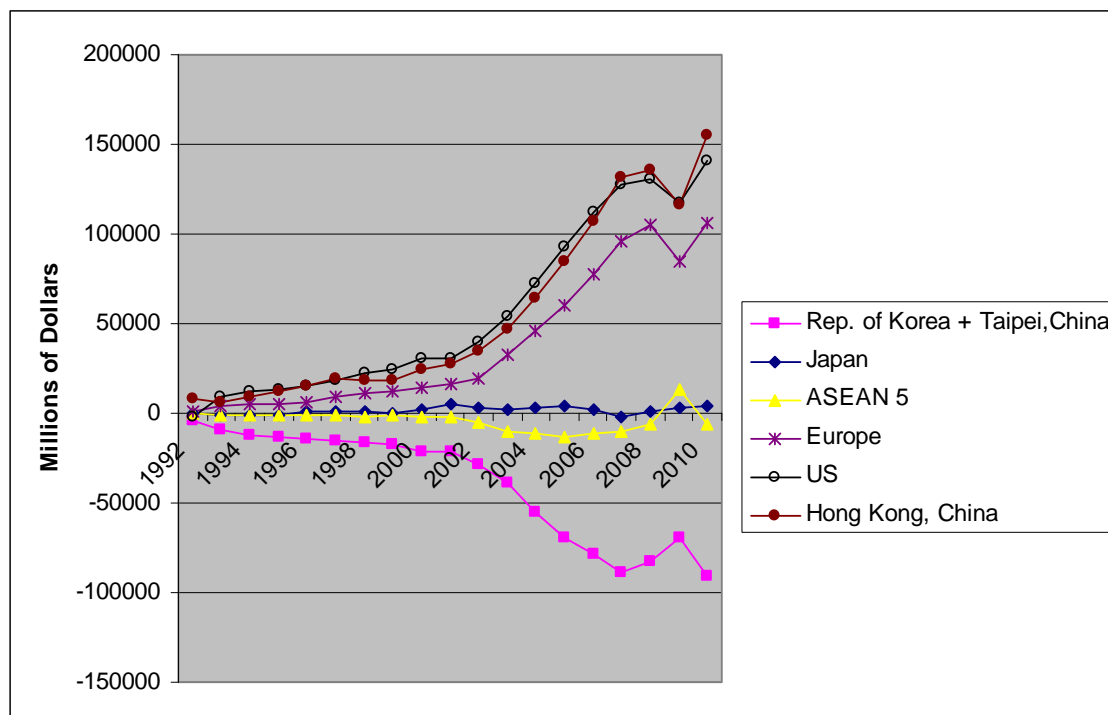
Figure 6b: The PRC's Processed Exports by Country and Region



Source: China Customs Statistics.

Note: ASEAN 5 includes Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

Figure 6c: The PRC's Trade Balance in Processed Goods by Country and Region



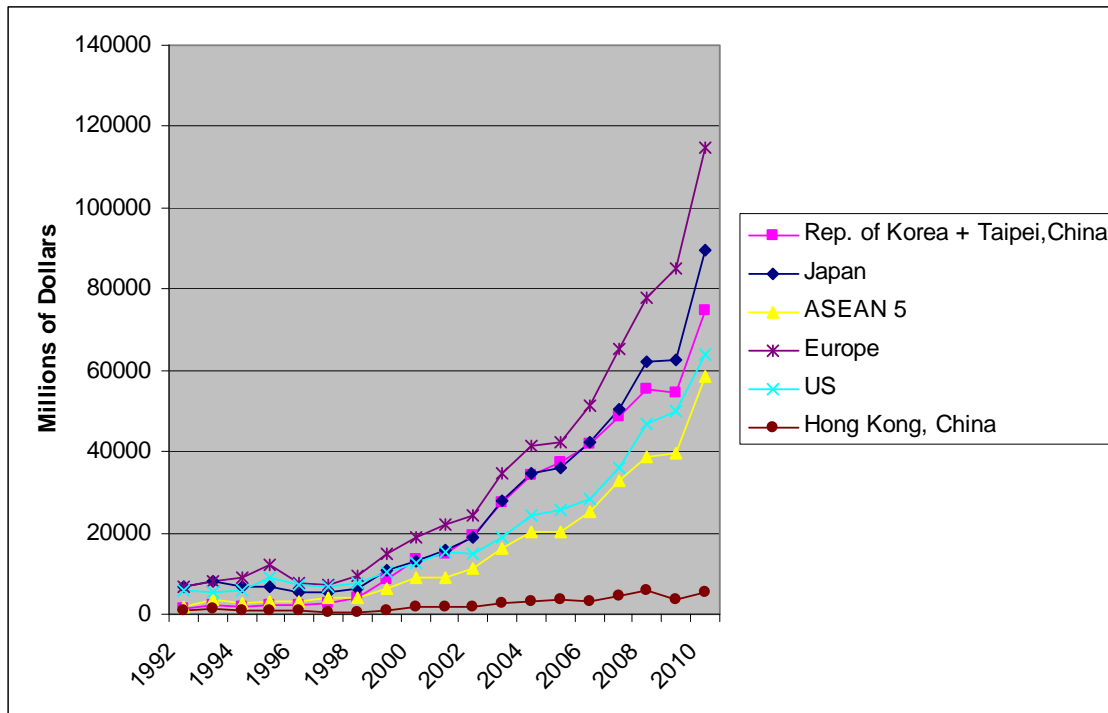
Source: China Customs Statistics.

Note: ASEAN 5 includes Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

While rebalancing is not taking place in processing trade, it is occurring in ordinary trade. The PRC's balance in ordinary trade shifted from a surplus of \$38 billion in 2005 to a deficit of \$48 billion in 2010. Gaulier, Lemoine, and Unal (2011), analyzing the PRC's ordinary trade using data up to 2007, found that Europe (especially Germany) exported large volumes of automobiles and other consumer goods to the PRC. Moreover, East Asian countries exported increasing quantities of parts and components and capital goods to foreign-owned enterprises in the PRC that produce for the local market. By contrast, the share of ordinary US exports to the PRC shrank, suggesting that the PRC's rebalancing is likely to be associated with continued large bilateral surpluses with the US.

Subsequent data indicate that this pattern is continuing (see Figures 7a-c). In 2010, the PRC's ordinary-trade balance recorded a \$71 billion deficit with East Asia and surpluses of \$44 billion and \$23 billion with the US and Europe, respectively. Europe's ordinary exports to the PRC increased from \$85 billion in 2009 to \$115 billion in 2010. By contrast, America's ordinary exports to the PRC increased more slowly, from \$50 billion in 2009 to \$64 billion in 2010. Thus, firms in East Asia and Europe are benefiting more than firms in the US from increasing demand in the PRC.

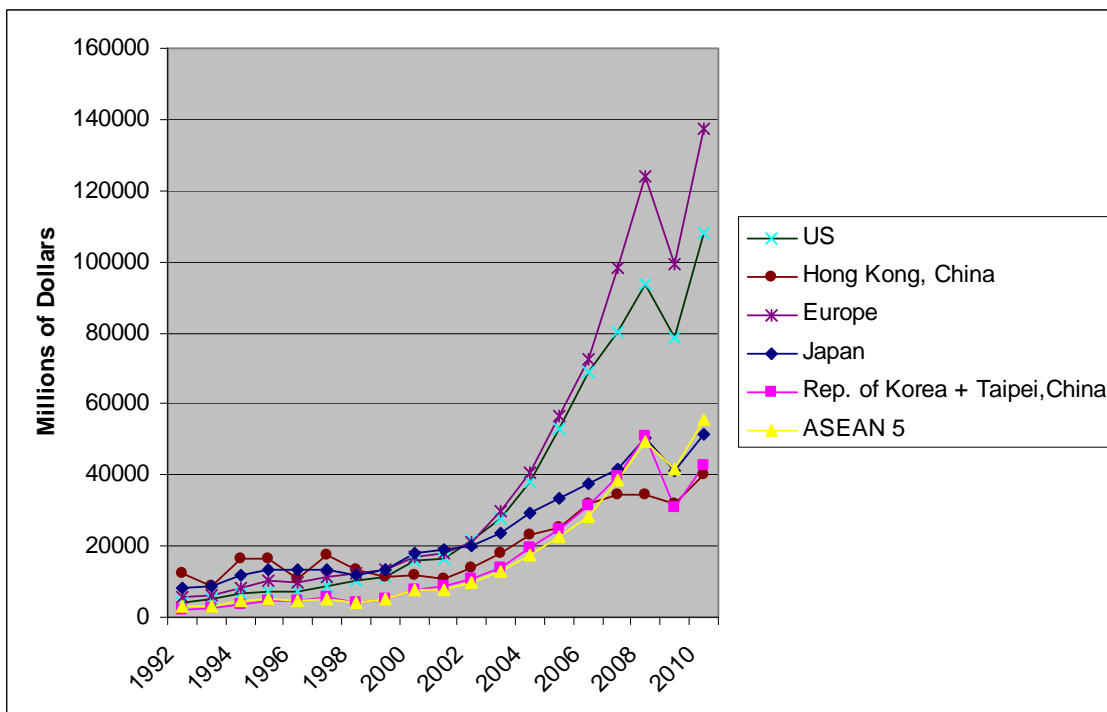
Figure 7a: The PRC's Ordinary Imports by Country and Region



Source: China Customs Statistics.

Note: ASEAN 5 includes Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

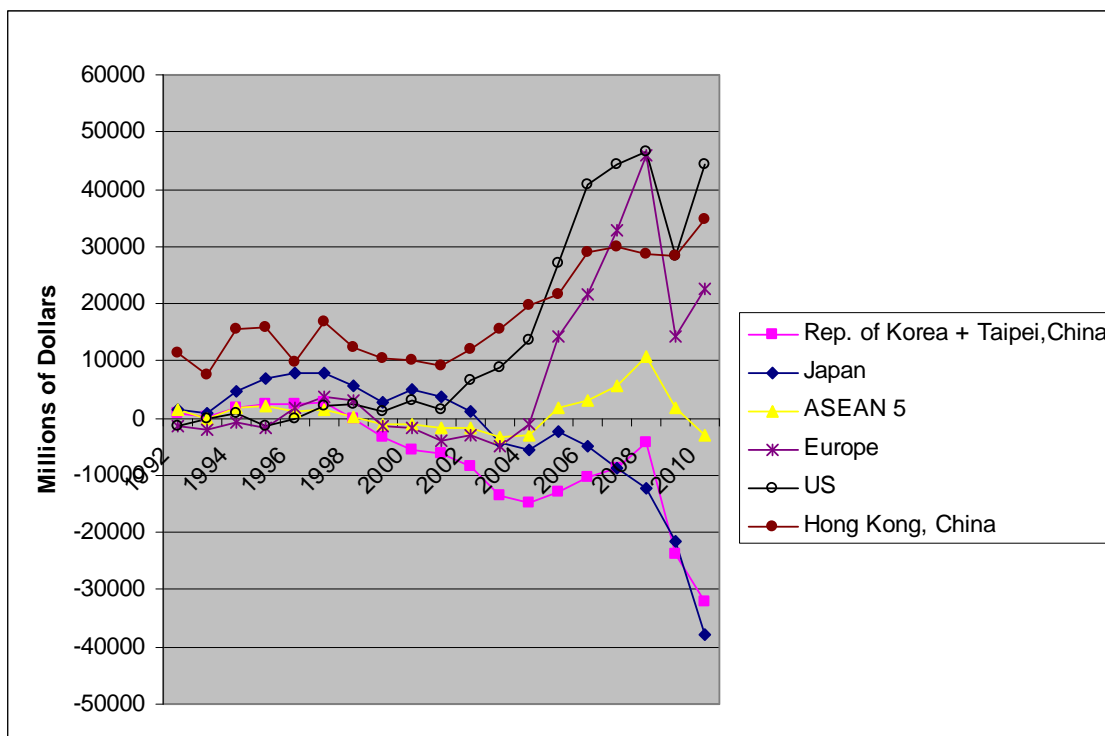
Figure 7b: The PRC's Ordinary Exports by Country and Region



Source: China Customs Statistics.

Note: ASEAN 5 includes Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

Figure 7c: The PRC's Trade Balance in Ordinary Goods by Country and Region



Source: China Customs Statistics.

Note: ASEAN 5 includes Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

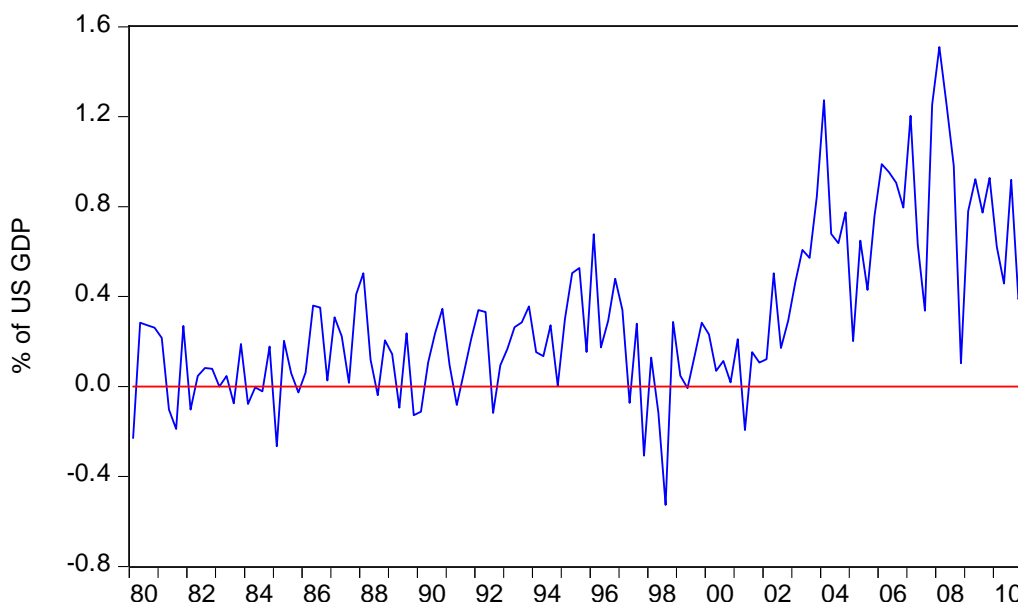
According to China Customs Statistics, America’s combined bilateral deficit in processing and ordinary trade in 2010 totaled \$186 billion. But this understates the size of the deficit, because the lion’s share of the PRC’s processed exports to Hong Kong, China are trans-shipped to developed economies (which means that Europe’s bilateral deficit is significantly higher as well). By contrast, US data treat goods coming from the PRC via Hong Kong, China as being exported from the PRC, yielding a bilateral trade-deficit figure of \$273 billion, up from \$203 billion in 2005.

Overall, Figures 6 and 7 indicate that the PRC’s trade remains very dependent on Western countries for final demand. If the US and Europe fall back into recession, this could cause another large drop in exports of final goods from the PRC and of parts and components from East Asian supply chain countries.

4. RESERVE ACCUMULATION AND MACROECONOMIC MANAGEMENT

The previous section indicated that Western and especially US demand continues to play a key role for Asia’s export demand. Figure 2 shows that net private inflows into the US have consistently fallen short of US current account deficits since 2002. How has the US sustained its large demand for net exports over the last 10 years?

Figure 8 makes clear that this shortfall has been closed by reserve accumulation. Data from the Bureau of Economic Analysis indicates that, since 2001, foreign official purchases of US assets have exceeded \$3 trillion. This understates foreign official purchases since foreign central banks also purchase a large amount through private banks and Treasury bond dealers.

Figure 8: Official Purchases of US Assets by Foreign Governments

Source: US Bureau of Economic Analysis

The PRC and other East Asian countries, facing pressure for currency appreciation because of massive current and capital account surpluses, have been the largest purchasers of foreign exchange reserves in recent years. According to the People's Bank of China (PBoC), the PRC's stock of external reserves since 2005 has increased by \$2.5 trillion. A key reason for intervention in East Asia has been to maintain competitive exchange rates in order to sustain the export-oriented thrusts of their economies.

Ceteris paribus, foreign reserve accumulation increases the monetary base and creates excess liquidity in the banking system. This in turn can generate inflationary pressure by increasing the money supply. Central banks can offset this by employing sterilization policies. Sterilization involves selling central bank bills or other assets to keep the monetary base from increasing too fast and to mop up excess liquidity in the banking system. Central banks also increase commercial bank reserve requirements to reduce excess liquidity.

Sterilization policy in the PRC was successful through 2006. As Ouyang, Rajan, and Willett (2010) showed, high reserve growth at this time was offset by cuts in domestic credit. Inflation also remained under control.

After this, however, sterilization policy has become problematic. The monetary base began increasing rapidly, and the year on year changes in the monthly consumer price index rose rapidly throughout 2007. It finally peaked at over 7% in the middle of 2008. Although inflation in the PRC collapsed with the onset of the global crisis, it soon returned and exceeded 5% in the middle of 2011. Food price inflation in 2011 exceeds 10%, and disproportionately harms poor consumers who spend much of their income on food.

These problems with macroeconomic management arise largely since the yuan is closely linked to the US dollar. Because of this, the PRC's interest rates are disproportionately influenced by US interest rates. US interest rates are currently set by the Federal Reserve at very low levels to fight the economic slowdown. With the PRC facing inflationary risks rather than deflationary risks, low interest rates are not the appropriate monetary policy.

Low interest rates cause Chinese savers to receive negative real returns on the massive amount of saving they hold in the PRC's banking system. The negative interest rates have led to a flight out of money into investments such as real estate, causing prices to rise rapidly in the property market.

Artificially low interest rates also reduce the cost of capital. Large corporations and other state owned enterprises can borrow from the four big commercial banks at a spread of about 3% over deposit rates. The World Bank (2010) argues that these low interest rates relative to the expected returns from investing in physical capital have led to overinvestment. The cheap and plentiful credit flowing to large corporations produces a capital intensive growth path that is inappropriate for a labor-abundant country such as the PRC.

In addition, low interest rates penalize Chinese consumers. Because the range of assets that they can hold is small, savers keep massive amounts of funds in the banking system. Low interest rates reduce their non-labor income, and thus reduce the amount that they can consume. This is one reason why the PRC's consumption is only 35% of GDP. Greater exchange rate flexibility would allow more decoupling between the PRC's interest rates and US interest rates, helping the PBoC to implement monetary policy that is appropriate for the PRC.

Another problem with sterilization policy is that it interferes with the allocation of credit through the banking system. The PBoC often forces banks to hold central bank bills at artificially low rates, reducing bank profitability. In addition, small and medium-size enterprises (SMEs) are the marginal borrowers in the PRC's banking system. When the PBoC issues central bank bills or increases reserve requirements to drain excess liquidity, loans to SME's fall the most (Pettis, 2011). Kan (2011) reports that SMEs in 2011 face loan rates as high as 60% per annum. Since SMEs employ 80% of workers, these difficulties in obtaining credit disproportionately harm ordinary workers (Zoellick and Lin, 2009).

There are other problems associated with sterilization policy. One is that the yield differentials between Asian sterilization bonds and US Treasury securities is positive, implying that there are quasi-fiscal costs associated with these operations. A second is that the practice of accumulating Treasury securities and sterilizing these purchases results in an inefficient allocation of resources. Private and social returns would be much higher if saving were channeled into education, healthcare, and other domestic investments.

5. REBALANCING GROWTH IN ASIA

Accumulating trillions of dollars of reserves and sterilizing the resulting base money increases is stoking inflation, harming SMEs, and producing an inefficient allocation of resources. Now is an opportune time for the PRC to wean itself away from reserve accumulation and pursue its self-proclaimed goal of adopting an exchange rate regime characterized by a multiple-currency, basket-based reference rate, and a reasonably wide band.

Ma and McCauley (2011) and Aglieta et al. (2011) found that during the 2006–2008 period when the PRC managed its exchange rate relative to a basket of currencies and other Asian countries also managed their currencies relative to currency baskets, there was considerable exchange rate stability between the yuan and other East Asian currencies. Thus, if the PRC again shifts to a more flexible regime targeted to a basket of currencies, the huge surpluses that East Asia is running against the US and Europe in processing trade would cause currencies in the region to appreciate in concert against US dollar and euro. Market forces could then allocate these appreciations across supply chain countries as a function of the size of their surpluses in processing trade.

A joint appreciation would benefit East Asia in several ways. It would maintain greater intra-regional exchange rate stability, facilitating the flow of parts and components and FDI within regional production networks (Hayakawa and Kimura, 2009). In addition, since much East Asian trade is intra-regional, a joint appreciation against extra-regional currencies would imply much smaller appreciations of effective exchange rates (EERs) in the region. The fact that EERs in Asia would increase by less implies that the recessionary impact would be attenuated. Concerted appreciations would also help prevent unpleasant outcomes such as “beggar-thy-neighbor” policies or “free-rider” problems that might arise because economies in the region are not only trading partners but also competitors in third markets. They would allow Asian consumers to import more from the rest of the world (Thorbecke, 2009, 2010). Finally, they would give Asian firms an incentive to produce for domestic markets. This would allow Asian consumers to enjoy more of the fruits of their labor.

The PRC should also address the distorted distribution of income between capital and labor. Since the return on citizens’ savings is low, the primary source of income for consumption is labor income. Labor income has fallen from more than 50% of GDP before 2002 to below 40% at present. At the same time, as Figure 5b indicates, corporate profits have soared in recent years. Low labor income is the main factor explaining why consumption in the PRC is less than 35% of GDP.

Huang (2009) explains these distributional changes by noting that factor market distortions provide a subsidy to producers. He calculated this subsidy in 2008 as equaling almost 2 trillion yuan (7% of GDP). These subsidies include an underdeveloped social welfare system that lowers employers’ labor costs, land prices that do not reflect market values, administered prices for fuel and electricity, environmental laws that are not rigorously enforced, artificially low real interest rates, and a yuan that is undervalued. These subsidies transferred resources to the corporate sector and increased their profitability.

Thus, to improve the sectoral distribution of income and raise consumption spending, the PRC’s government needs to take several steps. One is to reform the Hukou system of household registration so that migrant workers receive more of the benefits that urban workers receive. A second is to enforce environmental laws and to force firms to internalize the cost of environmental degradation. A third is to allow interest rates and exchange rates to increase.

Exchange rate appreciations would have a contractionary effect on the economy. This could be offset by domestic absorption increasing policies. A high priority for spending should be investing in education and health care for rural students. These students will be the urban workers of tomorrow, and the better their human capital the more productive the PRC will be. In addition, research has indicated that better educated workers are more adept at absorbing new technologies that become available through multinational corporations producing within East Asian supply chains (Urata, Matsuura, and Wei, 2006). To facilitate technology transfer, it is especially important for students to receive a high quality education in mathematics and science.

Rozelle (2010) noted that rural students face many obstacles to learning. Commutes can be long and dangerous. Poor nutrition, health, and vision restrict students’ ability to learn. In addition, tuition at the high school and college levels are prohibitively expensive. Only one out of four rural students finishes high school and only three out of a hundred go to a tier 1 or tier 2 university.

Thus, there is a significant need for the PRC to improve rural education. There is also a need in the urban sector for the PRC to invest in public transportation, schools for the children of migrants, and affordable housing. These investments would pay much higher returns than further purchases of US Treasury securities or other external reserves.

In the case of ASEAN countries, Figure 4a suggests that one way to rebalance growth is to increase investment. Thorbecke, Lamberte, and Komoto (2010) have argued that an important way to do this is to improve the investment climate. This can be done by fighting corruption, improving infrastructure, and investing in human capital.

6. CONCLUSION

Deficits in the US and surpluses in East Asia are an enduring part of the economic landscape. They are driven by low levels of saving in the US and by reserve accumulation in Asia. The US is the world's largest debtor and the PRC is the world's largest reserve accumulator. US net foreign debt equals \$2.5 trillion and the PRC's stock of foreign reserves exceeds \$3 trillion.

This paper argues that accumulating reserves and attempting to sterilize the base money increases is causing problems for the PRC's macroeconomic management. In particular, consumer price inflation currently exceeds 5% and food inflation is twice as high.

Problems are arising for the PRC because yuan is closely linked to US dollar, causing the PRC's interest rates to be influenced by US interest rates. US interest rates are set by the Fed at low levels to fight the US slowdown. The PRC for several reasons should have higher interest rates.

Low interest rates have led to a flight out of money into real estate, causing real estate prices to rise rapidly. They have also lowered the cost of capital and led to overinvestment in physical capital. They reduce the non-labor income of Chinese savers, causing consumption to be low.

The practice of accumulating Treasury securities and sterilizing these purchases is causing other difficulties in the PRC. The yield differentials between central bank bills and US Treasury securities is positive, implying that there are quasi-fiscal costs associated with these operations. In addition, when the PBoC issues central bank bills or increases reserve requirements to drain excess liquidity, loans to the marginal borrowers (the SMEs) fall the most. Since SMEs are a dynamic sector that employs the lion's share of workers, their difficulty in accessing credit harms ordinary workers and contributes to a capital-intensive growth path in the PRC. Finally, channeling so much saving into external reserves produces an inefficient allocation of resources. Private and social returns would be much higher if saving were channeled into education, healthcare, and other domestic investments.

The PRC should thus wean itself away from reserve accumulation and pursue its self-proclaimed goal of adopting an exchange rate regime characterized by a multiple-currency, basket-based reference rate and a reasonably wide band. This would cause exchange rates throughout Asia to appreciate together against US dollar and euro. Concerted appreciations against external currencies would benefit East Asia by maintaining intra-regional exchange rate stability, facilitating the flow of parts and components within regional production networks. In addition, since much East Asian trade is intra-regional, a joint appreciation against extra-regional currencies would imply much smaller appreciations of effective exchange rates in the region. Joint appreciations would also allow Asian consumers to import more from the rest of the world and give Asian firms an incentive to produce for domestic and regional markets. This would allow Asian consumers to enjoy more of the fruits of their labor.

Finally, policy makers should move away from a growth path that favors capital-intensive industries and large firms at the expense of labor-intensive firms and workers in SMEs. Many Chinese economists have argued that the way to do this is to improve the treatment of migrant workers, require firms to internalize the cost of environmental degradation, and allow market forces to play a greater role in determining interest rates and exchange rates.

The PRC and East Asia have sustained “miraculous” growth rates. Much credit for this should go to astute policy makers, capable entrepreneurs, and a hard working labor force. Asian governments are now very appropriately redirecting their focus to enable more of the benefits of economic growth to accrue to smaller firms and ordinary workers.

REFERENCES

- Adams C., and D. Park. 2009. Causes and Consequences of Global Imbalances: Perspectives from Developing Asia. Background paper prepared for Asian Development Outlook 2009. Manila: Asian Development Bank.
- ADB. 2009. Asian Development Outlook 2009: Rebalancing Asia's Growth. Manila: Asian Development Bank.
- Aglietta, M., C. Labonne, and F. Lemoine, 2011. Exchange Rate Policy and Regional Integration in Asia, La Lettre du CEPII No. 307. January.
- Bailey, M., 2003. The Sources of Economic Growth in OECD Countries: A Review Article, *International Productivity Monitor* (7).
- Belsky, E., and J. Prakken. 2004. Housing Wealth Effects, Housing's Impact on Wealth Accumulation, Wealth Distribution, and Consumer Spending. Harvard Joint Center For Housing Studies Working Paper W04-13, (Harvard Joint Center for Housing Studies, Cambridge MA).
- CBO. 2011. CBO's 2011 Long Term Budget Outlook. Washington, DC: Congressional Budget Office.
- Gaulier, G., F. Lemoine, and D., Ünal. 2011. China's Foreign Trade in the Perspective of a More Balanced Economic Growth. CEPII Working Paper No. 2011-04.
- Greenspan, A. 2003. Remarks presented at the Conference of the Independent Bankers Association of America. Orlando, FL, 4 March 2003, <http://www.federalreserve.gov/boarddocs/speeches/2003/20030304/default.htm>
- Hayakawa, K., and F. Kimura. 2009. The Effect of Exchange Rate Volatility on International Trade in East Asia. *Journal of the Japanese and International Economies* (23): 395-406.
- Huang, Y. 2009. The Future of the International Currency System: A Chinese Economist's Perspective. Paper presented at the Conference on Asian Architecture and Global Governance. ADBI/ADB. Manila, 29 October.
- Kan, H. 2011. Small Enterprises Squeezed by Loans. Caixin. June 30.
- Ma, G., and R. McCauley. 2011. The evolving renminbi regime and implications for Asian currency stability, *Journal of the Japanese and International Economies* (25): 23-38.
- Ouyang, A., R. Rajan, and T. Willett. 2010. China as a reserve sink: The evidence from offset and sterilization coefficients. *Journal of International Money and Finance* 29(5): 951-972.
- Pettis, M. 2011. Small Companies Feel the Pain in China. Blogspot, 28 June. Available at www.mpettis.com.

- Rozelle, S. 2010. China's 12th 5 Year Plan Challenge: Building a Foundation for Long Term, Innovation-Based Growth and Equity. Paper presented at NDRC-ADB International Seminar on China's 12th Five Year Plan. Beijing, 19 January.
- Thorbecke, W. 2009. Can East Asia be an Engine of Growth for the World Economy? RIETI Discussion Paper No. 09-E-006.
- Thorbecke, W. 2010. How Elastic is East Asian Demand for Consumption Goods? ADBI Working Paper No. 260.
- Thorbecke, W., M. Lamberte, and G. Komoto, 2010. Promoting Learning and Industrial Upgrading in ASEAN Countries. ADBI Working Paper No. 250.
- Williamson, J., 1983. *The Exchange Rate System*. Washington, DC: Institute for International Economics
- World Bank. 2010. China Quarterly Update. June 2010. Available at:
www.worldbank.org.
- Xing, Y. 2009. The Global Economic Recession and Challenges to China's Export-led Growth Strategy. Paper written for the ADBI conference on Global Economic Crisis: Impacts and Implications for Industrial Restructuring in Asia. 19–20 August 2009.
- Urata, S., T. Matsuura. and Y. Wei. 2006. International Intrafirm Transfer of Management Technology by Japanese Multinational Corporations. RIETI Discussion Paper 06-E-006. Tokyo: RIETI.
- Yoshitomi, M. 2003. *Post-crisis Development Paradigms in Asia*. Tokyo: ADB-I Publishing.
- Zoellick, R., and J. Yifu Lin. 2009. Recovery Rides on the G2. The Washington Post, 6 March.