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Rebalancing the Chinese economy

Yu Yongding*

Abstract  China has run a current account surplus for two decades. Its current account surplus is not simply a result of the saving gap. Rather, the current account surplus, as well as the saving gap, is a result of complicated interaction among various factors in a dynamic fashion. While running a large current account surplus, China has also run a large capital account surplus mainly in the form of FDI over decades. China’s ‘twin surpluses’ are a reflection of market distortion, which has caused large welfare losses for the country. The Chinese government should not only pay attention to internal balance but also to external imbalance. Hence it should combine expenditure-switching policies and expenditure-changing policies to maintain a decent non-inflationary growth rate, while keeping the current-account-balance-to-GDP ratio at a rational level.

Key words: global imbalances, current account surplus, China, RMB exchange rate, FDI, Swan diagram, the saving gap

JEL classification: E58, F41

I. Introduction

Before the subprime crisis hit in 2008, the issue of ‘global imbalances’ was arguably the dominant concern of international economists around the world. Global imbalances in this context refer to the large, persistent current account deficit in the United States matched by large and persistent current account surpluses in the rest of the world, especially China. Most economists believed that the global imbalances were not sustainable, that correction would be disruptive, and the more the correction was delayed, the bigger the interruption to global economic activity would be. The crisis precipitated by global imbalances was widely expected to be triggered by a sudden stop of inflows of foreign capital to fund the ever-widening US current account deficit, which, in turn, would lead to large and swift fall of the US dollar and a steep rise in US interest rates and associated risk premia. The resulting large financial disruptions and reduction in demand would eventually lead to a deep global recession.

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In the event, the crisis that erupted in 2008 did not take the form anticipated by most economists. It was fundamentally a financial crisis and not a balance-of-payments crisis. The anticipated sudden stop did not occur: instead, the US dollar strengthened rather than weakened in the wake of the so-called ‘flight to quality’, and the interest rates fell to record low levels. Nonetheless, while the focus of much of the analysis of the crisis has focused on the conduct of domestic monetary policy and, in particular, the supervision and regulation of the US and global financial system, the persistence of underlying global macroeconomic imbalances remained an important contributing factor to the emergence and dynamics of the current crisis (see, for example, Gourinchas et al., 2008). Without the recycling the US dollars back to the US capital market by current account surplus countries, the US housing bubble might not have expanded to such a degree.

Although the immediacy of the European sovereign debt crisis has pushed the question of global imbalances to the margins, the threat they pose both to China and the global economy remains substantial. The most serious threat to the global economy is undoubtedly a prolonged recession. To accelerate recovery while avoiding the deterioration of household and fiscal balances, the US must seek to improve its net export position in order to reduce its current account deficit. China is by far America’s largest trade surplus country and must therefore support this adjustment (without submitting to the naïve view of some American politicians who seek to place the blame for imbalance on China). More importantly, as pointed out by Premier Wen Jiabao, China’s once successful export-driven growth strategy is ‘unstable, unbalanced, uncoordinated and ultimately unsustainable’. Rebalancing of the Chinese economy is not only in the interest of the rest of the world, but also in the interest of China itself. This reality is widely and well understood: the current debate is, to a large degree, on the manner and speed of such an adjustment.

Arguably, China started to address these imbalances with its decision to de-peg the renminbi (RMB) from the US dollar in 2005. China’s current-account-to-GDP ratio, which peaked at around 10.1 per cent of GDP in 2007 has fallen quite rapidly ever since, to 2.8 per cent in 2011, while estimates by International Monetary Fund (IMF) staff suggest that the real exchange rate has appreciated by around 30 per cent since 2005 and is currently only ‘moderately undervalued’, although there is still lingering doubt about whether this fall is structural or cyclical (IMF, 2012).

But the move towards rebalancing is still a controversial problem in China. Some economists argue that China’s growth is not imbalanced at all while others argue that imbalances pose no particular problems, either in the short or medium term. A more commonly held view is that China’s macroeconomic imbalances are structural and hence cannot be corrected by macroeconomic policies, and that attempts to use macroeconomic measures to address imbalances may precipitate a sharp slowdown of the economy. For them, growth should take precedence over rebalancing.

1 China’s persistent current-account surplus against the US current-account deficit has occupied a central place in Sino-American politics. On the one hand, US politicians accuse China of ‘stealing American jobs and manipulating exchange rate’. On the other hand, China claims that China’s current-account surplus against the US is a result of America’s spendthrift life style, and Americans should be grateful to China for its persistent large purchase of US government securities.

2 Wen Jiabao, speech at the National People’s Congress, March 2007.
In this paper, I draw on extensive research and policy engagement (Yu 1996, 1997, 2003, 2007, 2009, 2011) to provide an assessment of China’s macroeconomic imbalances. In doing so, I confine the discussion to the specific issue of the persistence of ‘twin (external) surpluses’—by which I mean the coexistence of persistent current account and capital account surpluses which have contributed to enormous reserve accumulation, which by mid-2012 stand at around US$3.2 trillion, equivalent to 18 months of import cover. I argue that this ‘twin surplus’ phenomenon reflects explicit policy choices over the past 30 years in both the external and domestic policy domains and represents a serious misallocation of resources. Hence, the correction of the imbalances is in the interest of China itself. To place growth on a sustainable path, China must continue to implement comprehensive policy measures to rebalance the economy. However, because the rebalancing is not just a matter of policy adjustment on the external front, it also involves the restructuring of the whole economy, which takes time: the return to a balanced growth path will not be smooth.

Section II of the paper uses simple national accounting identities to discuss the proximate causes of China’s current account surplus. Here I emphasize the primacy of China’s development strategy based on the rapid growth of labour-intensive exporting over the alternative view that the surplus reflects excess domestic saving, although I do accept that the latter does play some role. Section III then links this to the capital account surplus to explore why the enormous growth in foreign direct investment (FDI) inflows have not yet translated into a current account deficit. Here I focus on how the interaction of structural weaknesses in the domestic financial sector combined with highly distorted incentives and a widely held perception that FDI is the dominant vehicle for technology transfer combine to explain a ‘round tripping’ phenomenon, in which large capital inflows are matched by offsetting investment in low-yielding US securities. The fourth section explains why to maintain imbalances in the form of twin surpluses is not in the interest of China, and section V concludes by summarizing the key actions required to address China’s macroeconomic imbalances.

II. Internal and external imbalances in China

It is standard for any discussion of internal and external balances in the Chinese economy to start from the national accounting identity equating the savings–investment gap to the balance of trade:

\[ S - I \equiv X - M \]  

where \( S \), \( I \), \( X \), and \( M \) represent the current account—national saving, domestic investment, exports and imports, respectively. Noting that the current account balance is defined \( \text{CA} = X - M + N \), where \( N \) denotes net factor income from abroad (roughly

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3 I use this term to highlight the distinction between the ‘twin deficits’ label used in the economics literature to describe the interaction between a country’s (private) savings gap, the current account balance, and the fiscal balance. For a given potential output, unless Ricardian equivalence holds, an increase in the fiscal deficit must entail either a crowding out of domestic investment or an increase in the trade deficit.

investment income net of interest payments on debt), and the balance of payments itself as \( CA + KA = \Delta R \), where \( KA \) denotes the capital account and \( \Delta R \) the accumulation of net international reserves, we can rewrite (1) as

\[
\Delta R = KA + CA = X - M + N = S - I
\]

(2)

where, for convenience, we define \( S = S + N \) as national savings inclusive of net factor income. Equation (2) is a simple representation of the ‘twin surplus’ argument: that the rapid reserve accumulation in China is the stock representation of the combined effects of the capital and current account balance, where the latter can be represented either in terms of the external balance or the domestic savings–investment position.

I discuss the dynamics of both surpluses in this paper, starting with the current account surplus. The dominant strands of thinking about the causes of China’s current account surplus among Chinese economists can be cast as interpretations of identity (2). One school of thought emphasizes the \( S - I \) gap to argue that the cause of China’s current account surplus is an excess of savings over domestic investment. In other words, the Chinese consume too little and save too much. The alternative interpretation focuses on the \( X - M \) imbalance, arguing that the cause of the current account surplus lies with China’s aggressive export promotion policy.

Equation (1) is, of course, simply a transformation of the national income account and, by definition, can tell nothing about the causality between the saving gap, the trade balance, and the current account surplus, let alone how they interact with each other. Hence, neither argument above can be verified or falsified \textit{a priori} without recourse to theory and evidence. In this paper, I argue that while a range of structural characteristics have contributed to high levels of excess domestic saving, current account dynamics overwhelmingly reflect a macroeconomic strategy that was primarily geared to the rapid expansion of net exports, and in which fiscal and monetary policy has tended to be focused on the management of internal balance while paying very little attention to an ultimately unsustainable external position.

(i) The current account surplus

Between 1981 and 2011, China ran a trade and current account surplus every year except for 1985–6, 1988–9, and 1993 (see Table 1). This period has coincided with an aggressive export promotion policy. In theory, export promotion was aimed at exploiting China’s perceived comparative advantage in labour-intensive manufacturing, but, in practice, this policy was accompanied by a mercantilist objective as the country sought to accumulate foreign-exchange reserves under the popular slogan ‘chuang hui jingji’ (a foreign-exchange-creating economy). Foreign-exchange accumulation required, at least initially, a trade surplus which saw the introduction of a comprehensive policy regime aimed at encouraging exports and discouraging imports. The motivation for foreign-exchange accumulation has, however, evolved over time, from a simple mercantilist motive, to an increasing need for international liquidity and a desire for self-insurance against external volatility, the latter being particularly prevalent in the wake of the East Asia Crisis in 1997. For the quarter-century from 1980, this policy was underpinned by moves to actively devalue the RMB against the US dollar. The official RMB exchange rate declined from 1.50 yuan per dollar in 1980 to 8.62 yuan by 1994, and was held at around this level for the subsequent decade.
By the mid-2000s, the stance of policy started to shift. The RMB was de-pegged from the US dollar in July 2005 and has steadily appreciated by around 30 per cent in real terms since. China’s current account surplus peaked at around 10 per cent of GDP in 2005 and has been falling steadily ever since. By 2011 the current account surplus was 2.8 per cent of GDP and is expected to fall further in 2012. Although much of this fall since 2008 can be attributed to the effects of the global recession and the associated stimulus package, which led to a sharp increase in fixed asset investment, the appreciation in the RMB has been an important contributing factor.

Complementing this focus on targeting a competitive (undervalued) real exchange rate was a raft of policy measures aimed at boosting (net) exports including: schemes to balance the import and local content requirements for key foreign investment projects (abolished after China’s accession to the World Trade Organization); tax rebates for exporters; and a range of discriminatory policies aimed at encouraging domestic enterprises to participate in international production networks, including through the provision of favourable access to infrastructure, credit, land, and so forth.

(ii) Macroeconomic management

The interaction between the focus on external balance and domestic aggregate demand management has been complicated. From the early 1980s and throughout most of the 1990s the authorities’ principal policy concern was the management of excess demand and domestic inflation, although following the East Asian crisis this was quickly replaced by concerns over deflation: for the half decade from 1997, export growth was increasingly seen as an important engine for growth and employment. But by late 2003

Table 1: China’s ‘twin surpluses’ and savings–investment balance (period averages as % of GDP)

<table>
<thead>
<tr>
<th>Time period</th>
<th>Current account balance</th>
<th>Capital account balance</th>
<th>Net international reserves</th>
<th>Domestic savings</th>
<th>Domestic investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1982–4</td>
<td>1.3</td>
<td>–0.1</td>
<td>4.5</td>
<td>n.a.</td>
<td>33.0</td>
</tr>
<tr>
<td>1985–9</td>
<td>–1.6</td>
<td>1.8</td>
<td>4.0</td>
<td>n.a.</td>
<td>37.1</td>
</tr>
<tr>
<td>1990–4</td>
<td>1.4</td>
<td>1.9</td>
<td>6.6</td>
<td>36.6</td>
<td>37.9</td>
</tr>
<tr>
<td>1995–9</td>
<td>1.9</td>
<td>2.3</td>
<td>12.7</td>
<td>36.5</td>
<td>37.6</td>
</tr>
<tr>
<td>2000–4</td>
<td>2.3</td>
<td>2.8</td>
<td>21.1</td>
<td>41.1</td>
<td>38.7</td>
</tr>
<tr>
<td>2005–8</td>
<td>8.5</td>
<td>2.4</td>
<td>40.6</td>
<td>50.8</td>
<td>42.7</td>
</tr>
<tr>
<td>2008–11</td>
<td>3.9</td>
<td>3.9</td>
<td>46.6</td>
<td>n.a.</td>
<td>48.3</td>
</tr>
</tbody>
</table>


5 The elasticity of the current account balance to the real exchange rate has changed over the last three decades. The increased specialization of the export sector and, in particular, the move up the global supply chain into higher-tech assembly and processing—which now accounts for 60 per cent of China’s total trade—has seen the import content of manufacturing rise and the impact of real exchange-rate movements on the current account diminish.

6 In early 2003, for example, when the author raised the issue of de-pegging the RMB from the US dollar, the main worry expressed by the leadership was the possible negative impacts of the appreciation on growth and employment.
concerns about overheating re-emerged and the public policy response returned to implementing monetary and fiscal tightening. This situation was maintained until the global financial crisis struck in late 2008.

A key feature of demand management in China has been to protect the export sector (at least in the short run) and direct monetary and fiscal tightening towards modulating the volume of aggregate investment. From 2003, the squeeze on investment, combined with the consequent depreciation of the real exchange rate (as domestic inflation fell), resulted in a compression of imports and an increase in the current account surplus. More recently, after the global financial crisis, the opposite happened: weak global demand reduced export growth, while the fiscal stimulus package boosted domestic consumption and investment powerfully enough that imports fell by a much smaller amount than exports so that the current account surplus fell.

(iii) Internal and external balance: a graphical analysis

The interaction between internal and external balance and the policy challenges facing the Chinese authorities in managing imbalances can be described using the simple Salter–Swan diagram. We draw heavily on the analysis of Blanchard and Giovanni (2005).

The IB and EB schedules in Figure 1 trace the combinations of the real exchange rate and aggregate absorption that ensure internal balance (IB—full employment of resources at low and stable inflation) and external balance (EB—a sustainably financed current account) respectively. Points to the right of IB correspond to excess aggregate domestic demand and to the left, to unemployment. Similarly, points to the right of EB correspond to an incipient current account deficit and vice versa to the left.

(iv) Adjustment: from East Asian Crisis to Global Financial Crisis and beyond

As of the mid-2000s, between the Asian Crisis and the Global Financial Crisis, China was at a point such as A, where the economy is roughly at balance between labour supply and demand, but with a trade surplus. It follows from Figure 1, positions B, C, and D correspond to alternative external balance positions. Demand contraction, given the real exchange rate, will take the economy to point C, at which external balance has been achieved at the cost of excess demand and incipient inflation pressures. By contrast, movement to external balance at B entails an appreciation of the RMB which would lead to a decrease of the trade surplus, but with no expansion of aggregate domestic demand it would entail the economy operating with unemployed resources.

The obvious implication is that even though the economy at A is in internal balance, efficient adjustment requires a combination of both expenditure-switching and expenditure-adjusting policies to engineer a move from A to D. According to Blanchard and Giovanni, this entails moves to boost private consumption through the following:

Note that a move from A to C would entail a depreciation in the nominal exchange rate sufficient to stabilize the real exchange rate in the face of rising domestic inflation.
reform of the social security system and other measures to reduce the level of precautionary saving among the population and policies to increase the share of household disposable income in national income; a public expenditure programme financed by debt to address regional and social problems; and a managed appreciation of the RMB exchange rate.

For much of the last two decades, however, the Chinese government has been reluctant to reach for expenditure-switching instruments: the structural external imbalance has not been seen as a policy objective. Rather, policy-makers, recognizing the space provided by the low (gross) debt-to-GDP ratio, have tended to rely on fiscal policy to keep the economy close to internal balance without paying attention to the growing external imbalance. In the context of the Salter–Swan diagram, the last decade has seen the economy oscillate from A’ to A’’ and back without any significant movement towards external balance. By around 2003, the economy was in a configuration such as A’ and the economy was overheating as a result of the expansionary monetary and fiscal policies adopted since the Asian Financial Crisis. Despite these pressures, the productivity gains that had been secured during the post-crisis period (with the support of the undervalued exchange rate) meant that the current account was in surplus. As concerns about inflation mounted, monetary policy was tightened, deflating domestic demand, but without igniting any pressure for the currency to appreciate. Hence the economy moved to the left, from A’ towards A’’. Throughout this adjustment, the investment share in GDP remained relatively constant, as did the import share; as a consequence, both the current account balance (X–M) and the savings–investment balance (S–I) increased through the adjustment phase (see Figure 2).

This fiscal and monetary policy blend has been relatively successful in managing to keep the economy close to internal balance. In fact, in 1998 and again in 2008 by
introducing a stimulus package, China was able to turn the economy around very quickly indeed—much faster than many other economies. When the objective has been to control overheating, the authorities have relied principally on monetary policy, using reserve requirements and open-market operations to target liquidity growth, as well as directed credit policies. Two aspects of monetary policy are worth stressing. The first is that the effectiveness of controls on capital means that the authorities are able to navigate the ‘impossible trinity’ and pursue an activist monetary policy at the same time as targeting the nominal exchange rate. The second is that with the fragmentation of China’s financial market and the inflexibility of interest rates, the authorities’ intermediate monetary target is the volume of money and/or domestic credit rather than an interest rate, such as the inter-bank rate. When the Global Financial Crisis struck, for example, China did not suffer a credit crunch and liquidity shortage: the central bank simply instructed commercial banks to increase their credits to enterprises to accommodate the government’s stimulus package, and commercial banks duly complied.

In short, while it often creates many distortions, on the whole China’s monetary policy is effective in controlling inflation. However, when the economy is under deflationary pressure, monetary policy is less effective than fiscal policy.

The trouble with this policy was that, without the currency appreciation, the tightening of domestic demand, say by cutting government expenditures, ended up with domestic demand being replaced by external demand without leading to the reduction in aggregate demand and the lowering of inflation. In China, given external conditions, whenever the government cuts ‘government sanctioned’ investment and government expenditures, China’s trade surplus will tend to increase.

The Chinese government started to allow the RMB to appreciate slowly on 21 July 2005. This was attributable to the fact that overheating had become quite serious at the time, and the authorities were less worried about the possible deflationary impact of RMB appreciation on the economy. In the following years, the pace of appreciation increased—besides American pressure, the main reason was still the continuous worsening of inflation.
In later 2008, due to the Global Financial Crisis, China’s trade surplus shrank drastically, but the trade account was still in surplus. With the annual growth rate falling below 7 per cent in some quarters, the economy shifted to the unemployment–trade surplus region. Hence it was natural for the government to discontinue the RMB appreciation, while introducing a large fiscal stimulus, driving up the investment ratio and import demand (see Figure 2), contributing to a narrowing of the savings–investment gap and a sharp fall in the trade surplus and the current account-to-GDP ratio.

In 2010, the economy moved back to the inflation–trade surplus region. Due to the fear of overheating, the government tightened monetary policy again and discontinued fiscal stimulating. In October 2010, the RMB de-pegged from the dollar and resumed the course of appreciation.

Currently, with the European Financial Crisis, and weak domestic demand as a result of tightening over the past 2 years, the Chinese economy has shifted to the unemployment–trade surplus region again. However, this time the economy is not far from both external and internal balances. Due to the accumulated effect of the gradual appreciation of the RMB and many other changes, China’s external balance has improved significantly. The Chinese government may loosen its monetary policy further and introduce a moderate fiscal stimulus, due to the fear of a further slow-down in growth. If so, China’s current account-to-GDP ratio may fall further, given that there will be no change in external demand. At this juncture, it is very unlikely that the Chinese government will push for a faster appreciation of the RMB, due to its possible deflationary impact. In the future, the RMB exchange rate will be influenced more by international balance of payments in general, and by the capital account changes in particular. It is very likely that China’s current-account-surplus-to-GDP ratio will fall further in the near future.

(v) The role of domestic saving

I have argued that the large and increasing current account surpluses in China from the 1980s until the mid-2000s reflected an economic strategy that emphasized export-led growth and reserve accumulation. The corollary of this position is that the savings–investment gap is a reflection rather than a driver of the trade balance. Nonetheless, structurally high levels of domestic saving are also an important long-run contributory factor in China’s persistent current-account surplus, especially since the mid-2000s.

China’s saving rate has increased very dramatically, especially in the last decade, from less than 37 per cent in 2000 to more than 50 per cent of GDP in 2007. Behind this aggregate increase lie important structural and cyclical changes in sectoral savings behaviour. Corporate savings rose sharply in the early 2000s, peaking in 2004 and then falling sharply ever since. Households, on the other hand, continue to rise, reaching almost 25 per cent of income in 2008. But the biggest contributor is the public sector, with government savings rising from 2.6 per cent in 1999 to 21 per cent in 2008 (Ma and Wang, 2010).

A number of factors underpin this pattern, including the particular demographics of China which, at least until recently, generated low dependency rates; the limited public provision for health care and retirement which has stimulated high levels of household saving; and a combination of low wages, high profits, and a low- or no-dividend policy.
in the (state-owned) corporate sector. Rising incomes and increased income inequality have raised aggregate savings significantly.

In summary, China’s current account surplus is neither simply an effect of the saving gap, nor is it driven entirely by trade policy. In the early period, China’s current account surplus was no doubt a result of its pursuit of export-promotion policy aimed at accumulation of foreign-exchange reserves. In the later period, the saving gap became an increasingly important contributory factor to China’s current account surplus. On the whole, the current account surplus, the savings gap, and the interaction of both resulted in China’s high current-account-surplus-to-GDP ratio. Recognizing this, the foregoing analysis underlines the need for the Chinese government to use a comprehensive policy mix to deal with China’s external imbalance. Because, as a result of the implementation of export-promotion policy and active participation in the international production networks for decades, China has become the world processor and assembler, external imbalance has become more and more structural, and the rebalancing will take time and the process will be painful.

III. The capital account

I now turn to the second leg of the ‘twin surpluses’ phenomenon, the capital account. Countries can be divided into current account surplus countries and current account deficit countries. Normally, current account surplus countries run capital account deficits, and current account deficit countries run capital account surpluses. Japan and the US are two major contrasting cases in point. However, while China has been running a current account surplus for two decades, it has been running a capital account surplus even longer. China is certainly not the only country to have run both current account and capital account surpluses, with the sudden appearance of twin surpluses in East Asian countries in the aftermath of the Asian Financial Crisis being the most obvious recent case in point, as these countries purposely sought to build up foreign-exchange reserves as a means of self-insurance against a repeat of the ‘sudden stop’ of capital that precipitated the crisis in 1997. But what sets China apart is both the scale of the twin surpluses and their duration: no country in recent history has run twin surpluses at such levels for so long (see Figures 3 and 4).

Before considering this, it is worth noting that without distortions, no country can or will run twin surpluses persistently. Starting from a situation of balanced current and capital accounts, an exogenous capital inflow will drive domestic assets prices up and real interest rates down. At the same time, the exchange rate will appreciate and the general price level will rise. These price adjustments will lead to an incipient current account deficit, offsetting the capital account surplus and restoring the balance of payments without any change in foreign-exchange reserves. However, in China, owing to interest-rate inflexibility and exchange-rate inflexibility, capital inflow may continue to increase and the current account will not turn to deficit to balance the increase in

8 We can think of this current account response being driven by a decline in net exports as a result of the appreciation of the real exchange rate or as a result of a contraction in the savings–investment balance as investment and consumption respond to the fall in the real interest rate.
capital account surplus. Through the central bank intervention, the twin surpluses end up with an increase in foreign-exchange reserves.

To attract foreign capital has been one of the fundamental pillars of China’s economic reforms over the past quarter-century. Conventionally, the argument for attracting foreign capital by developing countries is to supplement the shortage of domestic savings, so that they would be able to maintain a growth rate of investment and hence of GDP higher than otherwise would have been. But China is a current account surplus

**Figure 3**: The twin surpluses and foreign-exchange reserves (1984–2000, US$ billion)

![Figure 3: The twin surpluses and foreign-exchange reserves (1984–2000, US$ billion)](image3)

*Sources: State Administration of Foreign Exchanges, the People’s Bank of China (PBoC).*

**Figure 4**: The twin surpluses and foreign-exchange reserves (2001–11, US$ billion)

![Figure 4: The twin surpluses and foreign-exchange reserves (2001–11, US$ billion)](image4)

*Sources: State Administration of Foreign Exchanges, the PBoC.*
country which means that domestic savings are more than sufficient \textit{ex post} to finance investment. What then explains why China has run a capital account surplus over the past decades?

A key feature of this evolution is that FDI accounts for the overwhelming share of capital inflows. In part, this is an historical legacy: China started to attract foreign capital in the early 1980s, at a time when the Latin American debt crisis was unfolding. As a result, the Chinese government imposed tight controls over short- and long-term debt-creating inflows, but maintained a much more liberal policy towards attracting FDI, which was seen (correctly) as providing a conduit for foreign technology, managerial skill, and foreign market networks. This pro-FDI bias has been magnified by a number of structural and policy factors.

First, local government officials have very strong incentives to attract FDI to their city or district. Not only does the quasi-federal fiscal system provide local governments with strong revenue incentives for attracting FDI, institutional and political arrangements mean that the volume of new foreign investment is one of their most important, if not the single most important, quantitative performance criteria (referred to as \textit{zheng ji}). Those who attract the largest amount of FDI are the most likely candidates for further promotion. In making decisions about FDI, whether alternative domestic financial resources are available is often not an important consideration for local governments.

From the point of view of foreign investors, on top of political and macroeconomic stability, the temptations of cheap but skilled workers, low tax rates, long tax holidays, hidden subsidies in energy use, lax regulations on environmental protection, free infrastructure, and low or negative rents on land uses are just too tempting to resist. So the interests of local governments in attracting FDI and foreign investors in investing coincide perfectly.

Competition for FDI flows between provinces in the country and competition among counties in the same province is therefore fierce, but also concentrated on the short run since incentives are geared to attracting new capital rather than to the social return to FDI. As a result, not only is there very limited coordination of FDI inflows, although in an environment of high growth the costs of poor coordination may not be large.

Second, due to the fragmentation of the domestic financial system, many enterprises cannot raise funds domestically, though funds are available in domestic financial markets and may choose to raise initial capital from foreign equity partners. When enterprise investment needs are for locally produced capital goods (land and building), they will sell their foreign-exchange inflow to the central bank, and use RMB to buy local capital goods. In simple accounting terms, this capital account inflow leaves the current account undisturbed and translates directly into increases in foreign-exchange reserves. Since the middle of the 2000s, this phenomenon has been boosted by a wave of privatization initial public offerings (IPOs) aimed at foreign investors. In order to give new impetus to the reform of state-owned enterprises and commercial banks, the merger and acquisition of Chinese firms by foreign investors and the acquisition of equity claims by ‘international strategic investors’ in China’s commercial banks has been strongly encouraged. The resulting capital inflows have by and large added to the existing stock of foreign-exchange reserves, since domestic capital markets have been able to mobilize more than sufficient funds for these enterprises. In 2005 alone, capital inflows worth US$32 billion were attracted as a result of selling bank shares of international strategic
investors, even though China had already piled up more than US$800 billion in foreign-exchange reserves. In 2010, some Chinese commercial banks launched successful IPOs abroad, despite the fact that domestic demand for the shares of the banks was strong and the banks did not really need foreign exchange. As soon as the banks had raised the dollars by selling shares to foreign investors, they sold the bulk of the dollars to the PBoC for RMBs, and the PBoC had to use the dollars to buy US government securities.

In short, besides factors of political economy, China’s running capital account surplus is mainly a result of capital market failure. On the one hand, although there are more than enough savings available for investment, savings cannot be channelled effectively into domestic investment. On the other hand, investors cannot get necessary finance domestically and have to borrow from abroad in the form of FDI, even with very high costs. Hence, while China runs a current account surplus and hence is a net capital-exporting country, it still needs to run a capital account surplus.

The question remains, why the large capital account surplus does not translate into a current account deficit in China? In other words, why has FDI tended to crowd out rather than crowd in domestic investment? Figure 5 illustrates the phenomenon.

The argument behind Figure 5 is that because of the distortions and market failures noted above, foreign investors, via foreign financed enterprises, are able to capture the more profitable projects (e.g. the range AB). To simplify the analysis, we assume that domestic savings are given. We denote this inelastic volume of savings SS. Assume here that without FDI, China’s saving–investment gap would be zero so that \( S=I=AS \). (We have discussed reasons for this gap earlier in the paper but here we put these reasons to one side.) Now, as a result of the FDI crowding out AB of investment, a domestic saving–investment gap appears, equal to \( AS–BS=AB \). Domestic savers now invest less than they save and need to hold \( SS' \) of their savings elsewhere; they will, for example, hold extra bank deposits equal to \( SS' \). Foreign investors obtain RMB to purchase the

Figure 5: FDI crowding out and current account surplus

Notes: The vertical axis measures the real return to investment and the horizontal axis the volume of investment. Each rectangular bar represents one investment project, with the width of the bar representing the scale of the investment project. The vertical line SS represents saving which is assumed given and will not be subject to the influence of the interest rate. SS’ is China’s investment in US government securities.
investment goods AB, by selling their foreign exchanges to the central bank. If all of
these investment goods are domestically produced, as was assumed above, then their
investment has no effect either on domestic aggregate demand—since the investment
would have happened before—or on the current account surplus. But the central bank
gains extra foreign exchange, and invests this in US government securities. As a result of
the crowding out of domestic investment in this way, FDI leads directly to an increase
in reserves and has no effect on the current account. If the foreign investors spend
their foreign exchanges to import capital goods and foreign technology, then in the
balance-of-payments account, capital inflows would translate into a current account
deficit rather than leaving the current account deficit unchanged.

An obvious reason why such an outcome might be desirable, is if the FDI confers
benefits to the economy that cannot be accessed through domestic investment. As a
result, it may be optimal to encourage FDI and invest the ‘excess proceeds’ in US gov-
ernment securities, even if the latter appear to yield low returns, relative to the ex post
marginal return to capital in the domestic economy. Thus if FDI brings in technol-
ogy and stimulates spillover and other international network effects, the social return
of FDI may be significantly higher than the private return the foreign firms capture.
It does seem that technological catch-up has been taking place at a very high rate in
China, in a way which is consistent with this interpretation. But whether this is the most
efficient (and transparent) way to access technological transfer, as argued in the next
section, is a very open question.

IV. Why China should correct its twin surpluses

Is there anything wrong with China’s twin surpluses? In my view, there are at least three
problems. Reflecting their intellectual origins, I call them the Dornbusch–Williamson
problem, the Krugman problem, and the Rogoff problem.

The late MIT professor Rudiger Dornbusch pointed out in the late 1980s that running
a current account surplus means exporting capital (Dornbusch and Helmers, 1988). It is irrational for a developing country to lend money to rich countries, because
domestic resources should be used for domestic investment, which will bring in higher
returns and the improvement of people’s living standards. By this argument, China, as
one of the poorest countries in terms of per capita GDP, should be running a large cur-
rent account deficit. That it lends money to the richest country in the world—the US—
for decades may seem irrational. Professor John Williamson (1995) made essentially
the same argument in his speech to the Reserve Bank of India in 1995. Running twin
surpluses, he argued, implies that China fails to buy foreign capital goods and technol-
ogy with borrowed money. Instead, on aggregate terms, it ‘lends’ the money back to the
original creditors at a much lower return. According to the US Conference Board, in
2008 US firms’ average investment return in China was 33 per cent and, according to
the World Bank, multinationals’ investment return in China was 22 per cent. In con-
trast, China’s investment return on US government securities was perhaps less than 3
per cent in 2008.

By running a current account surplus, China accumulates foreign assets, while by
running capital account surpluses, it accumulates foreign liabilities. As of February
2012, gross foreign assets totalled US$4.7 trillion, while gross liabilities were US$2.9 trillion foreign liabilities from FDI, suggesting a net foreign asset position of US$1.8 trillion. But China’s investment incomes were mostly negative. In 2011, China’s investment income was –$27 billion. Measured by income streams discounted by a certain interest rate, China is a net borrower rather than a creditor. By running twin surpluses, it might appear that China is incurring large welfare losses, arising from the low returns from its holding of foreign assets and the high costs of its foreign liabilities, combined with the wrong currency structure for its foreign assets and liabilities.

As noted above, there is a possible response to the Dornbusch–Williamson argument. If FDI alone generates a social return significantly in excess of purely domestic investment, ‘round tripping’ (attracting FDI flows and re-investing the proceeds in low-yielding US securities) may be rational. There are, however, two important counter-arguments to this response. First, as the evidence from Japan and Korea suggests, technological and managerial transfer occurs through a range of channels, of which FDI is only one. Second, there is little evidence to show that the spillover effect of FDI in China is significant. On the contrary, there is plentiful evidence that the reliance on FDI has reduced China’s ability as regards creation and innovation. China’s failure in producing cars with its own brand names, while all major foreign car-makers have direct investment in China and China’s car production capacity has surpassed 19 million units, is a case in point.

The ‘Krugman problem’ refers to the fact that, because of the devaluation of the US dollar in terms of the dollar index, China’s net foreign-exchange reserves are facing serious capital losses. Since China’s foreign assets are denominated in US dollars, and liabilities in the RMB, a fall in the value of the US dollar reduces the value of net international investment position, which no longer reflects the accumulation of current account surplus.

Finally, according to Professor Rogoff, owing to its ballooning budget deficit, the US government has a powerful incentive to inflate away its debt burden, with the result that the purchasing power of China’s accumulated saving in the form of US government securities may evaporate quickly. In 2003, China’s foreign-exchange reserves were just above US$400 billion. Now they stand at US$3.2 trillion, an 800 per cent increase. However, in 2003, the price of crude oil was generally under US$30 a barrel, and the price of gold was less than US$400 an ounce. Now, prices for crude oil and gold are more than US$120 a barrel and US$1,600 an ounce, respectively. In fact, from 1929 to 2009, the US dollar has devalued by 94 per cent in terms of purchasing power. It will devalue even further in the future. Even without further explicit inflation, because of round after round of quantity easing (QE), the dollar debasement will be rampant, and the value of China’s foreign-exchange reserves will evaporate even further.

What, then, are the basic steps China should take for rebalancing the economy? The first involves a consideration of whether FDI inflows remain the most efficient route for accessing technology? Second, if not, attention needs to be paid to addressing the

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9 State Administration of Foreign Exchange, People’s Republic of China, and SAFE news release, 29 April 2012.
structural and incentive constraints, particularly at the local government level, that sustains the high levels of direct crowding out of domestic savings. Third, expenditure switching strategies designed to stimulate increased domestic demand are required to narrow the current account surplus. Finally, China has to seek to develop outbound FDI as an alternative to investment in US government securities. China’s potential for outbound FDI has been increasing steadily. This is a positive development both for China and for the rest of the world.

V. Concluding remarks

China’s current account surplus is neither simply an effect of the saving gap, nor is it driven entirely by trade policy. It is a combined result of both and of their interaction. In its pursuit of high growth, external balance has never been one of the final objectives of China’s macroeconomic policy. Hence, while overheating and unemployment happened in tandem, owing to the cyclical movement of the economy and the Chinese government’s policy responses, China has run a current account surplus for decades.

China not only runs a current account surplus but also a capital account surplus at the same time. Unless there are powerful positive externalities associated with foreign capital inflows, this is a gross misallocation of resources and a result of market distortion.

Having realized that to run twin surpluses and continue to accumulate foreign-exchange reserves is not in China’s interests, the government has taken actions to correct external imbalances since 2005, but the progress is slow and the economy is sinking even deeper into the ‘dollar trap’. Though its current-account-surplus-to-GDP ratio fell significantly, its trade surplus, capital account surplus, and total balance-of-payments surplus were still as high as US$180 billion, US$100 billion, and US$475 billion, respectively, in 2011. The bulk of the balance-of-payments surplus may have again translated into US government securities.

The Chinese government has tried to correct imbalances by simulating domestic demand, allowing the yuan to appreciate gradually, diversifying foreign-exchange reserves away from US treasuries, creating sovereign wealth funds, participating in regional financial cooperation, and promoting the reform of the international monetary systems and the internationalization of the yuan. However, all these efforts, though useful and necessary, have failed to address the direct cause of the rapid increase in foreign-exchange reserves with an adequate sense of urgency.

Due to the continuous worsening of the US fiscal position, the possibility that the US government will attempt to inflate away its debt burden is increasingly likely. Faced with ‘infinite QE’, the worst position a country can have in the global economy is to be a large net creditor. China should recognize that to allow the current-account-surplus-to-GDP ratio to fall and even enter the negative territory is as much in the interest of China as it is of America.

The capital losses that have accumulated on financial assets will not be realized, until the holders have decided to cash out: this creates a false sense of security. If the US government continues to pay principal and interest on its public debt, and China continues to pack its savings into US government securities, the game may continue for a
long time. Since it is already deep in the dollar trap, when the final reckoning comes, it certainly will be too late for China.

To stop the accumulation of foreign-exchange reserves and thus minimize China’s welfare and capital losses, the simplest solution would be for the PBoC to call a halt to intervention, even if this means RMB appreciation.

Ending central-bank intervention in currency markets is a complex issue. The devil is in the details. But, under any circumstances, the economic and welfare costs of China’s slow pace in adjusting the exchange rate are too high and will increase by the day. It is time now for China to consider allowing the yuan to float freely, while reserving the right to intervene when it must. To reduce the possible pressure on exchange-rate adjustment, and minimize unexpected adverse shocks, China should not be in a rush to liberalize its capital account, which should be pursued in a gradual fashion.

References


In addition, readers may find the following works useful:


