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That Chinese "juggernaut": Should Europe really worry about its trade deficit with China?

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That Chinese “juggernaut” – should Europe really worry about its trade deficit with China?

Andreas Freytag

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China’s impressive record of export growth has been well-documented. Its integration with other parts of the world has made it one of the biggest economies today. China’s trade with the EU has been growing at a high pace for the last two decades, but has especially taken up speed in the last 8 years. Europe is China’s largest export market and China is the fourth most important destination of export from the EU. There is a widespread agreement that China’s entrance into the world economy in general is beneficial to both China and Europe.

However, Europe’s increasing trade with China has become a politically sensitive issue. China’s exports to Europe are bigger than Europe’s exports to China: Europe thus has a trade bilateral deficit in its relation with China. The speed at which this deficit has grown has triggered criticism, increasingly alarmist in tone, and demands for action to be taken to correct this imbalance.

Reflecting views from some key member states, the European Commission has publicly elaborated on some policy responses to this imbalance. Labelled a “juggernaut” by Trade Commissioner Peter Mandelson, and criticized in very harsh terms by European

SUMMARY

China’s exchange-rate policy has been under attack in the last years, especially in the United States. Now the critique of Beijing’s policy is coming from Europe as well, and Chinese authorities are accused of boosting its own export, at others expense, by keeping its currency below its real value. At the centre of the European criticism has been the link between China’s allegedly undervalued currency European Union’s soaring bilateral trade deficit with China.

This Policy Brief discusses EU-China trade relations in the context of China’s exchange-rate policy. Especially it scrutinizes the assumptions underlying the link between China’s exchange-rate policy and Europe’s rising bilateral deficit. It finds this link tenuous, and argues that a bilateral deficit cannot prima facie be viewed as a problem when the overall current account of Europe largely is in balance.

Furthermore, the level of processing trade in China’s export is considerable, and trade replacement has been a distinct pattern in recent years: China has replaced many other merging markets’ export to Europe. This pattern fits with the broad trend of trade fragmentation experienced in the last decade.

This Policy Brief sets out an alternative explanation to China’s huge trade deficit. By using simple balance-of-payment theory, it argues that the current account should be viewed as an adjustment parameter for China’s macroeconomic policy.
leaders such as Nicolas Sarkozy, China has been warned that this deficit cannot keep on growing. It is “out of control” and represents a “policy time bomb” that will incur action by Europe unless China undertakes appropriate measures.

Is there really something novel in the current European worries about the soaring bilateral trade deficit? Current account deficits have always been widely and emotionally debated. Since the heydays of mercantilism, selling abroad has been considered superior to purchasing abroad. Therefore, the popular judgement is that a current account deficit should be viewed as something negative. A surplus in the current account is taken as an indicator of superior competitiveness. A trade deficit, however, is rarely perceived as a proof of foreign competitiveness, but rather as the result of “unfair competition”.

There might be novelties involved. The dramatic speed at which the bilateral deficit has grown since the late 1990s might put a different complexion on the issue. Since the Chinese currency, the renminbi, has depreciated against the Euro, at the same time as the Euro gained strength globally in the context of a declining US dollar, there might be causes to worry about this imbalance. On the face of it, it seems as a standard example of a country boosting its competitiveness by an undervalued currency. As many European countries under the old Bretton Woods system, an undervalued currency, combined with capital controls, can provide for export-led growth at the expense of other countries. Therefore, diagnosing the soaring bilateral deficit is an easy task: it only requires some basic knowledge in measuring currency depreciation.

The link between Europe’s deficit in its trade with China and the allegedly undervalued renminbi seems compelling. But the case, however, is less straightforward than it seems. In fact, just reflecting on the evidence needed to substantiate such a link makes the case rather weak. It disregards knowledge about fundamental trade patterns as well as basic balance-of-payment theory. What evidence is needed to substantiate the link between a soaring bilateral deficit and an undervalued currency?

Firstly, it needs to be demonstrated that a bilateral deficit is damaging to Europe’s economy. Few would actually claim that a bilateral deficit itself is a problem; if it were, then Europe has a much bigger problem at home since the surplus or deficit individual European countries have with the EU is much bigger than their net trade relation with China (see Table 1). In order for a bilateral deficit to merit worried attention, one should rather consider whether it fuels an overall current account deficit, or whether it has negative indirect effects on the economy.

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>DEFICIT WITH EU-27 (MIO. EUR)</th>
<th>% OF GDP</th>
<th>DEFICIT WITH CHINA (MIO. EUR)</th>
<th>% OF GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulgaria</td>
<td>2,302</td>
<td>17.4%</td>
<td>708</td>
<td>5.4%</td>
</tr>
<tr>
<td>Estonia</td>
<td>2,890</td>
<td>45.2%</td>
<td>120</td>
<td>1.9%</td>
</tr>
<tr>
<td>France</td>
<td>39,956</td>
<td>2.6%</td>
<td>1788</td>
<td>0.5%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>51,515</td>
<td>4.3%</td>
<td>29,964</td>
<td>2.0%</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2,517</td>
<td>25.7%</td>
<td>355</td>
<td>3.6%</td>
</tr>
<tr>
<td>Romania</td>
<td>2,647</td>
<td>21.1%</td>
<td>1,564</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

Source: Eurostat.

Secondly, it needs to be evidenced that Chinese export growth has come, in some way, at the expense of Europe. If the currency is considered as a key determinant of the soaring bilateral deficit, it needs to be proven that, for example, value-added production in Europe has declined as a consequence.

Thirdly, and as a matter of positive science, it needs to be demonstrated that it is an undervalued currency that has determined export growth, or at least a substantial part of it. This evidence is important to distinguish the currency effect from other possible determinants, such as comparative advantage.

There are several other factors that need to be considered too. These will be discussed in this Policy Brief, which aims at scrutinizing the fundamental economic assumptions behind the link between the soaring trade deficit with China’s currency undervaluation that is made in some European policy circles. The paper will provide analytical tools that are important to understand the profile and composition of EU-China trade. The analysis of each topical area is deliberately kept short and non-exhaustive in order to invite a larger readership.

The first section of this paper takes a look at China’s trade pattern in general and with Europe in particular, its macroeconomic significance and its causes. The second section discusses whether there are sufficient grounds
to state that China is manipulating its currency to boost its exports towards Europe. The final part proposes an alternative approach to understanding the trade “imbalance” based on a basic balance-of-payments analysis and domestic macroeconomic policies in China.

1. IS THE SOARING DEFICIT A PROBLEM?

There has been a distinct slide in Europe’s rhetoric towards China. The main cause of this perilous rhetoric is the soaring bilateral trade deficit. As Table 1 shows, from 2002 to 2006, Europe’s deficit towards China has more than doubled in real terms.

Table 2. Bilateral trade deficit with China 2002-2006 (Mio. EUR)

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRADE</td>
<td>-54,740</td>
<td>-64,219</td>
<td>-79,275</td>
<td>-106,834</td>
<td>-128,408</td>
</tr>
<tr>
<td>DEFICIT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUM OF</td>
<td>124,479</td>
<td>146,558</td>
<td>175,652</td>
<td>210,127</td>
<td>255,130</td>
</tr>
<tr>
<td>EXPORTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AND</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMPORTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Parallels between the US and Europe’s bilateral trade deficit with China have often been drawn. In the eyes of people worried about Europe’s trade deficit with China, there has been a convenient similarity: the US bilateral deficit with China has also grown rapidly in the last ten years. There have been many flare-ups because of the US-Sino deficit, and it has caused protectionist knee-jerk reactions from members of the US Congress, such as a bill to slap an 27.5 per cent tariff on all Chinese export to the US.

Do Europe and the United States face a similar problem? No, they don’t. There are key differences between the two, and those differences are not primarily determined by trade. The key difference is the overall current account deficit. The EU’s overall trade deficit is small and has been frequently changing its sign (either to positive or to negative). In contrast, the US has been running a considerable current account deficit for many years (see Table 3), that has been around 5-6 per cent of GDP in the last five years. But Europe has no unsustainable overall current account deficit.

In this context, a bilateral deficit with one single trading partner such as China is not a cause for concern for the European Union. Its deficit with China is largely balanced by a surplus in its trade with other countries. Hence, there are no structural world-economy concerns associated with the EU bilateral deficit, as there have been concerns about the US bilateral deficit with China. China’s peg to the dollar has caused not only a soaring US deficit with China but a reluctance in Asia overall to appreciate their currencies. This has prevented a fall of the US dollar’s effective exchange rate, at least in the years immediately prior to 2004/05, and led to lower world growth as the current account has not adjusted.\(^5\)

This simple observation is a fly in the ointment for people linking Europe’s deficit with China to the currency. Beyond this basic fact, there are also other trade structures to pay attention to. In particular we need to gain a better understanding of what portion of China’s exports to Europe represents value-added production in China and how China’s rising exports to Europe relate to the exports to Europe from other emerging markets.

China’s trade pattern has changed fundamentally in the last 20 years. Exports of “hard” manufactures – consumer electronics, apparel, et cetera – have increased considerably, while there has been a significant decline in the export share of agricultural produce and soft manufactures, such as textiles. This shift has led to a significant presence of processing trade. This means that China needs to import a significant share of inputs to be able to export. Of the value of its exports, only a part of it is represented by value-added production originating from China. China rather acts as an assembly hub where inputs from other countries are put together to be re-exported. As companies have increased the sophistication of their supply-chain fragmentation, processing trade has become more present. In fact, the share of processing trade in China’s exports appears to have grown over the last decades – from 47 per cent in 1992 to 55 per cent in 2005. According to a recent study, around 50-75 per cent of the value of China’s processing exports are accounted for by imported inputs.\(^6\)

This is important in the context of understanding EU-China trade. The vast part of the increase in net ex-
ports from China to the EU in the last ten years, as will be discussed later in greater detail, is represented by sectors showing high presence of processing trade. In fact, it might be the case that a not inconsiderable part of the value of China’s export to Europe is actually based on an export from Europe to China. Trade data analysis cannot reveal such a pattern, but it is certainly plausible that part of Europe’s deficit with China is produced in Europe.

We also need to consider the plausibility that exports from China to Europe have replaced other countries’ exports to Europe. Europe has a rising deficit with China but not with other emerging markets. As Table 4 shows, in the same years as Europe’s bilateral deficit with China has grown, trade with other important trading partners in Asia and the emerging world has reversed from a deficit to a trade surplus, or, such as in the case with Japan, been reduced. In particular, the trade balance with Russia — excluding fuels — turned from almost minus six billion EUR in 2000 to a surplus of 25 billion Euros in 2006. Accordingly, the bilateral trade balance with Japan, Mexico, India, Hong Kong and South Africa shows the tendency to activate. This table is not intended to demonstrate anything more but the existence of changing net-trade patterns.

| Source: Eurostat; own calculations. |

Table 4. EU-27 trade balance with China and selected emerging markets (all goods except fuel, bn EUR) |

<table>
<thead>
<tr>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>-48.5</td>
<td>-50.8</td>
<td>-54.8</td>
<td>-64.2</td>
<td>-79.2</td>
<td>-130.5</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>8.8</td>
<td>11.1</td>
<td>12.2</td>
<td>8.4</td>
<td>9.6</td>
<td>9.7</td>
</tr>
<tr>
<td>India</td>
<td>0.4</td>
<td>-0.4</td>
<td>0.7</td>
<td>1.1</td>
<td>1.1</td>
<td>2.7</td>
</tr>
<tr>
<td>Japan</td>
<td>-46.6</td>
<td>-35.6</td>
<td>-39.2</td>
<td>-31.4</td>
<td>-31.3</td>
<td>-30.1</td>
</tr>
<tr>
<td>Mexico</td>
<td>-8.5</td>
<td>-9.1</td>
<td>-10.9</td>
<td>-9.2</td>
<td>-9.7</td>
<td>-9.5</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>-5.4</td>
<td>4.1</td>
<td>8.6</td>
<td>9.3</td>
<td>12.2</td>
<td>19.8</td>
</tr>
<tr>
<td>Singapore</td>
<td>-1.8</td>
<td>-3.1</td>
<td>0.5</td>
<td>-0.7</td>
<td>-1.0</td>
<td>-1.1</td>
</tr>
<tr>
<td>South Africa</td>
<td>-1.5</td>
<td>-1.4</td>
<td>-1.5</td>
<td>0.4</td>
<td>2.3</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Source: Eurostat; own calculations.

Yet there are indications that the surge in Chinese exports to Europe (and the United States) is part of a global structural change: China appears to be leveraging its comparative advantage. This is demonstrated by the figures on the sectoral breakdown of net European imports and exports from China. Table 5 shows the development of European net imports in manufacturing since 1999. China has emerged as net importer from Europe in crude materials (except fuels). In all other industries, the Chinese trade surplus has been rapidly increasing.

Table 5: EU-27 trade balance with China in different product categories (Mio. EUR) |

<table>
<thead>
<tr>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crude materials except fuels</td>
<td>-180.8</td>
<td>-159.4</td>
<td>-247.3</td>
<td>-141.7</td>
<td>165.2</td>
<td>465.1</td>
<td>899.9</td>
</tr>
<tr>
<td>Manufactured goods classified by material</td>
<td>-4,174.7</td>
<td>-6,020.2</td>
<td>-6,070.2</td>
<td>-5,859.8</td>
<td>-5,772.9</td>
<td>-8,479.2</td>
<td>-11,953.8</td>
</tr>
<tr>
<td>Machinery and transport equipment</td>
<td>-4,260.9</td>
<td>-12,110.0</td>
<td>-9,970.3</td>
<td>-10,031.9</td>
<td>-21,985.1</td>
<td>-31,797.3</td>
<td>-44,066.2</td>
</tr>
<tr>
<td>Miscellaneous manufactured articles</td>
<td>-22,953.2</td>
<td>-29,760.3</td>
<td>-30,814.2</td>
<td>-33,032.5</td>
<td>-35,895.9</td>
<td>-39,164.4</td>
<td>-51,928.4</td>
</tr>
<tr>
<td>Other</td>
<td>-1,366.5</td>
<td>-1,517.6</td>
<td>-2,141.9</td>
<td>-1,037.3</td>
<td>-1,584.0</td>
<td>-1,947.4</td>
<td>-2,208.6</td>
</tr>
</tbody>
</table>

Source: Eurostat; own calculations.

Many studies confirm that China’s comparative advantages are in low-tech (miscellaneous manufactured articles) and medium-tech products (machinery and transport equipment). In both product categories, China runs a trade surplus with the EU of more than 55 billion euro. For the category “miscellaneous manufactured articles” one would certainly expect comparative advantages for China. Comparative advantage is important in the context of the alleged link between a soaring deficit and currency undervaluation. If China exports to the EU in sectors where it has comparative advantages, it is difficult to make the claim that, in the first place, the sharp export increase is determined by currency undervaluation and that, in the second place, this increase is at the expense of Europe. If Europe can exploit China’s comparative advantages, it is of benefit to Europe. Trade statistics, and analysis of comparative advantage, strongly suggests that EU-China trade has grown most significantly in areas where the comparative advantages of the two entities can be best exploited.

The bulk of the rise in imports from China occurred in the category “machinery and transport equipment”. Europe’s deficit with China in this category has grown
by more than 50 billion euro in 1999-2006. In Table 6 this product category is decomposed. The table reveals that Chinese net exports have emerged in medium technologies (computers, telecommunication, household electronics), whereas European competitors sell more specialized and high-tech products to China. This result confirms a study showing that China’s revealed comparative advantages (using a Balassa index) in 2001 have mainly been in unskilled labour-intensive sectors. Only in a few skilled labour-intensive (television, household equipment) and technology-intensive sectors (aircraft and electric machinery) did China reveal a comparative advantage in 2001. In comparison to 1991, there was only little change in the figures, and in 2006, the trend persisted.9

Table 6. Chinese surplus in machinery and transport equipment, 2006 (Mio. EUR)

<table>
<thead>
<tr>
<th>Products</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laptops</td>
<td>-10,883.8</td>
</tr>
<tr>
<td>Other computers and parts</td>
<td>-18,374.7</td>
</tr>
<tr>
<td>Other telecommunications equipment</td>
<td>-18,492.2</td>
</tr>
<tr>
<td>Telephones</td>
<td>-8,113.8</td>
</tr>
<tr>
<td>Electric machinery (e.g. household, signs)</td>
<td>-12,939.8</td>
</tr>
<tr>
<td>Specialized machinery (27 % for textiles)</td>
<td>4,276.1</td>
</tr>
<tr>
<td>Vehicled and transport machinery</td>
<td>5,817.5</td>
</tr>
<tr>
<td>Other</td>
<td>2,823.6</td>
</tr>
<tr>
<td>Total</td>
<td>55,829.0</td>
</tr>
</tbody>
</table>

Source: Eurostat; own calculations.

Let us return to the issue of trade replacement. If the Chinese net export to the EU in these manufacturing product categories is analysed in the context of the European trade balance towards other emerging markets, an interesting result emerges. It should especially be noted that the overall EU trade deficit in these product groups did not increase much between 1999 (40 billion euro) and 2006 (49 billion euro).10 The EU has run a “plurilateral” trade deficit in this product category for a long time.

European demand appears to have shifted from other countries towards China. Figure 1 shows the structural change occurring between 1999 and 2006. In 1999, Chinese firms in these product categories had almost no net exports to Europe while a group of selected countries ran a considerable trade surplus. This surplus has declined sharply in the last years at the same time as China’s surplus has increased. In 2006, the EU ran a surplus with the group of Asian countries plus Russia and South Africa.

By contrast, the bilateral trade deficit with China in “Machinery and transport equipment” in 2006 was 55 billion euro. This suggests that there has been a significant trade replacement in EU’s trade relations. China’s export in this category alone, representing a not insignificant part of EU’s trade deficit with China, has not replaced production in Europe; it has rather replaced exports from other countries to the EU.

When other product categories are accounted for, it amounts to such high values that much of the increase in the European Union’s net imports from China, especially in manufacturing, probably can be characterized as a replacement of net imports from other countries. China has specialized in unskilled labour-intensive and semi-skilled labour-intensive goods, which is in line with mainstream trade and development theory. So far the data suggests that China has taken a more or less standard path into the world economy and the global division of labour.

2. IS THERE EVIDENCE OF CURRENCY MANIPULATION AGAINST EUROPE IN CHINA?

China is said by many to be promoting exports and discouraging imports by fixing its exchange rate towards the US dollar (as part of the basket China has been...
using since July 2005) under the renminbi’s “real” value. As far as Europe’s bilateral deficit is concerned, the previous section has cast doubts on this claim and suggested that much remains to be proven for this claim to be considered valid. What leads to support to the claim?

It is largely exercises to determine the “right” exchange rate that have supported the view that China’s currency manipulation explains its trade surplus (as well as foreign investments and reserve accumulation). The theoretical framework of such analyses is based on the assumption that currency de- or revaluation can influence the exports and imports by inducing expenditure switching. The effectiveness of the policy depends on price elasticities (Marshall-Learner-condition).

Figure 2 shows the development of the nominal and real exchange rate of the Chinese currency towards the US dollar since 1980. Until 1994, the renminbi depreciated permanently and especially sharply in 1994, both in real and nominal terms. Since then, the real exchange rate appreciated until 2000 and depreciated until 2004. Since 2005 another period of appreciation can be observed. The nominal exchange rate remained constant for almost a decade. Mid-2005, the Chinese government switched from a dollar peg to a basket peg. It has also incrementally and cautiously been appreciating the renminbi since then.

Several authors argue that the renminbi is undervalued to the order of 25 to 40 per cent towards the US dollar. Using the underlying balance or macroeconomic balance approach, Goldstein and Lardy (2006) argue that a “normal” current account surplus in China should be approximately 1.5 per cent of GDP (instead of more than 10 per cent). According to this norm, China’s currency is rated below its real equilibrium exchange rate causing the high current account surplus.

There are several analyses of similar stripes that challenge the claim that the renminbi is undervalued. A recent study uses the so-called behavioural equilibrium exchange rate (BEER) and suggests that since 1980, the renminbi has been fluctuating between +3 and -5 per cent around its equilibrium exchange rate. These levels of fluctuation are deemed acceptable. Prior to the appreciation of July 2005, it was only undervalued by three per cent. This paper is not the only study claiming that the renminbi is not heavily undervalued and has not been so for the last two decades, at least not against the dollar.

This research mainly focuses on the issue of the currency manipulation towards the US dollar. Since the dollar has been depreciating significantly over the last months against the euro, the renminbi’s peg against the dollar automatically leads to its depreciation against the euro. Therefore, the recent depreciation of the renminbi against the Euro cannot be considered a deliberate strategy against the European Union. Figure 3 shows the development of the renminbi against the US-dollar and the Euro since 2005. There has been an appreciation towards the US dollar and a depreciation against the Euro, which is due to the still significant share of the dollar in the currency basket against which the renminbi is pegged. Figure 3 shows the latest nominal developments towards the euro (right scale) and the US dollar (left scale).
A simple count of the number of papers arguing in favour of or against considerable currency misalignment in China would probably point to the former as a winner. But is this a meaningful exercise? The discussion about China’s “correct” exchange rate reveals serious shortcomings. There are significant differences with respect to the methods as well as the exact specifications used by different authors, leading to different and conflicting conclusions. The papers cited in our study are no exceptions. The robustness of the estimations of equilibrium real exchange rates must therefore be questioned. Furthermore some authors tend to dissimulate the details of their approach, and this particularly applies to those who claim significant undervaluation. The level of speculation in these models is very high. As with many other models, the result is dependent on the assumptions used in the modelling exercise. When reviewing much of the analysis of the correct exchange rate, it is difficult to fully understand the logic of the assumptions, especially when authors claim that China’s economic performance does not fit with these assumptions. This is not to suggest that analyses of the exchange rate do not yield relevant information and are entirely meaningless. But they cannot be used alone, be it either in favour or against claims of currency misalignment. They need to be put in the context of both trade-pattern analysis and broader macroeconomic perspectives.

3. AN ALTERNATIVE EXPLANATION: THE TRADE BALANCE AS MACROECONOMIC ADJUSTMENT PARAMETER FOR CHINA’S MACROECONOMIC POLICIES

What analytical tools must be brought into the analysis of a country’s economic relations with the rest of the world? One important element conspicuously missing in many analyses of trade deficits and currency undervaluation is capital flows. In this section we will use a balance-of-payments approach that takes account of capital flows when analysing the current account.

What does economic theory predict about countries’ international macroeconomic balances? In general, the balance of payments of a country is zero. Imbalances can only occur in the current account (i.e., the trade balance),
the capital account and/or the balance of foreign reserves. Such imbalances do not automatically reflect disequilibrium. On the contrary, international capital flows are widely accepted as a means to foster a more efficient international allocation of capital.16

Box 1 exhibits a simple identity of the balance of payments. The domestic GDP consists of consumption (C), domestic investment (Ihome) and the trade balance (X-M). For simplicity, we do not distinguish between private and public consumption. GDP can alternatively be interpreted as the sum of consumption and savings (S). These savings can be spent on domestic investment, portfolio and direct investment abroad (Iabroad) as well as for the increase in foreign reserves of the central bank (R).

Box1: The balance of payments identity

(1) GDP = C + Ihome + X - M
(2) GDP = C + S
(3) S = Ihome + Iabroad + dR
(4a) S – Ihome = X – M ↪ (4b) Iabroad + dR = X - M

Equations (4a) and (4b) go to the heart of this paper. There is an identity of flows: the difference between domestic savings and domestic investments, in other words the capital (or financial) account equals the trade balance. The equation does not include any theoretical content; thus, it always holds and is one of the most fundamental relations in all international macroeconomics. China balances show that savings are very high, domestic investment is lower, and the trade balance is positive. In particular, the increase of foreign reserves (amounting to roughly 1.6 trillion US dollar) is remarkable.

The causal relationships are of interest for the question of what drives China’s trade surplus. Let us begin with the decision to save. A saver takes an intertemporal decision on what share of her income to consume immediately and what share to consume later. In theory, she follows an utility maximizing calculus.17 In aggregate, domestic saving is driven by the intertemporal calculus. Next comes the decision on how to invest the savings.18

On the national level, three options are available: investment at home, investment abroad, or an increase in domestic reserves. Economic rationality and opportunity costs are the main drivers of this decision.

Let us now apply this theory to the case of China. If China exports capital, this leads to a capital account deficit, and second — everything else equal — to an excess demand for foreign exchange. The consequence is a depreciation of the renminbi and an appreciation of the currency of the capital-importing country. This (real) revaluation of the foreign currency allows for the transfer from the capital account to the current account. Chinese exports become cheaper and its imports more expensive. Its trade balance will be affected, and it will show a surplus. The size of the real currency depreciation depends on price elasticities for demand and supply. The higher the elasticities, the lower are the potentially necessary exchange-rate adjustments.

Savings preferences are symmetric in foreign countries. For China, there is a potential destination in the United States, which has a preference for consumption or investment beyond savings. Accordingly, this country runs a trade deficit and a capital account surplus.

The capital account can be interpreted as the intertemporal budget constraint. A bilateral trade deficit builds up and reaches an equilibrium point if, and only if, the lender (i.e. trade surplus) country is willing to grant credit to the borrower (i.e. trade deficit) country. Contrary to the Marshall-Learner condition approach, based on price elasticities outlined in the previous sections, the role of the (real) exchange rate is different in this context: it is not a policy variable but an adjustment parameter.

When approaching, from this balance-of-payment perspective, the issue of Europe’s bilateral trade deficit with China, it is clear that there is no normative implication as such for any particular current-account balance. It cannot be said in advance if a current-account deficit is undesirable or not. For example, it can be sensible for developing or emerging countries (such as China), or a country with a relatively young population (such as the US),19 to run a current account deficit as a response to net capital inflows if these are invested. Ageing economies such as Germany or Japan for their part may be better off with a current surplus, investing their savings abroad. Developing countries (such as China) may run a current-account surplus to invest into future net capital inflows or to import know-
how for long-run growth. In any case, an imbalance in the current account is not necessarily a disequilibrium.

Today, China has the world’s highest per capita foreign reserves. The government and the country’s non-financial corporations save more than Chinese households. This is not least because the government has improved its overall efficiency and thereby increased the balance of its budget. These savings are partly invested abroad, partly invested in China and partly used to build up foreign reserves.

Furthermore, the domestic capital market in China is not fully liberalized and sufficiently sophisticated to absorb domestic savings effectively. This leads economists like Max Corden (2007a) to suggest that the Chinese government is parking its savings abroad until the capital market works better. It is not an unrealistic conclusion. This also implies that as soon as domestic investment opportunities improve, China’s capital flows will be redirected from the current low-yield US- or EU-bonds towards domestic investments.

Risk considerations may play a role. The Chinese banking system is fragile and full of risks due to continued politically-motivated corporate lending. In such a circumstance, foreign reserves can operate as an insurance against a future banking crisis. Finally, trade surpluses at an early stage of a country’s economic development tend to be used to buy knowledge in order to foster the ability to specialize on medium- and high-tech goods in the long run.

This is an explanation to China’s decision to run a considerable capital account surplus. It uses trade as an adjustment variable. It is now increasingly recognized that this policy is no longer in the interest of China. China’s capital-market performance, in combination with industrial-policy preferences, forces the government to build up huge international reserves. In the long run, it is certainly more rational for China to develop its internal capital market and to end interventions in the domestic financial markets in favour of certain industries. Yet as long as the government is conducting industrial policy, foreign reserves serve as insurance against the risks associated with it.

Is China’s policy met with the expected symmetry with its main economic partners, the EU and the US? Until recently, it was justified to analytically consider the United States as a young (quasi-emerging) country, which needs more capital than it can provide from its own savings. As long as capital imports are used for capital formation, current-account deficits can be considered sustainable. The European situation is not as simple. Firstly, its member countries differ considerably with respect to their development status. The transition economies typically run current account deficits and attract foreign direct investment; the mature, established EU members tend to run current-account surpluses. Secondly, as the EU trade balance on average is much lower than the American, the problem of sustainability is negligible.

Considering the current rise of inflation, it can be expected that China’s policies will change. Depreciation can only be accompanied by an increase in money supply. Increasing money supply will first lead to a real appreciation and subsequently to higher inflation. This typically drives capital out of the country. The result is certainly a trade surplus, but it comes at the expense of welfare losses induced by inflation. Cheap exports due to a weak currency lead to an increase in foreign exchange, and therefore to a rise in international reserves. This causes money growth to be faster than in partner countries, whose currencies are in the currency basket to which the renminbi peg. This causes domestic, i.e. Chinese, inflation to rise further.

The Chinese government could try to sterilize the increase in reserves and to stop money growth (and actually does so). The sterilization, however, leads to an increase in the interest rate, followed by an inflow of capital, which either causes even higher inflation or needs to be sterilized again. Higher inflation is also a factor that affects price competitiveness in the export industry: exports are reduced and imports are stimulated. The trade surplus is diminished or even reversed.

In this perspective, and taking account of the latest increase in Chinese inflation to more than 7 per cent, the next question for China is whether it should let the renminbi appreciate. But if the appreciation will lead to a reduction in the trade balance, such as implicitly expected by European and US policy-makers, remains an open question. As long as the savings-investment ratio and Chinese reserves do not change, it is not likely that there will be a change in the trade balance. At best, expectations of a “correcting” EU-China trade balance should be moderate.
**4. CONCLUSION: HOW RELEVANT IS THE EU’S BILATERAL DEFICIT WITH CHINA?**

The analysis in this Policy Brief leads to the following conclusions:

1. Europe’s soaring bilateral deficit with China should not cause worries. Europe does not run a considerable overall current-account deficit. The bilateral trade deficit with China results to a great deal from shifting European demand; it has shifted away from third countries’ goods towards Chinese suppliers.

2. It cannot be taken for granted that the renminbi is systematically undervalued; the evidence is mixed and speculative.

3. The structure of the trade balance between China and Europe is also a result of China’s overall macroeconomic policies. Yet China is now faced with domestic economic pressures that are likely to lead to more incremental revaluation, or even to a currency float. This is likely to bring about a slight reduction of the trade surplus, under the condition that the revaluation is accompanied by Chinese measures to increase domestic investment opportunities for the country’s high savings.

There is neither a case for being concerned about the bilateral deficit with China nor for forcing China to revalue its currency to address the matter. To a certain extent, China does behave in the way economic theory as well as Western politicians always have recommended. Internal (moderate) reform was backed by external liberalization and export orientation. For this policy development, China should be applauded. China has been careful with external capital-market liberalization, which is also one (of several) textbook recommendations.

**FOOTNOTES**

1. I thank Pierre-Olivier Legault Tremblay for extremely valuable research input, including the calculation of data. I also gratefully acknowledge helpful comments by Martin Abel, Iana Dreyer, Fredrik Erixon, Gernot Pehnelt and Razeen Sally on earlier versions.


3. In fact, Europe has already introduced safeguard measures on surging textile exports from China.

4. This is the first of several papers by ECIPE on EU-China trade and economic relations. Other papers will contain in-depth analyses of China’s and Europe’s trade policies, and will thus enter another set of issues with potential effects on the bilateral trade deficit.


7. This is a very important development. Furthermore, if the currency undervaluation argument prevails in explaining the EU’s trade deficit with China, then it would be logical to argue that an overvaluation of the rand, the ruble and other currencies is the only explanation for the EU’s surplus with these emerging markets. Such claims have never been made, and for good reasons.

8. See Ami & Freund (2007) and Feenstra & Hong (2007) for more analysis of comparative advantage in these sectors.

9. See Amighini (2005, p 210). It has to be noted that the RCA index is adjusted to the global trade balance. A comparative advantage in this sector exists when the ratio of exports from China to exports from the rest of the world in this sector exceeds the ratio of all Chinese exports to the world’s exports.

10. It has to be noted that Figure 2 only reports the bilateral trade balance in machinery and transport equipment with the countries mentioned; the total is not the world.


12. This view is accommodated by Dooley, Garber & Folkerts-Landau (2003). In their view China forms part of a group of mainly Asian countries that play the same macroeconomic role as peripheral countries orbiting around this United States such as Japan and Europe under the initial Bretton Woods System in the 1950s and 60s. These had closed capital accounts, pegged (and undervalued) their currency towards the US dollar and ran huge trade surpluses, until they reached a capital accumulation level that allowed them to float their currencies. This supported – so the claim goes – extraordinary growth rates. Yet the analogy has a flaw, as, contrary to today, a symmetrically overvalued US-dollar as the “nth” currency in the Bretton Woods system did not
cause a huge US current account deficit, as it does today. What is more, this “periphery country” strategy also had costs, since it repressed structural change for a long time (This argument is made for Germany by Giertz, Paque & Schmieding 1992, pp 176-192).

13. The BEER is an attempt to measure the difference between the fundamental equilibrium exchange rate (FEER) and the actual observed exchange rate (Yajie, Xiofeng & Soofi 2007).


15. For China, see Dunaway, Leigh & Li (2006); for a general overview, see Isard (2007).

16. This view remains valid in principle despite the disturbances on the international capital markets in late 2007 and early 2008.

17. See e.g. Corden (2007b); Obstfeld & Rogoff (1994) as well as Dluhosch, Freytag & Krüger (1996).

18. Both decisions may be made simultaneously and independently, but for reasons of clarity, we simply assume this sequencing.

19. See Cooper (2007) who argues that viewed from this perspective, the United States is like a developing country.


22. See e.g. Siebert (2007, pp 53f).

23. Recent developments on the capital markets cast heavy doubts on the sustainability of the US current account deficit. In addition, the US’ low saving rate poses a threat to sustainability.

24. In addition, it is not even clear whether an appreciation would lead to a desirable outcome both for China and the EU. Firstly, according to McKinno (2006), China may have to unduly face macroeconomic costs of a forced adjustment of its exchange rate. Indeed, an equivalent Taiwanese experience with an appreciation suggests at least some problems in the short run, but enhanced structural change in the long run. Secondly, if the revaluation of the renminbi reduces net Chinese capital export, real interest rates are bound to increase, everything else equal. This may be not beneficial for European borrowers, of whom the governments are a prominent part.

REFERENCES


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The European Centre for International Political Economy (ECIPE) is an independent and non-profit policy research think tank dedicated to trade policy and other international economic policy issues of importance to Europe. ECIPE is rooted in the classical tradition of free trade and an open world economic order. ECIPE’s intention is to subject international economic policy, particularly in Europe, to rigorous scrutiny of costs and benefits, and to present conclusions in a concise, readily accessible form to the European public. We aim to foster a "culture of evaluation" – largely lacking in Europe – so that better public awareness and understanding of complex issues in concrete situations can lead to intelligent discussion and improved policies. That will be ECIPE’s contribution to a thriving Europe in a world open to trade and cross-border exchange.

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