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**GLOBAL IMBALANCES
– THEIR SUSTAINABILITY AND THE ROLE OF THE DOLLAR**

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Abstract

This paper aims at delivering some analysis on the complex issue of global imbalances in the pattern of exports and imports of goods and services and simultaneous flow of capital in the world economy during the last decade. It discusses why these flows were principally streaming from developing to developed countries and what are their main driving forces. It also embarks on the problem of sustainability of global imbalances and the dollar playing an important role in reshaping them.

Keywords: global imbalances, current account deficits and surpluses, national saving and investment, saving glut, Bretton Woods II, asset shortage, dollar, international reserves.

JEL Classification: E2, E58, F31, F32, F33, F34, F40, G01.

The paper consists of three parts. First part presents some overview of how global imbalances have been unfolding during the last ten years or so. Second part describes major causes that have led to their emergence. Part three analyses interconnected issues of sustainability of global imbalances and the changing value of the dollar as being crucial in alleviating the consequences of imbalances.

1. Profile of global imbalances

Global current account imbalances (hereafter global imbalances) reflect immense current account deficits (hereafter deficits) and current account surpluses (hereafter surpluses) that have been built over the past decade in the world economy. According to the *Balance of Payments Manual*¹ current account balance of a country is a part of its balance of payments and comprises of transactions in goods and services between its residents and foreign residents in a specified period of time².

Oil exporters, Emerging Asian and some European surplus countries accounted for a lion's share of surpluses. However, there has been a gradual shift in regions generating them. Figure 1 shows a geographical concentration of global imbalances³. From early 1990s through early 2000s Japan and European surplus economies were responsible for the bulk surpluses. In later years their share have diminished to about one-third in favor of oil exporting and Emerging Asia countries, with a substantial share of China.

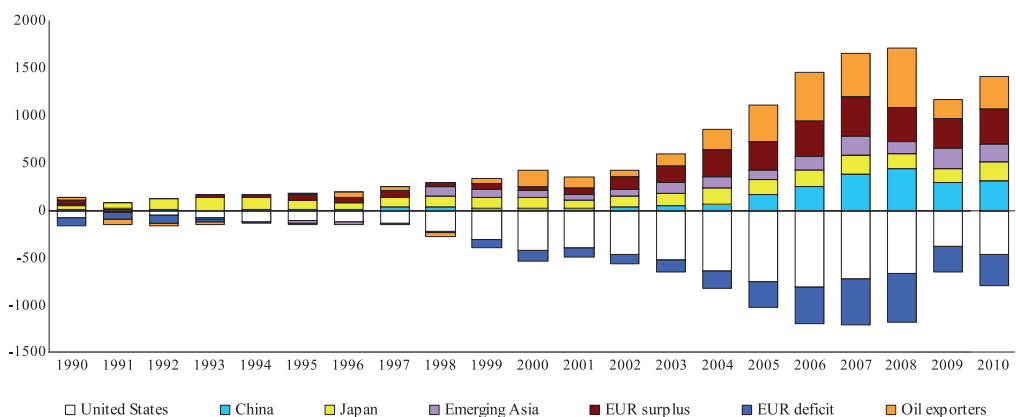


Fig. 1. Current account imbalances (billions of U.S. dollars), 1990–2010

Source: International Monetary Fund, World Economic Outlook, April 2011.

In 2007 current account surplus in China soared to a record-breaking level of almost 11% of gross domestic product (hereafter GDP), over 6-fold increase from 2001 when it began to rise dramatically. Figure 2 shows corroborative data.

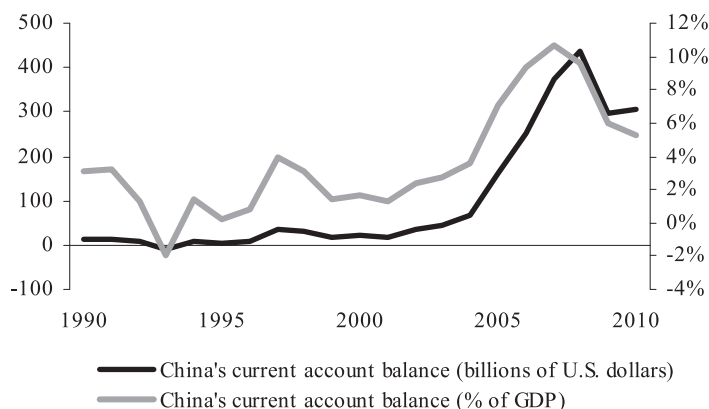


Fig. 2. China's current account surplus, 1990–2010

Source: International Monetary Fund, World Economic Outlook, April 2011.

On the other hand, vast current account deficits have been mounting up mainly in some European deficit countries and in the United States (hereafter U.S.) reaching there a peak level of 6% of GDP in 2006. As visualized in Figure 3 the U.S. deficit has been narrowing since then reaching just 2,7% of GDP in 2009. This slump, however, reflected dampened U.S. demand for imports due to sub-prime crisis unfolding at that time and this trend has been already reversed in tandem with the U.S. economy recovering. In 2010 the U.S. deficit has climbed to 3,2% of GDP and the International Monetary Fund predicts it is about to regain momentum again⁴.

According to the national income accounting identity, current account balance of a given country is equal to its net saving (or difference between national saving and investment). A country that is running current account surplus must, by implication, produce more goods and services than it consumes, hence its unconsumed output makes up its net saving which ultimately can be exported to the rest of the world⁵. It can be concluded that for a prolonged period of time countries with trade surpluses have been financing U.S. over-consumption. Americans live on credit. Figure 4 shows that U.S. saving rate is relatively low and moreover, it has been permanently lower than its investment rate. Therefore, U.S. excess investment had to be financed with foreign saving by means of running chronic current account deficits with surplus countries, particularly oil exporters and developing Asian ones.

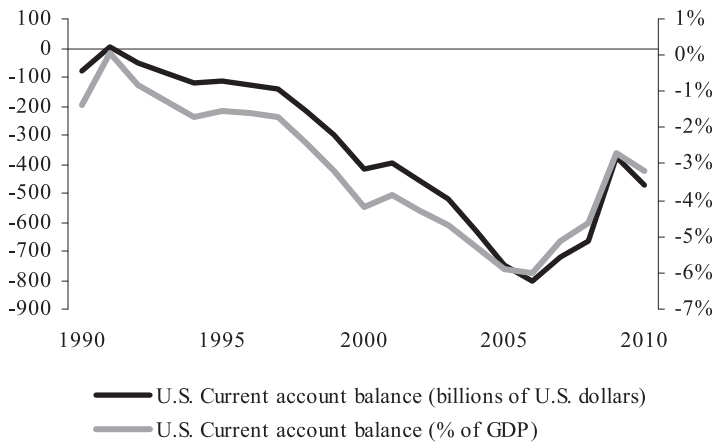


Fig. 3. U.S. current account deficit, 1990–2010

Source: International Monetary Fund, World Economic Outlook, April 2011.

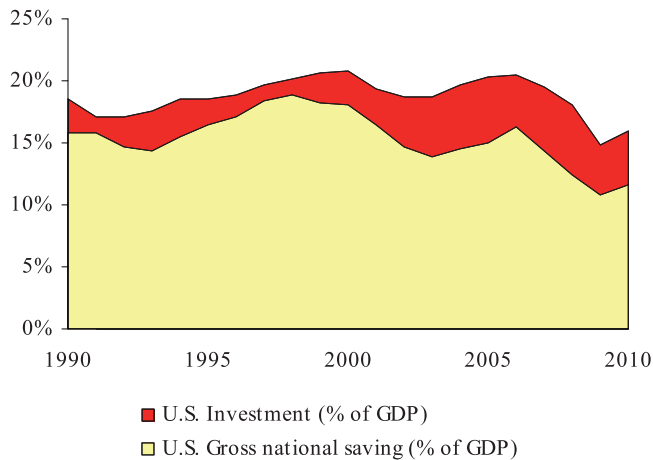


Fig. 4. U.S. investment and gross national saving rates, 1990–2010

Source: International Monetary Fund, World Economic Outlook, April 2011.

China's saving rate, on the contrary, has been exceeding its investment rate for a corresponding period of time. In 2010 its saving rate was by 5,2% of GDP higher than its investment rate, a difference which exactly mirrored its current account surplus. Figure 5 shows corroborative data.

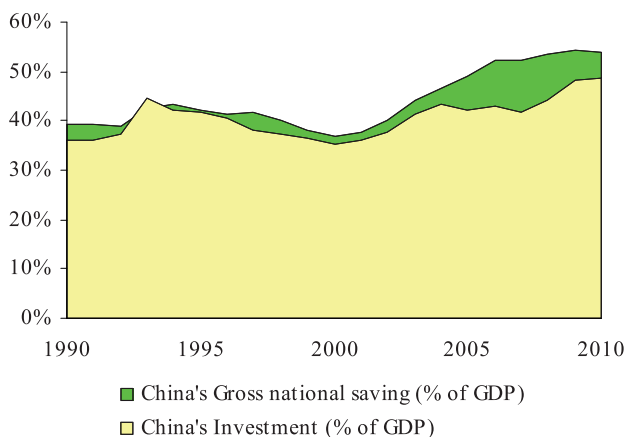


Fig. 5. China's investment and gross national saving rates, 1990–2010

Source: International Monetary Fund, World Economic Outlook, April 2011.

2. Main causes of global imbalances

What is surprising when looking at the global current account imbalances is the direction of capital flowing from poor and developing nations to rich and developed ones, despite the fact that marginal product of capital is presumably a way higher in developing countries. This phenomenon is known as the Lucas paradox⁶. One of the explanations of this paradox and global imbalances in general might be an issue of underdeveloped and closed financial markets of developing countries and their inability to absorb excessive saving. Recent report on international banking shows that as much as 62% of developing countries' adult population is deprived of banking services, whereas similar ratio for developed countries hovers just around 12%⁷. Financial underdevelopment leads to the lack of supply of financial instruments eligible for saving and borrowing and thus lack of insurance against future sudden consumption drops and ability to borrow against future income. Such a lack of financial instruments can be referred to as a safe assets shortage⁸. Scarcity of AAA rated assets eligible for storing value at home forces developing countries' populations to purchases of such assets in developed countries, particularly in the United States.

This view seems to be interlinked with a *global savings glut* theory put forward by Ben Bernanke, chairman of the Board of Governors of the Federal Reserve System. Bernanke argues that outside the U.S. border there is an excess global saving compared to investment opportunities and this excess saving has been invested in the U.S. due to greater sophistication

and size of the U.S. financial markets and higher profitability of the U.S. economy⁹. Supply of excess saving comes in overwhelming part from rising oil revenues of oil exporting countries and from developing countries, especially Asian, who accumulate excessive saving in the form of foreign exchange reserves in order to insulate themselves against sudden and massive outflows of capital, which these countries experienced during the 1997–1998 crisis. Partly, excess saving comes also from rich and developed countries and stems from their rising problem of aging populations, which enforces more pronounced saving for retirement purposes.

Last, but not least, Bretton Woods II (henceforth BWII) view delivers some useful reasoning. BWII is an arrangement according to which foreign central banks accumulate dollar reserves by purchasing them on domestic markets from exporters in order to stabilize the value of their currencies against the dollar so as to keep their exports competitive in the U.S. and thus deploying a strategy of export-led growth for the purpose of higher economic growth¹⁰. Nowadays it is particularly true in relation to Asian central banks who have amassed immense amounts of U.S. dollar reserves. China, in particular, have accumulated an equivalent of over 3 trillion dollars of reserves¹¹ in various currencies, of which a significant part is being held in U.S. dollar denominated assets.

3. Sustainability of global imbalances versus the dollar

Many economists argue that huge current account imbalances global economy is experiencing for several years now are not sustainable and that sooner or later they will have to be reduced. Whether it will be orderly or disruptive correction is an open question. However, it is a consensus that this correction will entail a considerable decline in the value of the dollar. Today the greatest fear stems from enormous foreign exchange reserves of surplus countries and rising U.S. foreign debt. To see why it is helpful to look at the financing pattern of the U.S. deficits.

The U.S. is running permanent deficits and in order to finance them it has to either issue debt instruments, or sell U.S. assets in form of corporate equities or foreign direct investment¹². In early 2000s when U.S. stock exchanges were experiencing boom this financing mainly took form of selling assets. As shown in Table 1 in 2000 net purchases of U.S. equities and foreign direct investment amounted to 515 billion dollars which accounted for 124% of this year's deficit on current account. At the same time debt issued accounted for less than 60% of the deficit. However, in later years this pattern has been reversed. In 2010 debt share in financing the deficit rose to 148% and sale of assets fell to 64%.

Table 1. Foreign acquisitions of U.S. financial assets, 2000–2010
(in billions of U.S. dollars)

| | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Credit market instruments | 238.8 | 309.6 | 398.7 | 499.9 | 715.9 | 737.5 | 915.3 | 838.7 | 459.7 | 269.5 | 695.2 |
| U.S. Treasuries | -70.5 | 10.5 | 138.9 | 276.0 | 347.4 | 260.7 | 150.3 | 165.3 | 710.1 | 583.9 | 736.0 |
| Official | -5.2 | 33.7 | 60.5 | 184.9 | 273.3 | 112.8 | 208.6 | 98.4 | 548.7 | 561.1 | 410.5 |
| Private | -65.3 | -23.2 | 78.4 | 91.0 | 74.1 | 147.9 | -58.2 | 66.8 | 161.4 | 22.8 | 325.5 |
| U.S. agency securities | 141.9 | 103.7 | 112.3 | 3.1 | 109.0 | 150.3 | 224.0 | 248.8 | -228.6 | -175.0 | -2.7 |
| U.S. corporate bonds | 168.4 | 195.4 | 147.5 | 220.8 | 259.5 | 326.5 | 541.0 | 424.6 | -21.8 | -139.4 | -38.1 |
| U.S. corporate equities | 193.6 | 121.5 | 54.4 | 5.2 | 25.0 | 56.9 | 96.2 | 218.5 | 104.7 | 139.5 | 109.1 |
| Foreign direct investment | 321.3 | 167.0 | 84.4 | 63.8 | 145.8 | 109.0 | 243.2 | 271.2 | 328.3 | 134.7 | 193.6 |
| U.S. Current account deficit | -416.4 | -397.2 | -458.1 | -520.7 | -630.5 | -747.6 | -802.6 | -718.1 | -668.9 | -378.4 | -470.2 |

Source: Federal Reserve Board, Flow of Funds, Table F.107.

It is worth noticing that it was quite easy for the U.S. to finance its permanent deficits. According to Table 1 it is visible that during the last ten years foreign purchases of both debt and assets have been exceeding U.S. deficits. This ease, however, was at a cost of rising net foreign indebtedness of a country. Figure 6 shows the U.S. net international investment position for over 20-year period. In 2009 the U.S. owed to foreigners 2.7 trillion dollars more than foreigners owed to the U.S. It is also noticeable that the U.S. turned from a net creditor to net debtor.

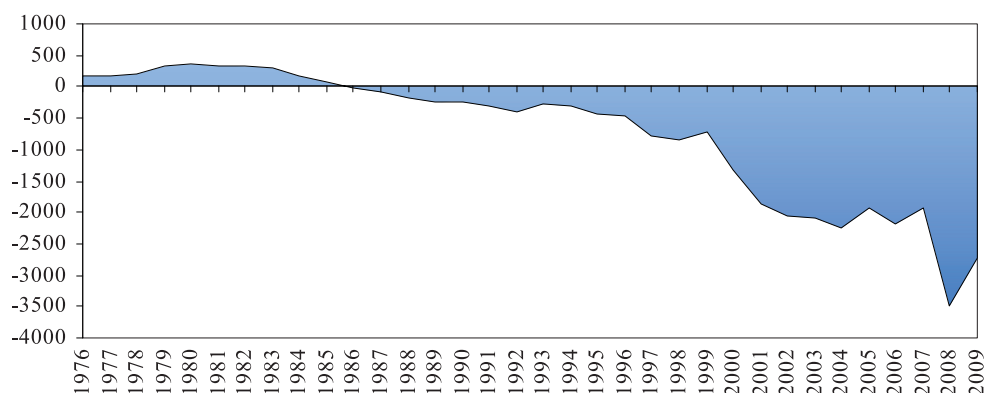


Fig. 6. U.S. Net International Investment Position (in billions of U.S. dollars)

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

The fact of a change in financing pattern of the U.S. deficits towards a greater share of debt has its consequences in light of sustainability. Whereas in early 2000s the bulk of the

deficit was financed by foreign private investors buying U.S. assets which were expected to bring higher returns than domestic ones due to higher productivity and profitability of the U.S. economy, recently the majority of the U.S. deficit has been financed by public investors, notably foreign central banks. During the period 2003–2010 official reserves of emerging and developing countries have ballooned from 1.3 to an equivalent of 6.5 trillion U.S. dollars¹³, of which an estimate of 60% to 65% are held in U.S. currency¹⁴. The most striking example of a country whose foreign exchange reserves have risen very sharply is China. Figure 7 shows a mind-boggling pace with which Chinese reserves have been expanding.

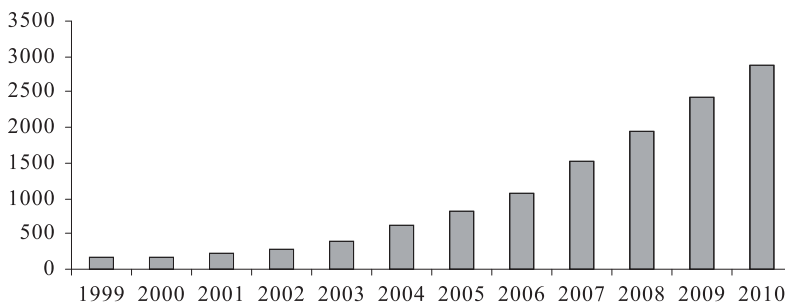


Fig. 7. China's foreign exchange reserves (in billions of U.S. dollars)

Source: International Monetary Fund, World Economic Outlook, April 2007 and April 2011.

Central banks of developing and emerging countries, especially in Asia, have been so keen in accumulating dollars reserves and thus financing the U.S. deficits because they desire to secure themselves against the speculative attacks that occurred in 1997–1998. Large stock of foreign exchange reserves will discourage speculators from attacking their currency again. Furthermore, they have been accumulating dollars in order to undervalue their currencies and follow a strategy of export-led growth. This situation, however, does not look sustainable any longer. Asian central banks have gathered sufficiently large amount of reserves so that they have no need to accumulate more as a safeguard against speculative attacks. This, in turn, could make it harder for the U.S. to finance its deficits. There is also a problem of diversification. China and Japan are holding now more than 2 trillion dollars in U.S. Treasuries alone¹⁵, not to mention other U.S. assets and debt classes. This policy is not prudent. In case there is a major decline in the value of the dollar China and any other holders of dollar denominated reserves will incur huge losses. There is also an increasing concern about how much more can the U.S. borrow from surplus countries until the latter will realize that their assets might be in jeopardy

because the U.S. might become unable to repay its debt. Today one can hardly imagine of such a scenario. However, there are signs that this is not impossible. On April 18th, 2011, Standard & Poor's assigned a negative outlook to the U.S. top-tier AAA rating¹⁶. In fact, it was a first warning in 70 years that the U.S. rating might be downgraded with the chances at one in three of this happening. All surplus countries seem to have realized this fact long ago and have started to cut down on dollars in favour of other assets. In expectation of the dollar decline India bought 200 tonnes of gold from the International Monetary Fund. Since 2003 China have augmented its gold reserves by 76% to 1,054 tonnes¹⁷. Nevertheless, China's gold reserves are still minor *vis-à-vis* its total reserves and account for only 1,8% of them¹⁸. Apart from gold China has been also spending its dollar reserves on strategic petroleum reserves as well as other commodities, including aluminium, copper, zinc and lead¹⁹.

However, there is also the other side of the coin. Surplus countries' options to diversify away from dollars are very limited due to the sheer size of their reserves. The only market liquid and deep enough to absorb such a large-scale reserves is the U.S. bond market. Moreover, investing these dollar reserves into assets like gold, silver, etc. would drive their prices madly higher, what actually has been the case recently. This would end up with a bubble which would eventually burst and leave investors with huge losses. Yet still, diversification needs of surplus countries will inevitably put a downward pressure on the dollar and until the U.S. does not limit its deficits it will find it ever more difficult to finance its debts.

Another reason for growing unsustainability is the fact that the dollar must eventually decline in the process of adjusting international trade patterns. If investors, both public and private, are thinking that the U.S. current account deficits must eventually fall someday, the only mechanism for this to happen is the decline in the value of the dollar. Theoretically, of course, it is possible for the U.S. current account deficit to vanish through the adjustment in relative prices between the U.S. and surplus countries. However, this adjustment must have entailed a gigantic decline in U.S. prices (or increase in foreign prices) and hence a decline in U.S. wages (increase in foreign wages accordingly). This seems very implausible. Returning to the dollar depreciation, the mechanism that could bring it about looks as follows. When foreign exporters sell products to the U.S. they get paid in dollars, which they next bring back to their domestic banks and finally to their central bank to convert them into their local money. If the central bank wants to limit its dollar reserves it will be willing to sell them. When no-one on the market is willing to buy dollars its price will have to decline. Through this mechanism the price of the dollar would fall, hence contributing to the U.S. exports becoming cheaper and

ultimately to the dissolution of the U.S. deficits and concurrent disappearance of surpluses of surplus nations²⁰.

Conclusions

In summary, the enormous and persistent current account imbalances cannot go on forever. The international arrangement in which surplus generating countries ship goods and services to the U.S. in exchange for financial claims must eventually stop functioning. In the light of growing uncertainty of the U.S. capability of servicing its swelling debt and the rising need of surplus countries to diversify their vast foreign exchange reserves away from the dollar, the American currency must ultimately lose on its value. The decline of the dollar relative to other currencies is necessary to make American made goods and services more attractive for the rest of the world, and consequently to level off the global imbalances, which have been adding to the uncertainty of future prospects of the world economy.

Notes

¹ International Monetary Fund (1993), p. 38.

² Income and current transfers are also part of a current account balance but for the purpose of simplicity we can assume that a current account balance of a country is simply the difference between its exports and imports of goods and services.

³ For a definition of country groups refer to the IMF (2011a).

⁴ International Monetary Fund (2011a).

⁵ Mankiw (2002), p. 118.

⁶ Chinn, Ito (2007), p. 3.

⁷ Economist (2011a).

⁸ Caballero (2006), p. 4.

⁹ Bernanke (2005).

¹⁰ Elwell (2008).

¹¹ Economist (2011b).

¹² Duncan (2005), p. 97.

¹³ International Monetary Fund (2011a).

¹⁴ International Monetary Fund (2011b).

¹⁵ U.S. Department of the Treasury (2011).

¹⁶ Economist (2011c).

¹⁷ Bloomberg (2009).

¹⁸ Own calculation with a current market price of gold assumed at the level of 1,500 U.S. dollars per ounce; 1 ounce = 28.3495231 grams.

¹⁹ Murphy, Yuan (2009), p. 9.

²⁰ Feldstein (2008), p. 117.

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