# Will US fiscal deficits undermine the role of the dollar as global reserve currency? If so should US fiscal policy be geared to preserving the international role of the dollar?

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#### **Abstract**

Any international monetary system has to perform two basic functions: providing liquidity for international transactions and facilitating the adjustment of current account imbalances. Since the end of the Second World War, the dollar has been used as the single most important medium of exchange, shore of value and unit of account in the international transactions. In other words, the dollar has played the role of the global reserve currency. However, the use of national fiat money as global reserve currency inevitably causes confident problem. As a result of persistent current account deficits. United States' (US) net international investment position (NIIP) - to- GDP ratio has been increasing steadily over the decades. The doubt about US' ability of honoring its debt obligation has been increasing significantly since the turn of the century. The recent global financial crisis and the policy responses by the US government towards the crisis and its aftermath have further shaken the confidence in the dollar. Among the policy responses, the dramatic increase in US fiscal deficit stands out as the most worrying aspect of US government policy. The increase in fiscal deficit and the consequent increase in the NIIP-to- GDP ratio inevitably will produce negative impacts on current account balance and hence will pose serious threat to the role of the dollar as global reserve currency. However, currently, the priority of US macroeconomic policy is to maintain the momentum of recovery. US fiscal policy should not be geared at preserving the role of the dollar as reserve currency. This is because dollar's role as global reserve currency depends on a wider range of factors and the impact of the increase in fiscal deficit on the dollar can be limited in the short run. Furthermore, in the short-run, the negative impact of the increase in fiscal deficit on the dollar can be offset by other policies such as trade policy.

#### Introduction

Any international monetary system has to perform two basic functions: providing liquidity for international transactions and facilitating the adjustment of current account imbalances. Since the end of the Second World War, the dollar has been used as the single most important medium of exchange, shore of value and unit of account in the international transactions. In other words, the dollar has played the role of the global reserve currency. However, the use of national fiat money as global reserve currency inevitably causes confident problem. As a result of persistent current account deficits, US net international investment position (NIIP) - to- GDP ratio has been increasing steadily over the decades. The doubt about US' ability of honoring its debt obligation has been increasing significantly since the turn of the century. The recent global financial crisis and the policy responses by the US government towards the crisis and its aftermath have further shaken the confidence in the dollar. Among the policy responses, the dramatic increase in US fiscal deficit stands out as the most worrying aspect of US government policy. The increase in fiscal deficit and the consequent increase in the NIIP-to-GDP ratio inevitably will produce negative impacts on current account balance and hence will pose serious threat to the role of the dollar as global reserve currency. However, currently, the priority of US macroeconomic policy is to maintain the momentum of recovery. US fiscal policy should not be geared at preserving the role of the dollar as reserve currency. This is because dollar's role as global reserve currency depends on a wider range of factors and the impact of the increase in fiscal deficit on the dollar can be limited in the short run. Furthermore, in the short-run, the negative impact of the increase in fiscal deficit on the dollar can be offset by other policies such as trade policy.

The first section is a general description of the functions and constituents of an international monetary system. The second section examines the role and performance of the dollar as reserve currency in different periods since the end of the Second World War. The third section discusses the relationship between global

imbalances and the dollar. The fourth section is about the relationship between US fiscal deficits and current account deficits. The fifth section examines the trajectory of US fiscal position in the long run and its impact on the confidence in the dollar. The sixth section discusses the reasons why US fiscal policy should not be geared to preserving the international role of the dollar as global reserve currency. The last section is a short summary.

# I. The role of reserve currency under different international monetary systems

The functions of the international monetary system

International transactions need an international monetary system capable of performing two basic functions: liquidity provision and adjustment facilitation. For any international monetary system, there are three key components: a chosen standard, exchange rate arrangements, and rules on the convertibility of non-reserve currencies to the reserve currencies.

The evolving of different international monetary systems

There have been different international monetary systems in history. It seems that the different combinations of the three key components, namely, the chosen standard, exchange rate arrangements and convertibility, define different international monetary systems.

#### Gold Standard

Gold Standard is a monetary system in which the standard unit of currency is a fixed quantity of gold or is freely convertible into gold at a fixed price without limit. In 1821, Britain became the first nation to switch to a full gold standard. Banknotes were issued on a fractional reserve, instead of being backed 100 percent by gold. Therefore,

banknotes were *fiduciary money*. During times of war the gold standard was often suspended temporarily, banknotes became *fiat money*<sup>1</sup>. Under gold standard a country's money supply is determined by its stock of gold.

The trouble with gold standard was that it failed to perform the functions of liquidity provision and trade imbalance adjustment in a satisfactory fashion. The growth of money supply was constrained by gold supply, which was entirely independent of economic growth of the global economy. As a result, under gold standard, lack of liquidity was a permanent feature and hence the system was inherently deflationary. At the same time, under gold standard, adjustment of trade imbalances could be particularly painful. When a country suffered from trade deficit, outflows of gold often resulted in severe recession and bank runs in the country.

# Gold exchange standard

Under gold exchange standard, countries held not only gold but also the dollar or pound as reserves in supplementing their gold reserves. In contrast to other countries, the US and Great Britain held only gold as reserve asset. The dollar and pound were freely convertible into gold with fixed rates. Central banks of non-reserve currency countries, instead of buying and selling gold in the forms of coins and bullions, bought and sold the reserve currencies—dollars or pounds to maintain the fixed exchange rates. This system alleviated liquidity problem caused by inadequate gold reserves. As a result, improvement was also achieved with regard to adjustment process. Because of the introducing fiduciary money as supplement to gold as reserve, like in a fractional reserve system at home, trust and confidence became the key for the

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Myth: The gold standard is a better monetary system, www.huppi.com/kangaroo/L-gold.htm

<sup>&</sup>lt;sup>2</sup> Gold Exchange Standard is a variation of the gold standard in which central bank reserves are held in gold <u>Bullion</u> and in reserve currencies that are convertible into gold. Steven M. Suranovic Gold-Exchange Standard *International Finance Theory and Policy - Chapter 80-4: Last Updated on 4/7* 

smooth functioning of the international monetary system.

## II The role of the dollar after the creation of the Bretton Woods system

The role of the dollar under the Bretton Woods system

The primary objective of the Bretton Woods system was to create fixed exchange rate among member countries with the IMF to bridge temporary imbalances of payments. Under Bretton Woods System the dollar was made the only "reserve currency" convertible to gold with fixed price of \$35 per troy ounce and all other currencies pegged to the dollar. The linkage between gold and the dollar was aimed at maintaining confidence on the reserve currency—dollar by making the reserve currency country, the US, unable of issuing fiduciary money without constraints.

Though the Bretton Woods system was a gold exchange standard system by design, it did not really operate as a gold standard system until 1959. In other words, it took 15 years for a system agreed upon in 1944 to be effective.<sup>3</sup> Only after 1958 when current account convertibility was introduced and capital transactions were able to be channeled through current account<sup>4</sup>, the Bretton Woods system as a gold exchange standard finally was in place.

With the dollar as reserve currency and fixed exchange rate, while non-reserve currency countries were under pressure to adjust trade imbalances by changing their domestic policy, the US was not under such direct pressure. The US central bank could print money to allow US to pay for its balance payments deficits. However, Charles De Gaulle's accusation of "exorbitant privilege" in the 1960s was a little bit of an overstatement. Because of the commitment by the US government on dollar convertibility, countries with international balance of payments surplus could opt for

<sup>&</sup>lt;sup>3</sup> Paul De Grauwe. 1991. *International Money*, Clarendon Press, Oxford, 1991.p.19.

<sup>&</sup>lt;sup>4</sup> Barry Eichengreen. 1996. *Globalizing Capital*, Princeton, 1996, p.94.

selling the dollar for gold, to force the US to take action to reduce its "official settlement deficit".

Gold exchange standard is a system of dual standard: reserve currency standard and gold standard. When fiduciary money of the reserve currency country is used as reserve currency by non-reserve currency countries, confidence problem is inescapable. In the interwar period, when gold flew out the reserve currency countries, the "run" on the dollar and pound immediately happened and quickly brought an end to the gold exchange standard. The same happened in the 1960s and eventually led to the collapse of the Bretton Woods system in 1971.

The confident problem was caused by increase in international liquidity in the form of the dollar reserves vis-à-vis gold reserves held by the US government. As expected by Triffin, the increase in holdings of the dollar by non-reserve currency countries vis-à-vis US gold reserves led to the loss of confidence on dollar's convertibility to gold at the official rate of \$35 per troy ounce, which in turn caused run on the dollar.

It should be noted that between 1950 and 1970, the US current account was in deficit only in three years: 1950, 1953 and 1959. In fact, the US current account surplus averaged \$0.6 billion a year; In 1960s, it was \$3.3 billion a year. <sup>5</sup>The worsening of "official settlement deficit" was due mainly to the increase in capital outflows.

By 1971 foreign holdings of US dollars stood at \$50 billion while US gold reserves were valued at only \$15 billion. Confidence on the dollar's convertibility at \$35 per ounce was waning rapidly. Having run out of options within the framework of Bretton Woods System, the US unilaterally terminated convertibility of the dollar to gold and allowed the dollar to appreciate against other currencies on August 15, 1971. The

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<sup>&</sup>lt;sup>5</sup> Robert Solomon: Changing Perspectives on the International Monetary System, in International Financial Policy ed by Jacob A Frankel and Morris Goldstein 1991, IMF. p69.

<sup>&</sup>lt;sup>6</sup> Steven M. Suranovic The Breakup of Bretton-Woods, 1997-2009, internationalecon.com/Finance/Fch100/F100-1.php.

action brought an end to the Bretton Woods system.

The role of dollar under the post Bretton Woods System

It is appropriate to characterize the post Bretton Woods international monetary system as a mixed system or no-system. The dollar, a fiat money, which severed any links with gold, has become the ultimate standard, meaning the core international reserve currency in place of gold. While floating has replaced the fixed exchange rate, many countries, especially countries in Asia, still peg their currencies to the dollar. For them, the greenback (fiat money) is as trustworthy as gold. In the new system, there were more than a few currencies that are also reserve currencies in parallel with the US dollar, but that their weights as reserve currencies are much lighter than the dollar. Now, the US government does not need to worry about the depletion of gold reserves any more. The termination of the dollar convertibility and the failure of the efforts for restoring the Bretton Woods system let to significant devaluation of the dollar against other major currencies (Figure 1).

250
200
150
-D mark
-GBP
-JPY

Figure 1. The devaluation of the US dollar

Note: devaluation of the US dollar against D-mark, GBP and JPY, measured in index of dollar price of each currency.

Source: CEIC data-base.

Under the post Bretton Woods system, the Fed was under no hard constraint on operating printing press. As expected, in the 1970s, immediately after having broken the link between the dollar and gold, the growth rate of broad money in the US accelerated rapidly (figure 2).

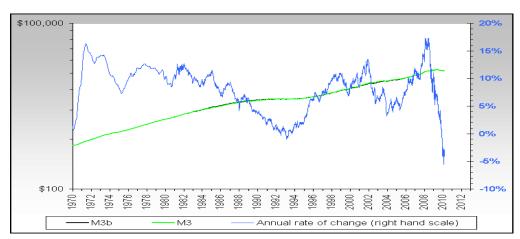


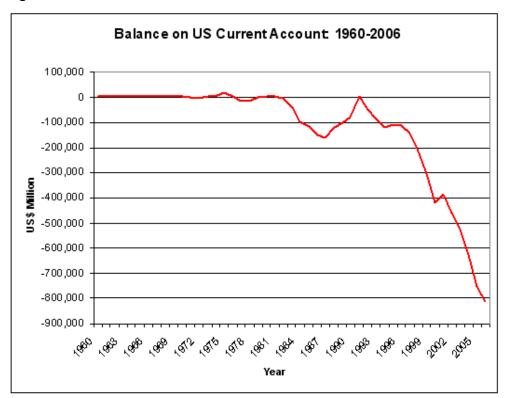
Figure 2. US money supply

Source: a world of possible future, Some key statistics as prediction aids,

www.nowandfutures.com/key stats.html

On the one hand, as a result of the significant depreciation of the dollar, US exports got a boost. On the other hand, the worsening inflation in the US impacted negatively on the US trade balance via real exchange rate appreciation. The inflation in turn was a result of expansionary monetary policy adopted by the US monetary authority aimed at financing budget deficit and rising oil import bills. On the whole, the US current account in the 1970s neither improved nor deteriorated significantly (Figure 3).

Figure 3



Source: US Department of Commerce, Bureau of Economic Analysis, <a href="https://www.globalpolicy.org">www.globalpolicy.org</a>. Created by Pekka Hirvonen, Updated by Federica Milo, July 2007.

The most puzzling phenomenon after the breakdown of the Bretton Woods System was that when the dollar was still backed by gold, run on the dollar happened because of loss of confidence in the convertibility of the dollar into gold. Now that the reserve currency—the dollar suddenly became pure fiat money with no backing whatsoever, why on earth private investors and central banks of non-reserve currency countries continued to hold US dollars and dollar assets, and the predicted liquidation of dollar reserves failed to happy?<sup>7</sup> The answers lie in two facts: lack of alternatives and international coordination among central banks.

As a result of Paul Volk's tight monetary policy since the later 1970s, with capital

<sup>&</sup>lt;sup>7</sup> Barry Eichengreen: Globalizing Capital, Princeton, 1996, P141

controls having been abolished, the high interest rates attracted large capital inflows into the US in the 1980s. The dollar exchange rate shot up and US current account deficits appeared and continued to increase. However, due to the high interest rate, capital inflows more than offset the downward pressure on the dollar caused by widening current account deficits. The dollar appreciated strongly despite the widening current account deficit.

In the early 1980s, the current account deficit has not been perpetuated yet, because high interest rate would eventually cause recession, which in turn would discourage the reserve currency country to use the capital account surplus to offset the current account deficit by raising interest rates. However, the situation changed since 1985 plaza accord. First, as a result of appreciation of the Japanese Yen and domestic push -factors in Japan, Japanese capital flew into the US in a big way. Second, in the 1990s, due to the violability of exchange rate caused by sudden rise or sudden stop of cross-border capitals, and frequent attacks by speculative capitals, developing countries found that they cannot rely on borrowing from international capital markets and/or IMF to maintain financial stability, and have to accumulate foreign exchange reserves to fend off forthcoming speculative attack. Demand for dollar assets increased significantly after the Asian financial crisis. Fourth, the People's Republic of China's (PRC) export let growth strategy and excess saving resulted so called "twin surpluses ", which in turn contributed rapid rising in its accumulation of reserve assets denominated by the dollar. Capital inflows into the US become a major feature of global balances (Figure 4).

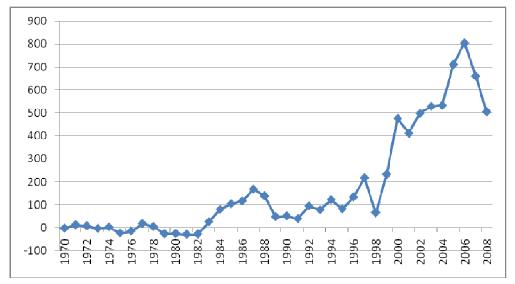


Figure 4 US Financial and Capital Account

Source: CEIC data-base.

In summary, the low inflation rate in the US, the high returns of US assets, the deep and liquidity US government bond markets, the desire by developing countries to hold more reserve assets for self- insurance, PRC's parking excess savings in the US capital market, lack of alternatives are the key contributing factors supporting the dollar in playing the role as the reserve currency, and sustained the imbalances starting from the 1980s until the global financial crisis struck in 2007. Now the global monetary system is in a cross road. Policy initiatives to be taken by the global society will determine the future role of the dollar and the shape of international monetary system.

#### III Global Imbalances and the US dollar

The sustainability of US current account deficits

In the words of Jacques Rueff: "If I had an agreement with my tailor that whatever money I pay him returns to me the very same day as a loan, I would have no objection

at all to ordering more suits from him".<sup>8</sup> Actually, Rueff's story of tailor loaning his customer has become the rule of game since the 1980s when the US current account deficit started to be financed by capital inflows. Foreign countries sell goods and services to the US, and loan their dollars earned by selling these goods and services to the US so that the US can carry on buying their goods and services. The world has been in this surreal, Kafkaesque process for three decades. Essentially, international finance has become a super-mega-Ponzi scheme.

However, the basic question is still whether dollars are convertible to real resources at a relative stable price (purchasing power). In other words, whether the Ponzi scheme can carry on depends on whether international investors and foreign central banks believe that the US government can and will honor its debt obligation, while US current account deficits and the accumulation of the deficits have been increasing steadily and rapidly.

The commonly used measurement of US' ability of honoring its debt obligation is the so-called NIIP (net international investment position) over GDP ratio. The US NIIP/GDP ratio has been increasing persistently since the early 1980s. At the time of collapsing of Bretton Woods system, US' so-called settlement deficit accounted for only 0.3-0.6 percent of US GDP and US was still a creditor country. Now US' NIIP-to-GDP ratio stood at more than 15 percent of GDP (Figure 5). How large a foreign NIIP/GDP ratio the US can reach to without causing a run on the dollar and dollar-denominated assets.

<sup>&</sup>lt;sup>8</sup> Jacques Rueff. *Balance of payments*, New York: The Macmillan Company, 1967. Pp. xv + 215.

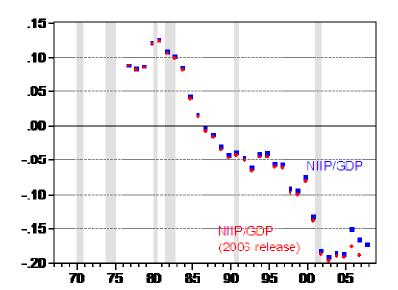


Figure 5 The International Investment Position

**Note:** Net international investment position to GDP ratio, 2007 release (blue), and 2006 release (red), all calculated using June 2008 GDP release. NBER defined recessions shaded gray.

Sources: BEA, International Investment Position, 2007; BEA GDP release of 26 June 2008; NBER.

Note: It is worth mentioning that the NIIP is not a simple summation of current account deficits over the years. Due to changes in exchange rate, the NIIP may fall while the current account deficit is increasing.

Optimists claim that a dramatic correction of the US current account deficit is not only unwarranted by also unlikely. "For the United States, unlike almost every other country in the world, a hard-landing process is inherently self-limiting. U.S. assets owned by international investors are predominantly denominated in dollars and a large fraction of U.S. assets held abroad are denominated in foreign currencies. Dollar depreciation, should it occur in a hard-landing process, will be self-limiting because the dollar value of U.S. assets abroad will rise, thus improving the U.S. net international investment position. Market participants, knowing this fact, are therefore unlikely to drive down the foreign currency value of the dollar in a rapid and disruptive

fashion."9

Pessimists argue that a day of reckoning is fast approaching when foreigners will no longer be willing to add rapidly to their already large net accumulations of US based assets. When this happens, the value of the dollar in foreign exchange markets will crash. Since 2008 US subprime crisis, a landing precipitated by a cut-off in capital inflows and/or a sudden rise in US long-term interest rates failed to materialize. Instead the long-term interest rates on US government securities are much lower now than at the start of the crisis, and the dollar vis-à-vis other currencies has strengthened rather than weakened most of the time due to safe-haven demand. However, I still believe that in the long-run, the dollar will continue to go south unless US' current account deficit can be reversed. The American Financial Crisis has strengthened rather weakened the argument that global imbalances is not sustainable, because, on top of the risk premium correlated with the increase in NIIP-to- GDP ratio, more risk premium will be demanded by foreign investors in the future as soon as risk appetite resumes. If US fails to rebalance its economy, a dollar crisis will happen and happen sooner rather later. The figure 7 below shows that when foreign investors have confidence in the US financial market, despite the accumulation of foreign debts by the US, dollar crisis will happen at the unsustainable point 2 (tolerable NIIP-to-GDP ratio is relatively high). After foreign investors' confidence on the market has been weakened due to the financial crisis, for a given NIIP-to-GDP ratio, they will demand a higher risk premium and hence a dollar crisis will happen at a lower NIIP-to-GDP ratio. As shown in the figure, the upward shift of Triffin dilemma curve caused by the weakening in the US capital market will bring forward a dollar crisis.

**<sup>9</sup>** Cletus C. Coughlin, Michael R. Pakko and William Poole. How Dangerous Is the U.S. Current Account Deficit? Economic Policy Lecture Series, Lindenwood University, St. Charles, Mo. April 2006.

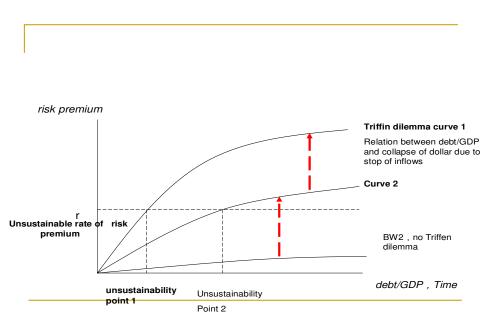


Figure 7. Relationship between global imbalances and the US financial crisis

There are other long run factors, which may shift the curve in the figure to raise or lower the un-sustainability point of NIIP-to-GDP ratio, where the collapse of the dollar will be triggered.

## Demand for the US assets

Whether the rest of the world will continue to finance the US current account deficit is a problem as important, if not more important, as that of whether US will be able to stabilize or reduce its NIIP-to-GDP ratio. Following the accumulation of current account deficits, and the increase in foreign debt balance, other things being equal, foreign investors will demand higher return for their investment. If the demand is not met, they may stop financing the current account deficit. From the perspective of the rest of the world, the key questions is at what level of NIIP-to-GDP ratio when the US has reached, they should stop buying US financial assets and hence trigger a dramatic correction of US' current account deficit. It can be seen from Figure 8, the US current account deficit is financed by four major groups: oil exporting countries,

the PRC, Japan and other advanced countries. The finance from oil exporting countries is highly unstable, which varies following the changes in business cycles. Japan has been the largest capital exporting country to the US and was surpassed only recently by the PRC. However, due to the aging problem, Japan is not likely to be continued to provide finance for the US. The PRC's ability and wiliness to finance the US current account deficit could be an important factor in determining the sustainability of the US current account deficit.<sup>10</sup> As matter of fact,

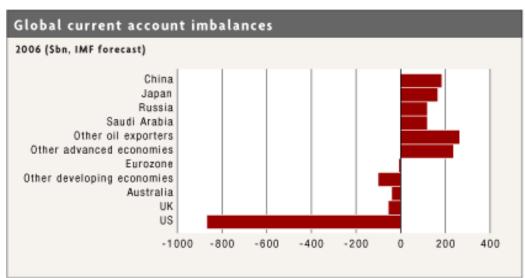


Figure 8 The finance of the US current account deficit

Source: FT Oct 18 2006

the PRC has started to adjust its growth strategy and is entering a stage of paradigm shift from "export-led growth" to "domestic consumption led growth". The PRC will reduce its current account surplus and diversify its foreign exchange reserves gradually. In East Asia and Latin America, efforts have been made to reduce the holdings of dollar reserve assets. One of the most important purposes of the IMF reform is also aimed at the need for holding too much dollar reserve assets. In short, foreign demand for the US treasuries and other dollar-denominated assets will

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<sup>&</sup>lt;sup>10</sup> Yu Yongding. Global Imbalances and China, *The Australian Economic Review*.Vol.40 no.1. pp1-21. March 2007

decrease.

#### IV Fiscal deficit and current account deficits

Correlation between fiscal deficits and current account deficits

In the 1980s and early 1990s, it was a widely shared opinion that the root cause for the persistent US current account deficit was the failure of the US government to tackle with the budget deficit. More specifically, based on historical experience from 1953 to 1989, according to Mundell, the changes in the budget deficit have been followed usually with a one-year lag, by changes in the trade deficit. The correlation is striking. 11 However, in the 2000s, the relationship between budget deficit and trade deficit has become a less clear-cut problem. According to Mussa. 12 the "twin deficits" theory" that asserts that the US external deficit is primarily the consequence of the US fiscal deficit is largely nonsense. The fact is that the US current account deficit disappeared between 1987 and 1991 as the fiscal deficit expanded to a postwar peak. Then the current account deficit widened to a new record of over 4 percent of US GDP in 2000 as the fiscal deficit moved from large deficit to significant surplus. Naturally, for Mundell, 13 a reduction of budget deficit is a precondition for elimination of the trade deficit. In contrast, for Mussa, US fiscal consolidation is not the be-all and end-all of policies to address the US external deficit. It seems fair to say that in the 1970s and 1980s, statistics supported Mundell's argument. In the 1990s and 2000s, Mussa's proposition is more acceptable.

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<sup>&</sup>lt;sup>11</sup> Bergsten F. C. ed. International Adjustment and Financing. Institution for International Economics. Washington D.C. 1991. pp211-212

<sup>&</sup>lt;sup>12</sup> Ditto.

<sup>13</sup> Ditto.

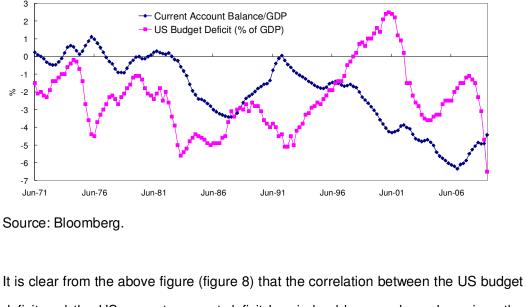


Figure 8 US budget deficit and current account balance/GDP

deficit and the US current account deficit has indeed become less clear since the 1990s. An empirical test also shows that the long-term relationship between budget deficits and current account deficits is rather weak (Table 1)

Table 1 Correlation between the budget deficit and the current account deficit

CA & Debt								
SUMMARY OUTPUT								
		<u>-</u>						
Regression S	Statistics	_						
Multiple R	0.012422861							
R Square	0.000154327							
Adjusted R Square	-0.00601756							
Standard Error	1.939987206							
Observations	164	_						
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	0.094107242	0.094107242	0.025004911	0.874551763			
Residual	162	609.695158	3.763550358					
Total	163	609.7892652						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-1.89001772	0.231885156	-8.1506628	9.32536E-14	-2.34792499	-1.43211045	-2.34792499	-1.43211045

Data source: Bloomberg

It is easy to see that the US current account deficit is a combination of government

and private saving gaps. If the changes in private saving gap can more than offset the

changes in government saving gap, the current account deficit will remain unchanged.

In the 1990s the correlation between the current account deficit and the budget deficit

was negative, because the private saving rate was falling dramatically while the

government increased its savings rate.

The role of savings gap

It is easy to explain the weak correlation between the budget deficit and the current

account deficit. According to identity (I-S)+(G-T)=CA, changes in the current account

deficit are related not only with the budget deficit (G-T), but also with private savings

gap<sup>14</sup>. It can be seen that in the US, the savings gap is much larger than that of

budget deficit (table 2). US budget deficit rarely surpasses 500 billion USD; only after

the financial crisis it shot up to 1,200 billion USD from less than 500 billion USD in

2008. In contrast, the private investment-savings gap has been higher than 500 billion

USD mostly since the 1990s. In 2006 when the US current account deficit registered a

record high of more than 800 billion USD<sup>15</sup>, the savings gap at the same period had

bigger magnitude than budget deficit.

By definition, Personal saving (with accrued wages) + Business saving = Net private saving. Net private saving

+Net government saving= Net national saving. Net national saving + statistical discrepancy - Net domestic

investment = Balance on current account.

<sup>15</sup> There are problems with data processing, which will be done later.

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Table 2 National saving, investment and current account

r																			
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Personal saving (with accrued wages)	6.9	5.8	6.0	5.9	5.9	6.2	6.4	5.0	4.4	4.1	3.4	3.0	3.6	2.0	1.9	1.5	1.7	1.1	1.0
	2.7	3.0	3.5	2.5	2.4	2.5	2.6	2.9	2.8	3.5	3.8	3.9	2.6	3.1	2.0	2.1	3.3	4.0	4.5
	9.5	8.8	9.5	8.5	8.3	8.7	8.9	7.9	7.2	7.6	7.1	6.9	6.2	5.1	3.9	3.6	5.0	5.2	5.5
	-4.4	-3.2	-2.6	-2.3	-3.2	-4.2	-5.4	-4.7	-3.3	-2.9	-1.7	-0.2	1.2	1.9	2.7	0.6	-3.0	-3.8	-3.5
	5.2	5.6	7.0	6.2	5.1	4.6	3.6	3.2	3.9	4.7	5.5	6.7	7.3	7.0	6.6	4.2	2.0	1.4	2.1
Net national saving plus statistical discrepancy Less: Net domestic investment Equals: Balance on current account Less: Capital-account transactions Equals: Net lending or net borrowing (-)	6.4	6.1	6.5	7.0	6.4	5.9	5.4	5.6	6.2	6.3	6.8	7.6	7.1	6.5	5.2	3.2	1.8	1.6	2.6
	10.0	9.8	9.0	8.9	7.7	5.7	6.1	6.9	7.9	7.7	8.3	9.2	9.6	9.8	9.7	7.3	6.7	6.9	8.7
	-3.6	-3.6	-2.5	-1.8	-1.4	0.3	-0.7	-1.2	-1.7	-1.4	-1.5	-1.5	-2.4	-3.3	-4.5	-4.1	-5.0	-5.3	-6.2
	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
	-3.6	-3.6	-2.5	-1.8	-1.5	0.2	-0.7	-1.2	-1.7	-1.4	-1.5	-1.5	-2.4	-3.4	-4.5	-4.1	-5.0	-5.3	-6.2

Source: Marshall B. Reinsdorf, BEA,

Http://www.bea.gov/scb/pdf/2005/04April/PersonalSavingBox.pdf

Therefore, it is very natural that changes in budget deficit alone cannot explain the bulk of changes in the current account deficit. Actually, the variation of in the private savings-investment gap can better represent the variation of the current account deficit.

Conclusion here is that unless we can have a clear idea about the trajectory of the savings-investment gap as well as US' fiscal position in the future, it is difficult to draw firm conclusions on the relationship between the budget deficit and the current account deficit in the future, and hence the impact of the budget deficit on the dollar.

The long-term perspective of US budget deficits

It was predicted that in 2010, US fiscal deficit will be 1560 billion USD and debt balance will be 14300 billion USD. Obama government promised to bring fiscal deficit/GDP ratio down to 4 percent of GDP. According to government economists, in the next decade, US fiscal deficit will not be lower than 3.6 percent, and in 2020 the

ratio can be 4.2 percent. Greece has triggered a sovereign debt crisis with a debt/GDP ratio at 113 percent of GDP. In comparison, the US debt/GDP ratio probably will surpass 100 percent of GDP in 2015. According to official prediction, the federal government will run a cumulative budget deficit of \$9 trillion over the next decade. However, the more worrying problem is the long-term perspective of the US budget deficit and national debt. According to US government economists, Social Security, Medicare and other benefits, and interest payments on the national debt will gobble up 80 percent of all federal revenues by 2020.16 If taking into account future liabilities from entitlement benefits, US fiscal situation is very frightening. According to GAO (government accountability office), the Social Security system, the biggest social spending program, has begun paying out more in benefits than it collects in payroll taxes. For the past quarter-century, Social Security had produced a surplus that helped finance the rest of the government. It will run cash deficit from 2017 on. Medicare, the health care program that now covers 45 million elderly and disabled people, is in worse shape. It's been paying out more than it takes in since 2008 and its trust fund is projected to run out of money in 2017 (Figure 11).

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<sup>&</sup>lt;sup>16</sup> US debt will keep growing even with recovery Tom Raum AP, February 14, 2010, 10:11 am EST

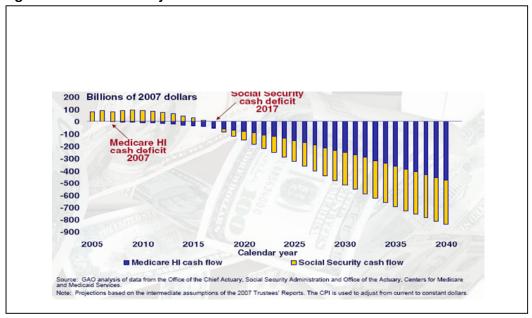


Figure 11 Social Security and Medicare deficits in the future.

Source: GAO analysis.

According to GAO<sup>17</sup>, in 2007, US government's explicit liabilities were 10.8 trillion USD. Contingent liabilities were 1.1 trillion USD and implicit exposure was 40.8 trillion USD. The total fiscal exposure was 52 trillion USD. In contrast, US total household net worth was 58.6 trillion USD in 2007. The corresponding Burden/net worth ratio was 90 percent. In comparison with Median Household incomes of 48,201 USD, fiscal burden per person was 175,000 USD. Historical experience shows that the private savings-investment gap is difficult to narrow let alone to eliminate. In the decades to come, US current account is not very likely to narrow and hence the NIIP-to-GDP ratio is more likely to increase significantly. For the PRC the worst nightmare is, as pointed out by Rogoff, that "if global long-term interest rates rise-as well they might after two to three more years of such huge spending and deficits—debt burden will worsen, temptation to inflate could prove irresistible". <sup>18</sup>According to Rogoff, government debt over 90 percent of GDP appears to be a key threshold. The US is already at 84

 $<sup>^{17}\,</sup>$  GAO-10-137SP Long-term Fiscal Outlook Fall 2009.

 $<sup>^{18}</sup>$  Kenneth Roggoff: Global Growth after the Second Great Contraction, PPT slide 26 , CIIC Forum, January 15, 2010 Hainan Sanya.

percent.<sup>19</sup>The long-term perspective of the worsening of the US debt-to-GDP ratio and its implications on inflation has created very negative impact on the dollar's role of global reserve currency.

## V The dollar's role as reserve currency and US macroeconomic policy

As a result of the burst asset bubbles in the US, wealth effect has impacted heavily on household consumption. The credit crunch and changes in expectations for the economic prospect must have serious negative impacts on corporate investment. Consequently, we have falls both in household consumption and corporate investment. In other words, since the global financial crisis, savings gap has been reduced significantly, due to a significant fall in investment and, a smaller fall in household consumption. However, as a result, the economy entered into recession. The fall of growth leads to higher unemployment, which in turn impacts negatively on consumption and investment. To prevent a gyration of economic growth, government spending is increased to stimulate the economy. The dramatic increase in budget deficit is used to offset the dramatic narrowing in savings gap. The question we need to answer is what will be the impact of the increase in fiscal deficits on current account.

Equilibrium condition can be defined as GDP= C+I+G+X-M, where GDP represents the exogenously-determined potential supply. Deficiency of aggregate demand means that GDP>C+I+G+X-M, or equivalently, [I-(GDP-C) + G] < M-X. For the given potential GDP, to achieve full employment, either I, C and G must be increased or M-X reduced. The latter in turn implies that M must be reduced and/or X increased. When the economy is in recession, an increase in fiscal expenditures G will reduce the demand gap, but that will not lead to an equal amount of increase in M-X.<sup>20</sup> On the other hand, it is worth noting that because M is not independent from the other

<sup>19</sup> Ditto

When the relationship (I-S) + (G-T) = (M-X) is used as an identity, full employment is assumed.

components of aggregate demand, M tends to change in the same direction with other components of aggregate demand, including G. Hence, when G increases, the trade account tends to worsen too, though not in the equal amount.

When the economy is under demand-side constraint, the relationship (I-S) + (G-T) = M-X always holds true by definition. The identity can be transformed into a new identity [I - (GDP -T- C)]+(G-T)=M-X. Here GDP represents incomes, which is not necessarily equal to the potential GDP. From the new identity, it can be seen that for a given fiscal deficit G-T, reduction in M-X can be achieved by increase in GDP. The increase in GDP means the reduction in I-S. But in this time, for a given I, the reduction in S is not achieved by reduction in consumption. In other words, faced with two contradictory objectives—namely the increase in GDP and reduction in trade deficit, the US government can "kill two birds with one stone" by adopting an aggressive trade policy. Only with this policy, the US government can achieve both growth and reduction in the current account deficit and hence a stable dollar.

The implications of the above analysis are two fold. First, to achieve full employment, an aggressive fiscal policy has to be taken. Second, the increase in fiscal deficits will not entirely translate into unfavorable trade balance. Third, export promotion policy should be adopted aggressively by the US government to offset the negative impact of the fiscal deficit on trade deficit. The improvement in trade balance not only will create jobs so as to reinforce the effect of the increase in the fiscal expenditures on the job creation, but also will help to stabilize the dollar.

## VI Concluding remarks

With the de facto dollar standard and unhindered cross-border capital flows, the current international monetary system increasingly looks like a Ponzi scheme. Despite the problems the dollar as the core reserve currency brings, its benefits outweigh

costs greatly for the US. However, this arrangement is becoming increasingly unsatisfactory for the rest of the world. This implies that to maintain the status quo is not in the long-run interest of the US either. In the short-run, a collapse of the US dollar will cause great upheavals in the global economy and is in no one's interests. Hence, to preserve the dollar's role as the core reserve currency is necessary at least in the short-run.

The role dollar as the key international reserve currency is determined by various factors, such as the demand for the dollar-denominated assets by the rest of world as well as the US NIIP- to- GDP ratio. The worsening of the US fiscal position definitely will have important impact on the stability and hence the role of the dollar as reserve currency in the long run. However, currently, the priority of the US government policy should be economic recovery. The preserve of the role of the dollar as reserve currency should occupy a secondary place. Furthermore, when the economy is suffering from lack of effective demand, the negative impacts of fiscal expansion on trade and current account balances are limited and can be offset by other policies, such as trade policy. Hence US fiscal policy should not be geared to preserving the international role of the dollar in the short-run. The issue of the role of dollar as global reserve currency should be left to be dealt with by other policies and reform measures.

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