

**Working Paper
460**

**GLOBAL IMBALANCES AND BRETTON
WOODS II POSTULATE**

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This forms part of the doctoral work “Capital Flows, Global Liquidity and Emerging Market Economies-Revisiting the Bretton Woods II Postulate” of the author, under the guidance of Prof C P Chandrasekhar at Centre for Economic Studies and Planning, Jawaharlal Nehru University. For having introduced me to this field and commented in detail on two of my seminar presentations at Centre for Economic Studies and Planning, I express my gratitude and thanks to Prof C P Chandrasekhar. It was during the stay at Centre for Development Studies during May-August 2014, availing the K N Raj Fellowship that this paper took shape, for which I express my gratitude to the K N Raj Foundation as well as to the Centre for the institutional facilities provided. The leave granted from my parent institution, Sri Venkateswara College, University of Delhi is gratefully acknowledged. The resources at the K N Raj Library proved to be useful towards the preparation of this paper. At CDS, Dr Vijayamohanan Pillai has been highly supportive in providing guidance and suggestions in the course of the writing of this paper. The discussions and suggestions which followed the seminar held at the Centre on 12th of August 2014 proved to be useful. My thanks for the comments of the anonymous referee, which proved to be useful at the revision stage. My thanks are also due to Shradha Jain, who had provided feedback on an earlier version of the current paper. The usual disclaimer follows.

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ABSTRACT

The growth performance of a group of east Asian economies including China, ever since the end of nineties, has been linked to their buoyant performance on the export front. The period till the 2007-08 financial crisis was witness to burgeoning American current account deficits and huge reserve accumulation by central banks of emerging market economies. The success on the export front of these economies has been based on their real exchange rates being maintained at a depreciated rate. This has been made possible through accumulation of US Treasuries by Asian central banks, thus defending the dollar from depreciation, despite the deteriorating current account. This operational mechanism in the international economy has been theoretically conceptualised by Dooley, Landau and Garber (2003) and christened as Bretton Woods II. It argues that the US current account deficit is here to stay in a quasi-permanent manner with a reasonable amount of stability, inasmuch as the objective of the Asian developing economies is to get more labour out of its traditional sources of employment like agriculture, and they are only too willing to finance the American deficits.

The paper intends to revisit this argument, particularly in the light of the change in deficits and surpluses in the world economy. It tries to develop a critique of BWII as a mechanism which could sustain growth and development in the developing world, particularly so, given its assumption that a threshold level of savings ought to be crossed by the countries to get loaded into the periphery. The paper tries to trace the genesis of BWII to the debates which originated in the course of the mid-eighties relating to development assistance in the aftermath of the international debt crisis. Even if the American current account deficit bounces back, would the emerging economies be able to be back in the original position, or, would they be cornered off further gains?

JEL Classification: F310, F320, F330, N20

Keywords: Bretton Woods II, reserve accumulation, American current account, global imbalances, gross capital inflows

Introduction

The international monetary arrangement of sorts, which evolved in the course of the last decade, popularly characterised as Bretton Woods II, after Dooley, Landau and Garber (2003), who provided a theoretical rationalization of the same, is often portrayed to be a stable arrangement. This arrangement has been found to serve the interests of United States to retain the supremacy of dollar in the international arena, despite burgeoning current account deficits and worsening net international investment position. At the same time, it has also been facilitating the Asian economies to industrialise by keeping their real exchange rates at a depreciated rate. The stability of the same has always been under the shadow of doubt, given that it was underwritten by the low-interest rate fed, bubble-led economy of United States on the one hand, and the process of consumption squeeze in Asia, on the other. With the global financial crisis, the limits to this model have come to the fore. This paper intends to undertake an exploration into the same.

This paper on “Global Imbalances and Bretton Woods II Postulate” is divided into four sections. The first section attempts to provide an overview of the contemporary trends in the international economy, with some focus on the issue of capital flows to emerging economies. The global imbalances which emerged in the backdrop of the low interest rate regime of the Greenspan years from 2000s, coupled with the series of financial innovations has resulted in an international monetary arrangement of sorts referred to as Bretton Woods II. Attempts have been made to draw similarities between this system and the Bretton Woods of the post-war period, ignoring the extant institutions which went to the

making of the Golden Age of Capitalism during the 1950-70 period¹. The second section would try to shed light on the post-war international financial system with a brief retrospective of the Bretton Woods system and the circumstances which lead to its collapse in 1970s. An overview of the literature relating to Bretton Woods II is attempted with a critique of the same in the third section. The next section tries to reflect on Bretton Woods II postulate in the light of the changing trends of global imbalances. This is followed by some concluding observations.

I

Trends in the Contemporary World Economy

The last two decades of financial globalization have been witness to a large increase in the external liabilities and assets of countries across the world. The IFI (index of international financial integration), i.e., $(\text{assets} + \text{liabilities}) / \text{GDP}$, across the world has been on the increase, with the same increasing faster with respect to the advanced economies as against the emerging market economies². Though the two-way capital inflows and outflows have been on the rise in the case of both these set of economies, and has been characterised by high volatility, given that the volume of the accumulated assets and liabilities of the past of the advanced economies have been large, this set has higher IFI ratios.

There has been a massive increase in the cross border gross asset and liability positions since the 1980s, its pace has got intensified in the course of the 1990s and 2000s. Particularly pronounced has been

1 These extant institutions include the aggregate demand management through countercyclical fiscal policies under the aegis of the Keynesian welfare state, considerations of the state policy about the strategies of full employment by the mandate given by the Full Employment Acts and the government assuming the role of a stabilizer of the economy through its interventions. For more about this period, see Bhaduri and Steindl's article in Marglin and Schor (1990).

2 For more on this see Lane (2012). See Lane and Milesi-Ferretti (2007) for data on the international financial integration ratios (i.e. assets plus liabilities to GDP) and an updated database of 2010.

the increase with respect to advanced economies, wherein the index of international financial integration (IFI) has risen from 0.684 in 1980 to 4.382 in 2007. During the same period, it has increased from 0.349 to 0.733 for the emerging market economies.

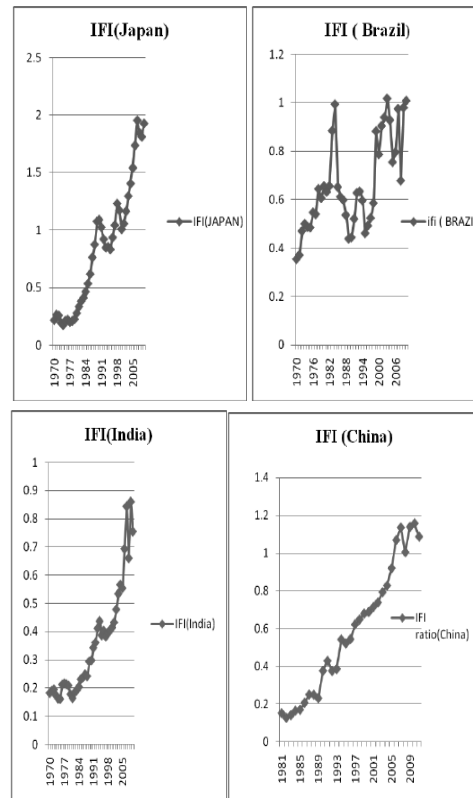
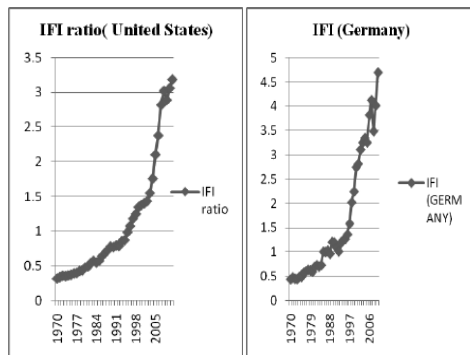
The graphs in **Chart I** portraying IFIs of countries are based on the data provided in Lane and Milesi-Ferretti (2010) database. It was from 2003, that there has been a steep increase in the IFI ratio of USA, wherein it literally doubled from 1.5 (2003) to 3.12 (2010), i.e., 312% of the GDP. Germany moves up in the same period from 3.25 to 4.69. Japan has not crossed 2 over the period till 2010.

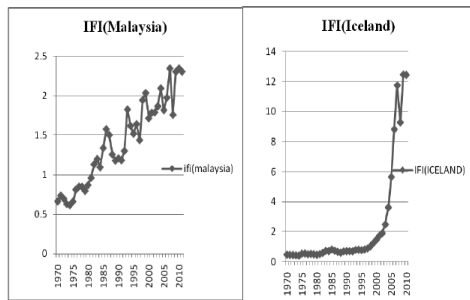
The IFI of Brazil in 1984 was 1, comparable to that of Germany during the same period, but, over the years, contrary to the steep increase in the value of index of other countries, Brazil has been witness to large volatile changes, with the same remaining around 1 at 2010. Though it has been characterized by large fluctuations, in the context of various crises, the IFI ratio of Malaysia has been showing a upward trend continually, with its value, as on 2010, being 2.34.

As far as India is concerned, the value of IFI has moved from 0.43 (1999) to 0.84 (2007). In the course of the crisis, the IFI ratio went for a dip of 0.2 points (i.e., from 0.84 to 0.65). In any case, compared to different other economies, the IFI ratio of India has been very low. So too, is the case of China, which also has a IFI ratio of 1.2 by 2011, in spite of the fact that it has large amount of trade openness. There are many of the countries hosting international financial centres, which by virtue of their large two way capital flows, has very high IFIs, even as many countries with high level of trade openness ratios have low IFI ratios. Inasmuch as certain economies like Iceland, which serve as banking and financial hubs are concerned, prior to the global financial crisis in 2007, they had 524% of the annual GDP in the form of external assets, while owing to the foreigners something to the tune of 636% of its GDP.

As per the TDR 2012, the cross border capital flows increased from 0.5 trillion \$ in 1980 (i.e., 4% of the global GDP and 25% of the value of international trade) to 12 trillion\$ in 2007 (i.e., 21% of the global GDP and 84% of the value of international trade). This huge increase in cross-border capital flows, particularly of the two way nature of capital flows, most of which are routed through the banks, have resulted in a large amount of volatility in the system. Notwithstanding the increase in net private capital inflows to the emerging and developing economies, 80% or more of the stocks of foreign owned financial assets is located in the developed countries³.

Chart I
Change in IFI ratios from 1970 to 2010





Even as financial globalization picked up momentum, the policy discourse with respect to capital mobility and controls has been witness to a drastic change. Contrary to the earlier optimism cherished in the early nineties by the Washington Consensus postulates, capital was found to flow uphill, i.e., from the poor to the rich economies⁴. In their empirical investigation, Rodrik and Subramanian (2008) has found no compelling evidence of capital account liberalization advancing growth.⁵ Moreover, the volatility associated with the two-way capital flows and the concerns raised relating to the same by Diaz Alejandro and others, far before, was proving to be true, in the light of the string of recurring financial crises since the mid-1990s⁶.

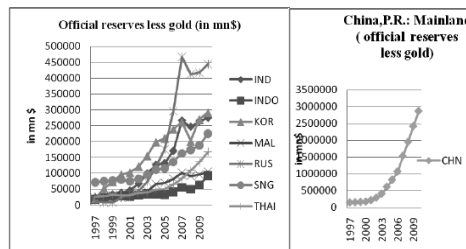
4 Notwithstanding the net private capital inflow into the emerging market economies, there has been large official reserve transfers from the developing and emerging market economies to the developed world in the form of the subscription of Treasury securities, that Gourinchas (amidst others) refer to the United States as the venture capitalist, which borrows short at low rates of interest and lend/ invest long abroad.

5 In an intervention in the aftermath of east Asian crisis, Bhagwati (1998) also has tried to put across the same viewpoint.

6 See Diaz-Alejandro (1985) in this regard.

The asymmetry in the access to financial resources of the international monetary system for the developing economies, during the crisis of Asian crisis of 1997-98, resulted in an unprecedented accumulation of large foreign exchange reserves by the central banks of Asia with a precautionary motive in mind. See Chart 2 below.

Chart 2



The era also witnessed ventures of regional monetary co-operation like the Chang Mai Initiative and as of late, the BRICS Bank. Notwithstanding the innovativeness of the efforts towards sharing reserves during times of crises, there are policy circles, which have been skeptical about the same, given that currency crises generally tend to be of a self-fulfilling nature, and it could affect all the members of the regional monetary grouping at the same time.⁷ Moreover, even international policy making centres, which were making policy advocacy for full capital account convertibility were cautioning against the premature liberalisation before appropriate institutions were in place,

7 In the backdrop of the self-fulfilling currency crisis models, which tends to affect a region as a whole, or a set of countries, Eichengreen, amidst others, has been sceptical of the utility of regional monetary co-operation.

thus stopping short of making a case for capital controls, since the financial crisis of 2007-08.⁸

Even as the current account of economies continue to be at the same levels, and, therefore, also, the net capital flows, the gross capital inflows and gross capital outflows of economies as a proportion of the national income were on the increase over the last two decades. In **Chart 3**, we can see the high level of volatility of gross capital inflows and gross capital outflows of Brazil and India, as against their current account figures. The net result of such tendencies in the external account of countries has been the huge accumulation of external assets and liabilities across countries over the course of the last two decades. Increasingly valuation changes with respect to the stocks of liabilities and assets are found to have a much larger effect on the NIIP or net foreign assets of countries, than the changes in current account. Obstfeld (2012) observes that even when the current account continued to be an important indicator of macroeconomic performance and financial stability of economies, the valuation change occurring through the change in the relative value of currencies, and its impact thereupon on the net international position of countries was turning out to be even more important⁹.

In an exercise undertaken of a set of countries (i.e. United States and emerging market economies) of the correlation between change in NIIP or NFA and the change in current account, in the 1971-90 period and the 1991-2010 period, the former was found to have a higher level of correlation compared to the latter period, showing the links between these have become weak, and valuation changes matter more than changes in current account in leading to changes in NIIP or NFA. See **Table 1** below for the details in this regard.

8 For the recent changes in the perspectives of the IMF in this regard, see Arcand, Berkes and Panizza (2012). They are sceptical about any purpose served by financial development beyond a particular threshold.

9 Obstfeld (2012) draw attention to the same through the Richard T Ely lecture.

Chart 3

Figure 1

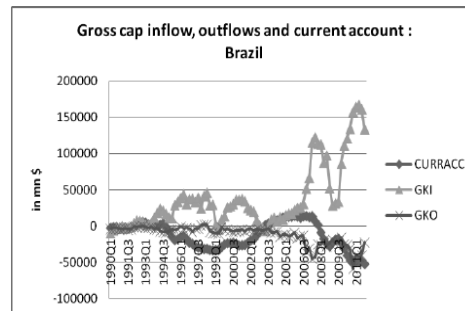
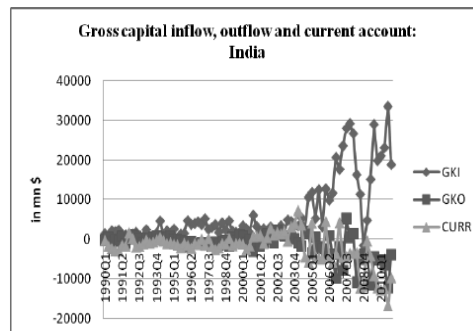


Figure 2



The impact of the exchange rate variations on the balance sheets of corporates, due to structure of the assets and liabilities, currency of their denomination as well as their period of maturity have been subjecting the economies of countries through a process of balance sheet recessions¹⁰. The composition of capital flows, the currency of denomination as well as the length of the maturity of the inflows and outflows assumes importance in this era, that more important than the global imbalances, is the issue of liquidity imbalances¹¹. This is all the more so, in the backdrop of the global financial crisis, where, the world was witness to the eurozone sinking into massive liquidity shortage, due to the inability to rollover short term liabilities¹². In fact, the ability of the global banking system to extend credit facilities at a higher pace, far higher than that of the growth of core liabilities through the mobilization of non-core liabilities (i.e. through borrowings in the international markets) has been subjecting the economies to a high level of volatility¹³. The collapse of banks, which would have resulted, had it not been for support extended by the central banks, has also made the policy sphere to reflect on the necessity for a regulatory framework for cross-border banking flows.¹⁴

10 See Krugman and Eggertson (2012) for a perspective in this regard.

11 See Gourinchas (2012).

12 See Acharya and Schnabl (2009) in this regard. Also Lane (2012a). For European sovereign debt crisis see Lane (2012a).

13 Elsewhere, Caruana mentions about this sort of banking as the double-decker model of banking, wherein loans are accumulated from abroad towards creation of assets, thus increasing the leverage ratios to high levels.

14 See for a perspective in this regard, the report on Banks and Cross border Capital Flows by CIEPR (2012).

Table I

Correlation between change in NFA and current account		
	1971-90*	1991-2010
USA	0.846	0.146
Argentina	0.736	0.576
Brazil	0.671	0.185
Chile	0.573	0.694
China,P.R.: Mainland	0.906	0.771
Colombia	0.874	0.793
Ecuador	0.591	0.825
India	0.937	0.180
Indonesia	0.700	-0.214
Korea	0.913	-0.220
Malaysia	0.693	0.387
Mexico	0.753	-0.407
Morocco	0.435	0.695
Peru	0.747	0.072
Philippines	0.511	0.468
Poland	0.154	0.586
Singapore	0.617	0.235
South Africa	0.222	-0.002
Thailand	0.483	0.263
Uruguay	0.698	-0.061
* (the data of some countries start after 1971.Source: Lane and Milesi Ferretti database)		

The transition from the high tide of global liquidity (like in the 2003-08) to the sudden squeeze of liquidity (like in the course of the

2008 global financial crisis), makes the growth in the period of financial globalization highly volatile. In fact, Chandrasekhar and Ghosh (2008) draws attention to the endogenous forces generated by the high tide of liquidity, which itself sowed the seeds of its destruction, referring to the same as global liquidity paradox. Referring to the liquidity support extended by the central banks in the context of global liquidity squeeze, the article draws attention to the sharp increase in global liquidity which preceded the same, to which a multitude of factors contributed in their own way¹⁵. Apart from the low interest rate environment provided by the monetary policy establishment in the developed countries, which further fed into the credit and asset markets in the rest of the world, through cross-border banking flows, the rising price of the oil which created surpluses for the oil exporting countries, and the forex accumulation in the east Asian economies contributed to the rise in global liquidity. The caution exercised by the east Asian economies in spending, particularly, in the backdrop of Asian crisis, which kept their investment ratios lower than savings rates, resulted in US Treasury securities being purchased by official capital outflows from Asian central banks. The widening distributive disparities of income across countries which resulted in large increase in savings, which coupled with financial sector reforms which permitted the pension funds and insurance firms to invest in private equity, also facilitated this huge surge in global liquidity in 2003-07 period. All this added to boom in the asset markets and gave a fillip also to commodity market boom too, ultimately bringing along with its collapse, the global liquidity squeeze.

Given the changes in valuation of assets as well as its easiness with which they could be converted to liquid assets, there are different committees of the Bank of International Settlements (BIS), which have been looking into the issue of the measurement of liquidity per se,

15 A sharp increase in global liquidity in the period after 2002, touched 716bn \$ in 2002 and shot up five-fold to 3.6 trillion dollars in 2006, compared to the previous peak of 1.3 trillion in 1997.

particularly private liquidity. A perusal of the consolidated and locational banking statistics of the BIS would reveal the fallout of fluctuations of capital flows, in particular, banking inflows and its reversals, on the capital account, as well on the balance of payments, and thereupon on the volatility of growth in the emerging market economies.

In fact, since the mid- nineties, the emerging market and developing economies have been subjected to the phenomenon of capital market volatility, and its associated boom-bust cycles¹⁶. Over the last two decades, the international financial landscape has been witness to the rise of other financial institutions, apart from banks, like hedge funds, sovereign wealth funds, pension funds as well as wealth funds, which have been massive purveyors of liquidity, with varying degrees of leverage. Given that the gross financial inflows and outflows across countries have grown far more since the seventies, in comparison to the trade flows, and the accumulated stocks of liabilities and assets have increased significantly over these decades, as is reflected in the Milesi-Ferretti-Lane database, the shocks transmitted from one country to another through the financial channel has turned out to be far more important than the ones that conveyed through the trade channel.¹⁷

Indeed, the low interest rates in Japan since the nineties, as well as the low rates in US and Europe in the past few years, in the course of the pursuit of unconventional monetary policies pursued in the US and Europe (bond purchases made by the Fed Reserve as well as the European Central Bank) has resulted in the different financial institutions

16 For more on this see the UNCTAD Report on Capital flows and capital floods: The new curse of a globalised economy? In fact, this report goes on to suggest that apart from a regime of capital controls, the countries should peg exchange rates at constant real exchange rates.

17 This is captured through a simple model of international finance multiplier, with the public as well as leveraged institution, as agents seeking domestic as well as foreign assets. See Krugman (2009).

borrowing through these currencies (funding currencies), i.e., yen and dollar at low interest rates, and buying assets in emerging and developing economies like Brazil, towards exploiting the interest rate differences across these countries. The carry trade across the globe is neither for facilitating trade nor towards financing the same, these are transactions with the explicit intent on capitalizing on the interest rate differentials. Moreover, in this line, they also tend to benefit from the associated appreciation of the receiving currency. In this context, the management of capital flows through the forex market intervention has been an important pre-occupation of the central banks of the developing and emerging economies. To stem the tide of appreciation, lest they lose the competitiveness of exports, during phases of flood of capital inflows, the central banks are forced to accumulate foreign exchange reserves, with associated costs to the central banks as well as government. Further ahead would be the problem which would crop up when the unwinding of the carry trades occurs as the process of bond purchases are reduced in the advanced economies.

In certain instances, despite their best efforts, not only do the currencies appreciate, but given the higher levels of inflation in the country *vis-a-vis* the counterparts in the developed world, the currencies are witness to real exchange rate appreciation, thus undermining their competitiveness in the international markets. In fact, these are cases where deterioration of the current account is intermediated through the flows occurring in the financial /capital account¹⁸. On the contrary, at the sight of capital outflow, the strategy of capital controls coupled with interest rate hikes is pursued, the fallout of which has to be borne by the credit squeeze in the economy, having impact on different sectors as well as on employment.

18 For more on this, as well as the turmoil in the emerging market economies in the backdrop of the retraction from the unconventional monetary policies, see Akyuz (2013)

II

Post-war Bretton Woods International Financial System and its Collapse¹⁹

There have been attempts to trace similarities between the international payments mechanism which has evolved in the course of the end-nineties, with the Bretton Woods system which came into being in the post-war period. So too, a historical excursus into the same would be useful from the angle of understanding as to whether too much is being read in the form of similarities between these two periods.

It is in the backdrop of the beggar-thy-neighbour policies pursued by different countries in the context of the interwar years which was characterized by floating exchange rates, destabilizing speculation as well as high unemployment that the world political and economic leadership met at Bretton Woods, New Hampshire to settle for a new international monetary arrangement for the post-war period. The international financial system prevailing for nearly two decades, in the second half of the twentieth century, was based on the Articles of Agreement of the International Monetary Fund and signed in New Hampshire Bretton Woods in July 1944, which was agreed upon, after the heated interchanges between John Maynard Keynes and Harry Dexter White over the finer details²⁰. They were able to come to an agreement on an exchange rate arrangement based on fixed rates, which could be subjected to change under conditions of fundamental disequilibrium. Under the Agreement, the exchange rates of currencies

19 This survey of literature relating to different events that led to the emergence of the post-war international monetary system of Bretton Woods, and its collapse in the course of two decades counts upon various works including Bordo (1993), Chandrasekhar (2010), Eichengreen (2007), Eichengreen (2008), Marglin and Schor (1990) and Rakshit (2001).

20 An engaging account of the details of the Bretton Woods deliberations is provided in the recent work by Steil (2014).

were fixed in terms of dollar, and dollar was convertible into gold at the rate of 35\$ for an ounce of gold. Given that US held three-fourth of the world share of monetary gold stock after the war, the logic of the convertibility of dollar into gold appeared to be credible. The national currency of United States was now the reserve currency of the international economy under this system.

The system was distinct for the stability which it tended to offer for the economies under short-term liquidity requirements as well as those under fundamental disequilibrium. For countries with problems from the random or cyclical shocks, which could be dealt with expansionary fiscal and monetary policies, they were permitted temporary access to gold it has contributed to the IMF reserves pool and were also eligible to avail short term loans up to a limit. There was an escape clause offered to the countries to devalue their currencies, in case of an adverse permanent shift in the international situation of the country leading to a fundamental disequilibrium in the balance of payments. This was extremely important for the adjustment in prices and wages towards restoring equilibrium would take time, and that was fundamental distinction *vis-à-vis* the Gold Standard of the nineteenth century. Indeed to rescue their countries from the ravages of international capital movements, they were free to institute capital controls. Both in the pre-war as well as the interwar period, speculative capital flows impaired the abilities of countries to maintain internal and external balance under the Gold Standard.

To write about the Bretton Woods system in the post-war period sans the Marshall Plan would be like Hamlet without the Prince of Denmark. While the dollar shortage proved to imply difficulties for the US since import restrictions threatened its own activity levels, the United States reconciled to the importance of international aid towards the maintenance of export levels of its own country, this perspective provided the background for the Marshall Plan, according to

Block(1977).²¹ Not only that the economies under the Bretton Woods system were guided by the ideas of Keynesian aggregate demand management, with the government playing a far bigger role, but the countries were also witness to significant improvements in productivity coupled with increases in the level of wages. The exchange rates were pegged to the dollar and they were subjected to change by the IMF only under conditions of fundamental disequilibrium in the balance of payments. The low level of capital movements in the global economy also reduced the scope of speculative attacks against the currencies, as was the case of destabilizing speculation under the floating rates of the inter-war period. The distributive disparities within the economies were on the decline, and even as external demand was increasing, given the disruption in the inter-war years, the role of the domestic market was crucial in providing demand to the system. In contrast, the period of Bretton Woods II has had no concrete initiatives of international economic planning in the form of Marshall Plan, and the peripheral economies have been characterised by a growth process based on consumption squeeze, not to mention about the widening distributive disparities, which has been characteristic of the post-nineties period across the world.

Apart from the initial devaluation of a number of currencies vis-à-vis the dollar, exchange rate adjustments became less frequent under the regime, indeed the world economy was relieved off the uncertainties of exchange rates and the process of destabilising speculation to which they were subjected to, in the course of the inter-war years. During most

21 Block (1977) noted that Marshall Plan was far more than an effort to finance the export surplus, it simultaneously attacked all forces which were moving western Europe away from liberal, capitalist, multilateral, international economic order desired by US; strength of European left, relative weaknesses of European economies, and most importantly, the pull of Soviet Union. All this led to the passage of the Marshall Plan in the US Congress. Marglin and Schor (1990) p.67. A detailed exposition of the period is given in article by Glyn and others "The Rise and Fall of the Golden Age" in Marglin and Schor (1990).

of the 1950s and 1960s, Japan and many European countries used capital controls to maintain stable real exchange rates against USD. Under the system, through the fifties and sixties, US ran a balance of payments deficit with the rest of the world, thus providing the world with dollar liquidity. Under the system, playing the role of a world banker, United States specifically engaged in maturity transformation, providing short term liquidity services (i.e., borrowing short term) and lending long term to the rest of the world²².

The initial period of the Bretton Woods system period started with a phase of dollar shortage, due to huge current account surplus of United States, but, in due course, current account was at reasonable levels, and there were capital outflows happening to the rest of the world from United States, which towards the end of sixties was turning out to be far more than the current account resulting in protests from French against the lack of gold backing for the dollar liabilities in the rest of the world. Indeed the world was moving from a period of “dollar shortage” to one of “dollar glut”, with the exorbitant privilege²³ exercised by the reserve currency crossing all limits, with the fiscal deficits in United States increasing on account of the Great Society programme of President Johnson, and, over and above all, the Vietnam war.

Inasmuch, the countries were ready to pick up the dollar liabilities, and institutions like the Gold Pool were in place to take care of the price of dollar, there was no threat for the dollar. But, once the dollar liabilities

22 See Despres, Salant and Kindleberger (1966) in this regard.

23 This refers to the privilege exercised by the country, the domestic currency of which serves as a reserve currency in the international financial markets. During the sixties, the foreigners, therefore, were seeing themselves as supporting American living standards and subsidizing American multinational firms through this asymmetric financial system. During that period, French President Charles de Gaulle had made this a very big issue. It is his finance minister, Valéry Giscard Estiang, who referred to this as America's exorbitant privilege. This also is the title of the work in economic history by Eichengreen (2011) on the rise and fall of dollar.

were found to be far outstripping the gold reserves of US, the credibility of assurance regarding convertibility of dollar into gold came under shadow. Central banks, in particular, of France, started making a clamour for conversion of the dollar holdings into gold. Inasmuch as the US government was concerned, they could have entered the gold market and made the purchase at the existent price, but their entry towards this would have resulted in a huge increase in the price of gold. Within a short span, there was the opening of the two-tier gold market, and further in 1971 of the announcement of the closure of the gold window. The system was brought to a close, thereafter inaugurating an era of flexible exchange rates.

In the immediate aftermath of the war, only currencies of US and Canada were fully convertible under the current account, but by the late 1950s and 1960s, not only all the currencies of the developed countries became fully convertible on the current account, but there were some bit of relaxation on the front of capital controls also. This resulted in the growing integration of international financial centres across the world and opening up of private gains through speculative attacks on currency, in case there was an expectation that a country would devalue in the wake of persistent current account deficits. With the frequent recurrence of balance of payments crises in Europe, countries found it difficult to maintain external and internal balance under the Bretton Woods system. Though institutional arrangements like Gold Pool tried to maintain the dollar value of gold, ultimately, the central banks had to stop intervening in the private markets. The eventual collapse of the same had to occur with the external balance of United States itself being in a state of disequilibrium. With the massive speculative attacks against the dollar in March 1973, the world entered into an era of floating exchange rates.

Right from its inception, the risk associated with a national currency serving as an international reserve was a matter of contention. Here for the system to be stable there ought to be the availability of the

dollars which serves as reserve currency. Towards the facilitation of the same, balance of payments deficits had to be incurred by United States. Even as the same is made available, the gold reserve backup of the same should be assured. In Triffin's view, the expansion of international liquidity in tandem with the growth in the volume of international trade requires of the reserve currency country to incur a balance of payment deficit, but in case the extent of the same crosses a limit, it would result in a confidence problem, with the currency being ultimately forced to suspend its convertibility to gold, given the declining share of monetary gold in the possession of United States. In case, there is dollar glut, and dollar liquidity is available, the confidence in the currency would be under shadow, and else, under dollar shortage, there would be a shortage of international liquidity. In the words of Marglin, Triffin was better as the prophet of the end result than as the prophet of the mechanism.²⁴

The latter part of the Bretton Woods period was witness to significant productivity improvements in Japan and Germany, which reduced their unit costs of production, vis-à-vis United States, which on the other hand, was witness to high rates of inflation, making the dollar, an object of speculative attack. With rising federal deficits in the course of the Great Society initiative of President Johnson and the Vietnam war, the dollar liabilities were piling up in the rest of the world, and over that the increasing current account deficit, given the declining holdings of gold of the United States compared to the 1950s, the US had to resort to the two-tier gold market mechanism, wherein only intra-central bank holdings would be convertible to gold. Ultimately, the convertibility of dollar into gold came to an end with President Nixon closing the gold window. Thereinafter the world entered into an era of flexible exchange rates.

²⁴ See Marglin's article in Marglin and Schor (1990) p.9.

III

Bretton Woods II Postulate and its Critics

One of the major paradoxes which has emerged in the course of the previous decade has been of the rapidly growing capital poor economies of the world exporting capital, on net, to the capital rich North, say USA. A rationalization of sorts has been provided for the same in Dooley, Landau and Garber, who through their articles, postulated in the early 2000s that the international monetary regime has metamorphosed into a new Bretton Woods of sorts²⁵. Under the international monetary system since 2000s, the major currencies euro, pound, dollar and yen float against each other, the currencies of many Asian and emerging market economies are pegged to the US dollar. It is in this context that Dooley et. al. has characterised the present set of exchange rate arrangements as the revived Bretton Woods. Beginning in 2000s, there has been an enormous increase in global liquidity, global reserves increased by almost double in the 2003-07 period, compared to the previous increase of just over 30%. Not just that there was an increase in the accumulation of reserves, but the accumulated reserves as a proportion GDP was turning out to be higher. See Chart 2 in this regard. Much of the reserve accumulation has been done by the Asian emerging market economies; this was used to finance the American current account deficits.

As can be seen from Table 2, the foreign reserves of China has increased from 168278 million \$ (14.11% of GDP) to 408151 mn \$(24.73% of GDP) in the period from 2000 to 2003. Further it increased to 1530280 mn \$ (i.e., 43.81% of GDP) in 2007. So too, was the case with different east Asian economies, which was witness to increase in

²⁵ This section attempts a review of literature on Bretton Woods II postulate through the writings of its main exponents: Michael Dooley, David Folkerts-Landau and Peter Garber. See Dooley et al (2003, 2004a, 2004b, 2009).

Table 2

		Official reserves minus gold in million dollars (as % of GDP)										
		1995	2000	2003	2007	2010						
China	75376.7	9.96%	168278	14.11%	408151	24.73%	1530280	43.81%	2866080	48.16%		
India	17921.8	4.88%	37902.2	8.10%	98937.9	16.73%	266988	22.14%	275277	16.40%		
Indonesia	13708.2	6.78%	28501.9	17.27%	34962.3	114.89%	54976.4	12.72%	92908	13.12%		
Korea	32677.7	6.32%	96130.5	18.02%	155284	24.12%	262150	24.98%	291491	28.73%		

Source: International Financial Statistics, IMF/Author's calculations

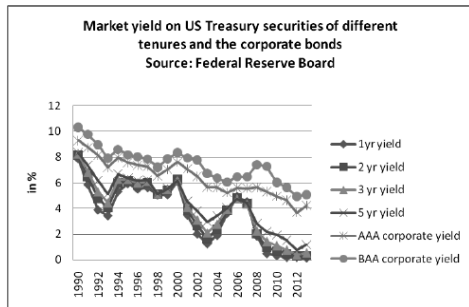
the accumulation of foreign exchange reserves, both in absolute terms, as well as percentage of GDP. It would have been difficult for United States to finance the deficits, for the net international investment position was highly negative, and further increasingly turning out to be so. With investors becoming increasingly reluctant to invest in these securities, the yields would have been expected to rise, but to the contrary, the nominal yields on Treasury securities were found to decline from 1999 to mid 2000s, this was made possible due to this huge increase in demand for treasury assets from the part of the east Asian economies. Dooley et al (2004a). This, it is argued, became possible because, after collapse of the old Bretton Woods, i.e., the structure of the international monetary system has come full circle to its essential Bretton Woods era form, allowing deficits to be financed even as nominal interest rates as well as spreads on US financial instruments fell. Dooley et al (2003) See **Chart 4** in this regard. Note that long with the decline in the yields on the Treasury securities, there has been a remarkable decline in the yields of corporate bonds.

In fact, Bernanke in his Sandridge lecture, takes issue with the argument that the US current account primarily reflects the economic policies and other developments in United States itself. Further he argues that there was a combination of diverse forces which has created a significant increase in the global supply of savings — global savings glut— which explains the both the US current account deficit and the low long term rates of interest. In fact he tries to argue out a case of the glut of savings in the international economy, than the endogenous factors within US economy, as responsible for the US current account.²⁶ Certain others have even dragged this as an explanation for the global financial

26 It should be noted that the surpluses in East Asia apart, that in Latin America and Africa were not even comparable to early decades. In fact, savings and investment rates are reported to be lower in Latin America and Africa than even in the previous decades.

crisis. Indeed the pre-Keynesian lineage of Bernanke's argument is subjected to a critique by Patnaik (2009).

Chart 4



De Cecco (2012) argues that perhaps reserve building by emerging market economies took away a lot of the timber from the bonfire that leading financial institutions lit up in the advanced countries. (p.50) In fact, as against the Asian economies which were subscribing to the US treasuries, it was the bankers of Germany and UK, who were massively buying up the US toxic assets in the runup to the financial crisis. Further, De Cecco concludes that perhaps only the non-liberalised large financial system in Asia played the part of a keel to stabilize the markets of advanced, democratic and liberal countries. In fact, it could safely be argued that the sub-prime bubble was caused by the low interest rates produced by the lax monetary policy and by the liberalisation of financial innovation, and not by inflows of foreign, or Asian capital.

Dooley et al argues that in the course of the eighties and nineties, with the collapse of the planned economies, the supply of labour to the world economy increased. So too, it was expected that given stock of

capital, the marginal product of capital would tend to increase, and therefore too, the interest rate would tend to increase. But along with the supply of labour, the supply of savings have also increased, and the periphery countries of east Asia were ready to keep their real exchange rates depreciated, towards pursuing export led strategies, through the accumulation of reserves. Under the new regime, they were net savers. All of this resulted in high rates of growth of employment in these economies. United States could serve as an export market of last resort, for it could now set aside external considerations of its monetary policy, for financing its deficits is no more a concern. The favourable rate of growth of east Asian economies further gave a fillip to the growth of oil prices, thus further contributing to the surpluses in the Middle East. Almost all of the increase in savings that was happening in east Asia as well as the surpluses in Middle East due to the increase in oil prices was represented by an equivalent decrease in the level of savings of United States, reflected in its widening current account deficit. Dooley et al (2004a). Indeed the dollar value of the increased savings in these regions was placed in dollar securities as part of the growth strategies of these economies, as part of keeping their currencies depreciated.

The role of China prominently figures in most of the writings of Dooley et. al. The country has the challenge of mobilizing an enormous pool of domestic savings towards creating an internationally competitive capital stock. It lacks a domestic financial system or managerial skills in this regard, which can channelize these savings into productive investment. Whereas China and other countries relied on an export-led model, through the process of reserve accumulation, the US was now less constrained on relying on domestic demand to grow, for the current account is easily financed, through the Asian official inflow into US securities.

Reserve accumulation from the part of China and other east Asian countries could be seen as a collateral held against the stock of foreign

direct investment. While financial intermediation facilitated growth in the periphery, it also generates asymmetric risk for the centre country since the periphery is less creditworthy compared to the centre. (Dooley et. al. (2004a) To offset the same, the periphery should post collateral for actual or potential mark to market losses. Logically it follows that for the system to work, USA must be willing to run a current account deficit (Dooley et al 2004b p.3), which alone would permit the Asian economies to garner dollars with which they could buy securities, which, could serve as a collateral against losses on the investments made in the periphery. In this total return swap, China gets the return on dollar denominated financial instruments including Treasury securities and foreign investors get the return on equity. Thus, as under Bretton Woods I, USA engages in maturity transformation, borrowing short term, on net, from the periphery, and lending long term on net—mainly in the form of FDI to the periphery. The old periphery (i.e., Japan, Europe and others) now constitute the group called the capital account economies, which would invest in dollar assets provided they yield return, lest they would move to the assets of other countries.

Most importantly, under the Bretton Woods II, the USA current account supplies the international collateral for the periphery, which through two way trade in assets would liberate the capital formation in the poor countries from the inefficient domestic financial markets. This provides for an explanation as to why capital flows from the poor to the rich countries. Indeed, this logic, as it has been mentioned in different writings of Dooley et. al.(2004b) has its genesis in the international debt crisis of the eighties, where loan default had to be negotiated upon. Under this regime, any threat whatsoever for foreign investment in the periphery would be more than compensated for with the securities in United States, owned by the Asian economies. It tries to put forward an impression that “collateral trumps the traditional model”. Here the periphery’s current account surplus provides the collateral to support the financial intermediation that is at the heart of the development

strategies. But, this serves the purpose of only these emerging market economies, i.e., those who have crossed a threshold level of income. Indeed, as a development model, the significance of the Chenery-Strout model based on the assumption that the poor countries would not be able to save as much to finance current investment, and therefore too, there is a rationale for foreign assistance continues to be relevant²⁷.

Indeed during the debt crisis of the eighties, the Japanese reactions to the same has traces of the Dooley et. al. model. Japan, which was a current account surplus country in the eighties had very little stake in third world debt. Japanese Prime Minister Takeshita in 1988 had suggested that a global approach to third world debt could be initiated with deposits of official reserves of debtor countries with the creditor country, thus absolving Japan the risk of debt default²⁸. Moreover, the argument that the debt default occurred in the eighties ignores the context in which the debt of the developing world got transformed from the speculative mode to a Ponzi mode, towards which the Volcker disinflation strategy as well as the deterioration in the terms of trade of primary commodities have played an important role²⁹. To this extent, the Bretton Woods II model of international finance is trying to come to the protection of the financier interests, limiting this course of re-routing of capital as a model of economic transformation to be available only for a group of emerging market economies, to the total exclusion of the development needs of the least developed countries, for which official development assistance, which has been on the decline, continues to be immense importance.

On the whole, we can see that there are three blocks under the Bretton Woods II system: centre country, trade account economies as

27 See Chenery and Strout (1966).

28 Quoted in Sen (2004).

29 See Kregel (2004) in this regard.

well as capital account economies. The most important objective of the core/ centre country is to see to it that the supremacy of its currency remains unchallenged. Inasmuch the same is possible, provided the surplus producing economies are diverting their surpluses to the dollar denominated assets, it does not mind a group of its industries in its domestic turf losing out on competitiveness in the international economy, for a strong currency would not only be making imports cheap to the benefit of the domestic consumer, but also would allow the currency to rule the roost in the international financial markets. The trade account countries know very well the limitations of the scope of the domestic market, so too, it would like to sell cheap in the international markets, this being possible, if they keep their currencies at a depreciated rate. Given that the surplus labour is never in the neighbourhood of getting exhausted, due to the fact that they run to millions, as well as of the fact that the employment in the world economy has been highly inelastic due to the sort of technological changes, it need not even be bothered about the real exchange rate, for the same would also remain depreciated given the low price levels/wages. As it is, they peg against the dollar, and through intervention in the foreign exchange market, they see to it that the currency does not appreciate. Under the logic of system, so too, it pays off for the trader account countries to resort to the strategy of reserve accumulation. The group of capital account countries (i.e. Europe, Japan etc) are the floaters in the system, they bother only about the returns which accrue to them, in case they subscribe to securities of a country, as against that of another.

Ever since the global financial crisis, there has been a rethinking about Bretton Woods II per se. The debate around the sustainability of the American current account deficit was about to be put to test in the course of the global financial crisis. Contrary to the predictions of the Obstfeld and Rogoff (2004) and others that this sort of deficits would result in the crash of the dollar and a global slowdown, in the wake of the global financial crisis, with imbalances starting to unravel, there

was a massive flight for safety and liquidity into dollar, resulting in large flow to the Treasury assets, particularly those of short term nature, from different central banks across the world, thus even leading to the appreciation of the dollar. Though the crisis was linked to the imbalances in the world economy, Dooley et al (2009) argued that the global financial crisis was not due to global imbalances, since the crisis did not result in the sudden stop of capital flows to US, which could have resulted in the depreciation of the dollar. On the contrary, the dollar appreciated. This was used by Dooley *et. al.* towards validating the international monetary arrangement under BWII. But this ignored the fact that the inflows to US were almost all to Treasury securities, in a frenzy of central bankers seeking safe haven. And the shift from equity securities to debt securities was continuing, with more of a reallocation in favour of short term Treasury securities, in the course of the financial crisis. All the more so, when it was revealed to the world that some part of the risks associated with the American housing markets were passed on to the European banks, and there was no scope for diversification to another currency asset, as some of the commentators were arguing out.

Two distinct strands of literature have emerged about the Bretton Woods II regime, one which accepts the validity of the BWII, but locates substantial differences with the earlier regime and argues that the same would spell doom to the longevity of the system. The other challenges some of the key underlying assumptions of the system.

Eichengreen (2011) and Roubini (2006), through their contributions, drew attention to the differences of the current system vis-à-vis that of the earlier system, and sees the seeds of instability in the same. Under the earlier regime, other than for a few years, almost all throughout the regime, the United States had a current account surplus and it was a net investor always, implying that it had a positive net international investment position. As against this, not only is the US continually having current account, but also has a falling net

international investment position. To add to the same, argues Roubini, is the fiscal deficit under the current dispensation, as against the earlier on. Both Eichengreen and Roubini feel the system could be short-lived due to the unsustainable current account and fiscal deficits³⁰. Given the size of the external liabilities, the extent of capital inflows which would be required to finance the same would grow at a far faster rate than the and willingness of the central bankers and private agents to accumulate such reserve assets, given the plausibility of dollar devaluation.

The sustainability of BW II would require intensified growth in the US domestic demand to cater to the exports from the periphery. The expansionary phase of growth of United States were heavily counting on asset price bubbles, i.e., the housing price bubble, which by 2007 has virtually collapsed, bringing down the demand in the system. Moreover, ever since there have been no efforts from the part of United States to substitute the decline in demand in the US economy, with fiscally expansionary strategies, which is what is warranted during times of recession. Bibow (2010) argues that the large current account deficits are unsustainable because the domestic counterpart of the same was private debts, in particular, household debts, which was financing the hike in consumption. Ever since the property bubble burst, there have not been any significant efforts either towards bolstering the demand by expanding government expenditure.

Further in the earlier dispensation, there was no substitute reserve currency anywhere in sight, but under BWII, alternative currency of euro is also in sight, which tries to give some sort of an option for the central banks to shift their assets, in case they lose trust in the capacity of the dollar to maintain its value, and at the same time tries to restrain United States from being fiscally extravagant or continuing towards increasing current account deficits.

30 See Eichengreen (2004), Eichengreen (2007) and Roubini (2006).

To add to the same is the stable institutional arrangements like the Gold Pool, wherein a group of countries intervened to preserve the dollar value of gold. Under the current dispensation too, though there is reserve accumulation being undertaken by number of economies, Eichengreen doubts the stability of this coalition of countries in the region, which due to the heterogeneous and conflictual interests, could derail the arrangement.

There has been yet another set of arguments which were around the key pivot of the system: American current account deficit. Providing market access to different economies which were geographically proximate to the erstwhile Soviet Union was a part of the geoeconomic strategies of United States, one of the fallouts of which was the east Asian miracle, which definitely benefited a set of economies in east Asia. Indeed, it is the responsibility of the leader country to provide market to facilitate growth process in different economies in the lower to the middle layer, this is required for the stability and sustainability of the global economic system. So too, a reasonable current account deficit for the United States is warranted. Even with respect to the sustainability of the deficit, there have been differences of opinion. The differences of opinion aired by Cooper (2008) and Feldstein (2008) is representative of such arguments. Cooper (2008) argues that given the highly flexible nature of the American economy and the permanent increase in productivity and profitability of investment, foreigners would continue to direct substantial amounts of capital towards US. Feldstein (2008) doubts about whether given the growing current account, countries like China would consider maintaining their portfolio of dollar assets at the current level, for this would entail risks for them.

Kitchen (2006), on the other hand, argues that US external position is sustainable because the US foreign investments earn far higher compared to the foreign investment made by others in United States. It is on the basis of this assessment that even when the whole world was

expressing concern over the declining net intentional investment position of United States and the growing current account deficit that Hausmann and Sturzenegger (2006) were expressing doubts about the veracity of the numbers, to the extent of arguing that there was some sort of an underreporting or under-recording of the exports of United States, on account of the liquidity services (seigniorage), insurance services (secure investments) and knowledge services (organisational knowledge and brand recognition), because they were bundled with three types of financial instruments: US currency held by foreigners, US treasury bonds held by foreigners and US originated FDI. Further, in an investigation based on the numbers provided by Hausmann and Sturzenegger, Buiter (2006) argues that other than with respect to the liquidity services, the calculation with respect to dark matter does not hold merit. For an argument as to why the dark matter as well as savvy investor would not hold simultaneously see Eichengreen (2006).

The Bretton Woods II model is based on the world economy characterized by the two way flow of capital in the international economy and the substantive increase in gross capital inflows and outflows, which consists of equity and debts of different levels of maturity. It is argued that through reserve accumulation and real exchange rate depreciation, countries would be able to graduate to higher levels of income, and therefore, Bretton Woods II is even portrayed as tool in the development policy kit. But, would this not be just restricted to those countries which have crossed a threshold? In other words, it does not offer anything to those economies, which are in a low-level equilibrium trap. For them, the dual-gap models of foreign aid still continue to hold significance, and official development assistance continues to be relevant. Moreover, these models heavily count on the external markets to the exclusion of the creation of internal market, which means the same resorts to consumption squeeze as a method to generate an export surplus which is required as international collateral in the system. Further, given that this option of real exchange rate depreciation has resulted in some

transformation in certain economies of Asia, what should stop the other countries, even those of the erstwhile periphery (i.e., even the capital account economies in the Dooley et.al model) from resorting to deflationary strategies of unit cost reduction towards selling in the international markets? The next section tries to explore the same in the context of the shift in global imbalances.

III

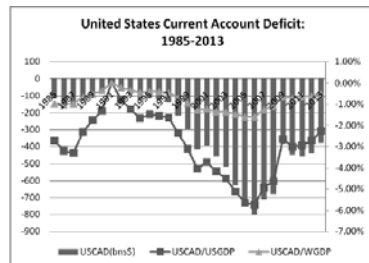
Bretton Woods II Postulate and Global Imbalances

Ever since the global financial crisis, there has been a significant reduction in the current account surpluses and deficits of economies. We refer to as global imbalances only to those deficits or surpluses of the economies which are supposed to pose a systemic threat to the growth process of the global economy. The reduction in the American current account deficit is of immense consequence as far as the demand in different other parts of the world is concerned. Given that the demand from the American economy was a result of the highly leveraged households, who were riding the tide of the property bubble in the domestic economy, it is only automatic that the crisis has compelled them to deleverage resulting in increase in household savings rate. And, given that as the households and the corporations deleverage, the government has not been increasing expenditure, it is only automatic that the demand from the American economy has got reduced and the same has ever since resulted in the reduction of the United States current account deficit.

Ever since the early nineties, though the US economy has been incurring deficits, the extent of deficits was witness to a distinct increase, ever since 1997 when from 1.67% it moved to 4% of GDP in 2000, and further it moved to 5.76% in 2006. See **Chart 5** below. Indeed the widening deficit happens in the period, when the American economy was benefiting from the wealth effect due to the dot com bubble and

later the housing bubble. It reached its maximum level in 2006, when the current account deficit reached a high of 798.47bn\$, coming to around 5.76% of the USGDP (almost 1.6% of the world GDP). This was the highest level of deficit for United States³¹. Between 2002 and 2007 even as the current account deficits got accumulated, and the borrowings towards the financing of the same has increased we find that the NIIP has improved, (Chart 6) the reason being that in this phase, there has been a sustained depreciation in the trade weighted index of dollar(see Chart 7 below). In fact, valuation changes intermediated through the exchange rate turns out to very important in the determination of NIIP than even changes in the current account. The two-way capital flows and large increase in gross capital inflows and outflows have resulted in the accumulation of assets and liabilities to such an extent, in the case of US, assets of up to 143% of the GDP and liabilities of up to 176% the GDP. Lane and Milesi-Ferreti (2009) draws attention to this valuation change intermediated change in NIIP.

Chart 5

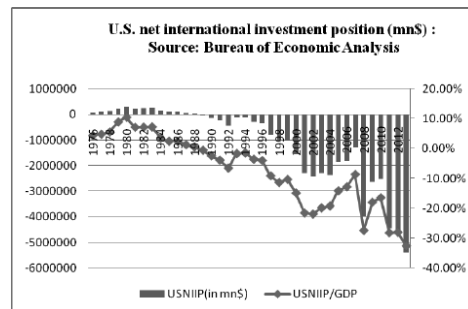


31 Though de Cecco (2012), quoting a study by De Mello and Padoan (2010) attributes larger US deficits of 2% in the 1985/6 period, our numbers reveal that even during that period, US current account deficit was only at 1.03% of the world GDP. In a communication with this author, de Cecco has agreed to the same.

With the depreciation of dollar, given that most of the liabilities are denominated in dollars, the NIIP is found to increase, and the reverse occurs with the appreciation of the dollar. As can be seen a large proportion of the liabilities are in short term debt and assets are in long term equity, i.e., United States has over the years been borrowing short and lending long, that Gourinchas and Rey (2007) characterises this transformation of USA as one of that of a world-banker to a world-venture capitalist³².

The disaggregates of the US current account reveal that large share of the current account deficit is contributed by the merchandise trade deficit. Even as the other constituents are found to fluctuate, there is a positive balance on income account which contributes around 1.34% of the GDP in 2013. It is due this net investment income from abroad that there is disagreement amidst policymakers as to whether there has been an under-valuation of the assets abroad.

Chart 6



32 See Gourinchas and Rey (2007).

Chart 7

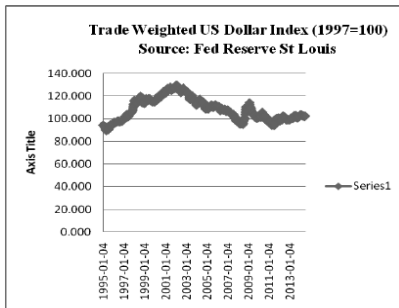
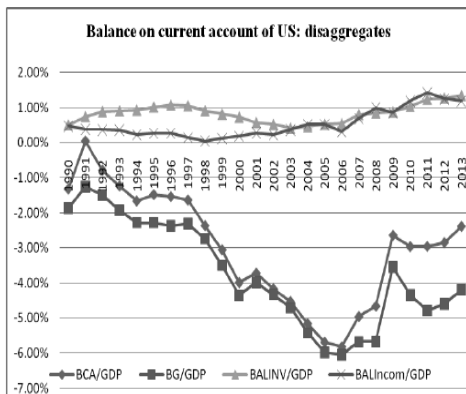
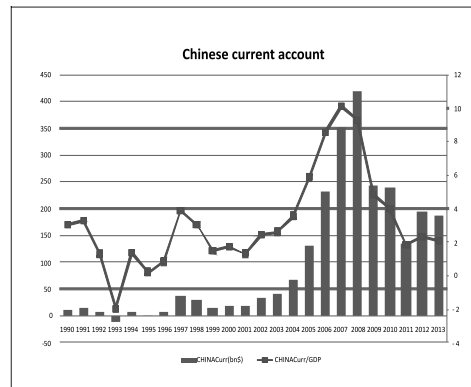


Chart 8



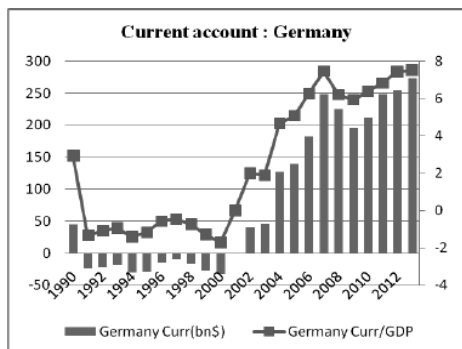
Ever since the 2007-08 period, there has been a decrease in current account deficit from 5.76% (2007) to 2.26% (2013) of the USGDP, which is large squeeze for world demand, almost by 1% of the world GDP over a short span of time, this is not without consequences, as is revealed by the chart relating to the same of China. Over a period of time, China has registered significant increase in its trade share in the world economy. Its current account increased substantially after 2003. From 43bn \$ (2.62%) in 2003, it rose up to 428 bn \$ (9.35%) in 2007, indeed a substantial jump in the course of four years. Thereafter there has been a steady slide downwards, it has decreased to 188 bn \$ in 2013 (approx 2% of the GDP). In terms of world GDP, the Chinese current account surplus has increased from an almost trivial share of 0.11% in 2003 to 0.67% in 2008, before collapsing to as low as 0.19% in 2011 to recover later at 0.26% of the world GDP in 2013. (see **Chart 9**).

Chart 9



In fact, **Chart 10** relating to one of the capital account countries, i.e., Germany, is interesting to take note of. From -1,74% of GDP in 2000, the current account of Germany has surged ahead to 7.45% in 2007. Ever since the crisis, though there has been a reduction in the current account surplus, it has again made a remarkable comeback to 273.54 bn\$ (7.5% of the GDP in 2013). Germany seems to be making good use of its labour institutions towards keeping the real wages under control. The data provided in Dustmann et al (2014) reveal that the real wages of the lowest 15th percentile in Germany fell dramatically from mid 1990s onwards, further from mid 2000s the median wage began to fall, and only wages at the top continue to rise. This has contributed to the favourable evolution of labour costs in Germany compared to United States, and other nations. He further draws attention to the role played by the labour of which the wages were not advancing with productivity improvements towards the transformation of the Sick Man of Europe into an Economic Superstar. The paper further argues that more than the

Chart 10

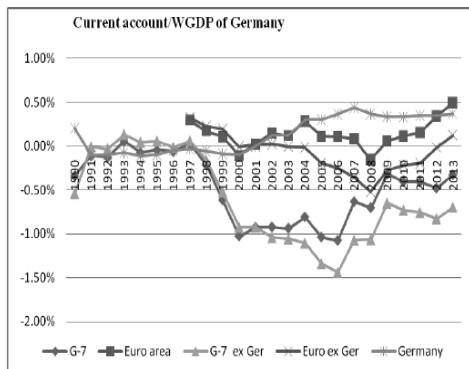


Hartz reforms on behalf of the German government under Gerhard Schroder, or the joining in the euro area, it was the drop in the relative labour costs of Germany vis-à-vis that of the other economies, which enabled Germany to gain competitiveness, not just with other countries, but also with its counterparts in the rest of Europe. In fact, Germany is a classic case of the possible consequences of a capital account country in the BW II model applying the consumption squeeze model of the trade account countries.

Whereas at its peak, the Chinese current account surplus has reached 0.68% in 2008 and it fell to a low of 0.19% of the WGDP, it rose further to 0.26% of the world output. But Germany's current account surplus rose to a high of 0.44% of the GDP in 2007, and is holding steady at 0.37% in 2013, thus catapulting Germany to be the largest exporter of the world economy. All these countries which are exporters to the international economy like Germany or China are counting highly on depreciated real exchange rates. This is made possible either through intervention in the foreign exchange market against the appreciation of the domestic currency or through reduction in per unit costs of production, mostly through wage squeeze.

In the chart below (**Chart 11**), the surpluses and deficits of Germany is juxtaposed against the G-7 excluding Germany, Eurozone excluding Germany. It should be noted that the current account of G-7 excluding Germany and that of Eurozone excluding Germany is worse than that of G-7 as well as Eurozone. Here is the case of a developed country, which is generating surpluses within its own Euro zone, vis-à-vis its neighbours, through the route of real exchange rate depreciation, by keeping its relative price levels low. Through this, it has also successfully transformed into a big export economy. If resort is taken towards tightening intellectual property related rules, and therefore charges on royalties and patents, such a dispensation would work more in favour of countries like Germany consolidating their gains on the export front.

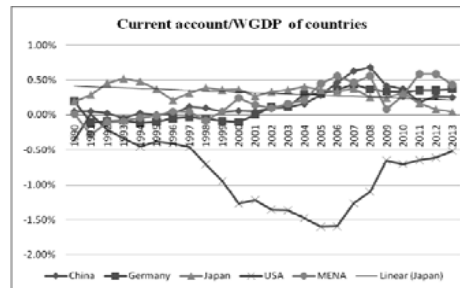
Chart 11



Comparison of the Current account/ world GDP of Economies

In Chart 12, we observe how the surpluses and deficits of countries as a proportion of the world GDP have moved over the years. We have observed the US case earlier. The surpluses of the Middle Eastern region was in favourable situation during the high tide of global liquidity, i.e., 2003-07 period. In the period from 2010 to 2013, the surpluses of MENA region is almost equal to more than 90% of the absolute current account deficit of United States. While surpluses of Japan in the early nineties were even higher than that of the deficits of United States, its share in the post-2010 period has come to be just 0.05 to 0.08% of the world output. Though the prominent surplus economy of the 2000-09 period was China, its share has declined in the post 2009 period, with Germany emerging as the leading exporter.

Chart 12



Though in the initial period when Germany was confronted with the problems of unification, it had deficits, in due course, it has emerged as a major exporter. The chart above shows that excluding Germany, the current account surplus of the euro area was lower from 2005 till 2012. Moreover the current account deficits of G-7 countries, excluding Germany was always higher since 2002. In fact, contrary to the earlier expectations during the time of the formation of the euro zone, we find Germany having current account surpluses with the rest of Europe, made possible because of the practice of keeping the wages grow at a lower rate compared to the productivity of labour.

IV

Some Concluding Observations

In the various readings on Bretton Woods II, it is even suggested that no sooner that the current economies who serve as the periphery of the system transform over time, some other countries would be able to load in as the periphery. But, the illustrations like that of Germany seem to suggest that some of the early “capital account” countries under BW

II could itself take over the export market, by keeping the price levels at a rigid rate, or even through the route of the downward flexibility of wages. In other words, through wage deflation, or through methods by which they disallow transfer of productivity gains on to the labour, a larger share of the world trade could be cornered hypothetically by a developed country, while another one, i.e., the centre country enjoys the benefit of the reserve currency, and rides the tide of what de Cecco (2012) characterises as import-led growth. This would alternatively mean restoration of the old poles of the previous Bretton Woods I. This is one of the hypothetical situations. So at the end of the day, rather than a “new developing” country graduating into the periphery, one of the old countries itself reloads in as the periphery once again, denying the chance of export-led growth even to the current periphery. Given the nature of low elasticity of employment under the sort of new technologies, labour supply should not even be seen as a constraint. And, if at all, it hits the ceiling of labour supply, immigration would do the task. If such a pattern emerges, it would even exclude the chances of the current periphery.

The second is a situation where cautious about sentiments of the larger European periphery that Germany was dominating the region, the crisis affected PIIGS load in as the periphery, and some others like Germany tries to deploy their technology and capital in the region and transform the same into an export platform, in this case also, more or less, the previous order would be restored. In any case, it is these countries which were ravaged by the crisis in Asia which loaded in as the periphery in BWII. This would amount to mean a set of countries being forced to give way to another who would like to take the growth path for a particular span of time. Most importantly, whoever graduates in as periphery would have to tread the path of consumption squeeze to export to the world.

The evolution of the Bretton Woods in the post-war period was in response to the problems associated with the destabilizing speculation

in the inter-war period on the one hand, and the burden of adjustment under Gold Standard being on the level of prices or wages, on the other hand. It allowed for readjustment of exchange rates under conditions of fundamental disequilibrium. Now the German case seems to bringing it back to original by making the labour bear the pain of adjustment towards generating a current account surplus through consumption squeeze and wage deflation. It is indeed paradoxical that the arrangement under Bretton Woods II, which heavily counts upon consumption squeeze, rather than generation of mass markets is christened Bretton Woods II!

But most importantly, given that unless one crosses a threshold level of saving, one cannot load in as the periphery keep the BW II periphery option restricted to the emerging market economies to the exclusion of the less developed countries, which would continue to benefit from the official development assistance and the logic provided for the same through the dual gap models. In fact, BW II ends up rationalizing the logic of growth taking for granted the process of the financialisation of the global economy, that discussions about autonomous models of development based on mass domestic markets seems to be put to rest.

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References

- Acharya, Viral V and Schnabl, Philipp. 2009. Do Global Banks Spread Global Imbalances? The Case of Asset Backed Commercial Paper During the Financial Crisis of 2007-09. IMF.
- Akyuz, Yilmaz. 2013. 'Waving or Drowning: Developing Countries after the Financial Crisis,' *Economic and Political Weekly*, September 14, 2013.
- Arcand, Jean Louis; Berkes, Enrico; Panizza, Ugo . 2012. 'Too much Finance?' Working Paper No. 12. International Monetary Fund.
- Bernanke, Ben. 2005. The Global Saving Glut and the U.S. Current Account Deficit. Sandridge Lecture, Virginia Association of Economists, Richmond, Virginia.
- Bhagwati, Jagdish .1998. 'The Capital Myth: The Difference between Trade in Widgets and Dollars', *Foreign Affairs*, 77, No..3(1998), pp.72-85.
- Bibow, Jurg. 2010. 'Bretton Woods 2 is Dead, Long Live Bretton Woods 3?' Levy Economics Institute Working Paper 597.
- Block, F L. 1977. The Origins of International Economic Disorder. Berkeley. University of California Press.
- Bordo, Michael. 1993. 'The Bretton Woods International Monetary System : A Historical Overview,' in Bordo and Eichengreen (eds), *A Retrospective on Bretton Woods System*, University of Chicago Press.
- Buiter, Wilhelm. 2006. 'Dark Matter or Cold Fusion ?' Global Economics Paper No. 136. GS Global Economic Website.
- Chandrasekhar C. P. 2010. 'Global Imbalances and the Dollar's Future,' *Economic and Political Weekly*, June 5, 2010, Vol. XLV, Number 23.

- Chandrasekhar C.P and Ghosh, Jayati. 2008. The Global Liquidity Paradox. www.networkideas.org
- Chenery, Holis and Strout, Allan.1966. 'Foreign Assistance and Economic Development,' *American Economic Review*, Vol. 56. No 4, September 1966.
- CIEPR. 2012. Banks and Cross Border Capital Flows : Policy Challenges and Regulatory Responses.
- Cooper, Richard. 2008. 'Global Imbalances: Globalization, Demography and Sustainability,' *Journal of Economic Perspectives*, Volume 22. No.3. Summer 2008. Pp. 93-112.
- De Cecco, Marcello. 2012. 'Global Imbalances: Past, Present and Future. Contributions to Political Economy(2012) 31,29-50.
- Despres, Emile, Charles P. Kindleberger, and Walter Salant. 1966. 'The Dollar and World Liquidity,' *The Economist*, February 5, 1966.
- Diaz-Alejandro, C. 1985. 'Goodbye Financial Repression, Hello Financial Crash,' *Journal of Development Economics*, 19(1985) 1-24, North Holland.
- Dooley, Michael P, Folkerts-Landu, David and Garber, Peter. 2003. 'An Essay on Revived Bretton Woods System,' NBER Working Paper No. 9971.
- Dooley, Michael P, Folkerts-Landu, David and Garber, Peter. 2004a. 'The Revived Bretton Woods System: The Effects of Periphery Intervention and Reserve Management on Interest Rates and Exchange Rates in Centre Countries,' NBER Working Paper No. 10332.
- Dooley, Michael P, Folkerts-Landu, David and Garber, Peter. 2004b. 'The US Current Account Deficit and Economic Development: Collateral for a Total Return Swap,' NBER Working Paper No. 10727.

- Dooley, Michael P; Folkerts-Landau, David and Garber, Peter. 2009. 'Bretton Woods II Still Defines The International Monetary System,' NBER Working Paper No. 14731.
- Dustmann, Christian , Fitzenberger , Bernd, Schinberg, Uta and Spitz-Oener, Alexandra. 2014. 'From Sick Man of Europe to Economic Superstar : Germany's Resurgent Economy,' *Journal of Economic Perspectives*, Pp. 167-188.
- Eichengreen. Barry. 2006. 'Global Imbalances : The New Economy, the Dark Matter and the Standard Analysis,' *Journal of Policy Modelling*, Vol. 28. 6, p. 645-652.
- Eichengreen. 2007. *Global Imbalances and Lessons from the Bretton Woods System*,
- Eichengreen, Barry. 2008. *Globalising Capital*. Princeton University Press.
- Eichengreen, Barry. 2011. *Exorbitant Privilege: The Rise and fall of the Dollar*,. Oxford: Oxford University Press.
- Feldstein, Martin. 2008. 'Resolving the Global Imbalance : The Dollar and the US Savings Rate,' *Journal of Economic Perspectives*. Volume 22, Number 3. Summer 2008, pp.113-25.
- Gourinchas, Pierre-Olivier. 2012. Global Imbalances and Global Liquidity, Asian Economic Policy Conference. Federal Reserve of San Francisco.
- Gourinchas, Pierre-Olivier and Rey, Helene. 2007 'From World Banker to World Venture Capitalist : US External Adjustment and Exorbitant Privilege,' in Richard Clarida (ed) *G-7 Current Account Imbalances: Sustainability and Adjustment* , University of Chicago Press, Chicago, 2007, pp.11-55.
- Hausmann, Ricardo and Sturzenegger, Frederico. 2006. 'Global Imbalances or Bad Accounting? The Missing Dark Matter in the Wealth of Nations,' Harvard Centre for International Development, Working Paper 124.

- Kitchen, John. 2006. Sharecroppers or Shrewd Capitalists? Projections of the U.S. Current Account, International Income Flows, and Net International Debt. Unpublished manuscript, Office of Management and Budget (February).
- Kregel, Jan. 2004. 'External Financing for Development and International Financial Instability,' G-24 Discussion Paper Series. Number 32. October 2004.
- Krugman and Eggertsson. 2012. 'Debt, Deleveraging and the Liquidity Trap: A Fisher-Minsky-Koo Approach,' *Quarterly Journal of Economics*, 1469-1513.
- Krugman. 2009. International Finance Multiplier, mimeo.
- Lane, Philip R. 2012. 'Financial Globalisation and the Crisis,' Paper at 11th BIS Annual Conference, June 21-22, 2012.
- Lane, Philip R. 2012a. 'The European Sovereign Debt Crisis,' *Journal of Economic Perspectives*, Vol. 26. Number 3. Summer 2012.
- Lane, Philip R. and Milesi-Ferretti, Gian Maria. 2007. 'The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970-2004,' *Journal of International Economics* 73, November, 223-250.
- Lane, Philip R. and Milesi-Ferretti, Gian Maria. 2009. 'Where did all the Borrowings Go? A Forensic Analysis of the US External Position,' *Journal of Japanese and International Economics* 23, 177-199.
- Lane, Philip R. and Milesi-Ferretti, Gian Maria. 2010. Extended database of the 2007, The External Wealth of Nations. accessed on the internet.
- Marglin, Stephen and Schor , Juliet B. 1990. *The Golden Age of Capitalism: Reinterpreting the Post-war Experience*, Clarendon Press, Oxford.

- Obstfeld, Maurice. 2012. 'Does the Current Account Still Matter?' *American Economic Review*, 102(3) ; pp. 1-23.
- Obstfeld, Maurice and Kenneth Rogoff. 2004. 'The Unsustainable U.S. Current Account Position Revisited, NBER Working Paper No.10869 (October).
- Patnaik, Prabhat. 2009. The Theory of the Global Savings Glut. www.networkideas.org
- Rakshit, Mihir. 2001. *The East Asian Currency Crisis*, Oxford University Press
- Rodrik, Dani and Arvind Subramanian. 2008. Why Did Financial Globalisation Disappoint? Institute of International Economics.
- Sen, Sunanda. 2004. *Global Finance at Risk on Real Stagnation and Instability*, Oxford University Press.
- Steil, Benn. 2014. *The Battle of Bretton Woods : John Maynard Keynes, Harry Dexter White and The Making of a New World Order*, Princeton University Press.
- Triffin, Robert. 1961. *Gold and the Dollar Crisis*. New Haven : Yale University Press.
- UNCTAD. 2012. Trade and Development Report, UNCTAD.

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