

**The Borrower of Last Resort:
International Adjustment and Liquidity in Historical Perspective***

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ABSTRACT

If the operation of gold standard from the last two decades of the nineteenth century, till the outbreak of the world war was in essence a sterling standard, the Bretton Woods system instituted after the second world war was in effect a dollar standard. The paper compares and contrasts the actual workings of the international monetary arrangements in the two periods. The pyramiding of official liabilities on a disproportionately small reserve base, and the parallel emergence of unregulated monetary mechanisms based on an explosion of private liabilities generated international liquidity in both periods. It has been argued that Britain in the period of the international gold standard and USA after the post war period were in effect acting as the international lender of last resort, and injected liquidity through their central role in international financial intermediation. The efficacy of this mechanism, however, hinges on the ability of the 'leading' country to draw short term capital flows and stem the efflux of capital in the face of growing trade deficits and dwindling reserves, in short to act as a 'borrower of last resort'. Imperial hegemony, it is shown, played a critical role, historically, in the institutional mechanisms that underpinned financial intermediation by the leading country in the two periods.

KEY WORDS: International Gold Standard, Bretton Woods System, International liquidity.

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INTRODUCTION

The present phase of ‘globalization’ is often compared to the decades around the turn of the nineteenth century that had also witnessed a significant degree of global integration. The proliferation of trade flows that marked both periods was linked to, and engendered a parallel burgeoning of international financial flows. Global integration in both periods was premised on the development of international monetary arrangements that could generate the necessary international liquidity. The crux of these arrangements was the emergence of the monetary liabilities of a single country as the principal means of settlement of balance of payments between countries, internationally. If the operation of gold standard from the last two decades of the nineteenth century, till the outbreak of the world war was in essence a sterling standard, the Bretton Woods system instituted after the Second World War in effect forged a dollar standard.

The paper compares and contrasts the actual workings of the international monetary arrangements in the two periods. The pyramiding of official liabilities on a disproportionately small reserve base, and the parallel emergence of unregulated monetary mechanisms based on an explosion of private liabilities generated international liquidity in both periods. It has been argued that Britain in the period of the international gold standard and USA after the post war period were in effect acting as the international lender of last resort, and injected liquidity through their central role in international financial intermediation. In this paper, I argue that the efficacy of this mechanism hinges on the ability of the ‘leading’ country to draw short term capital flows and stem the efflux of capital in the face of growing trade deficits and dwindling reserves, in short to act as a ‘borrower of last resort’. Critical to the institutional mechanisms that underpinned financial intermediation by the leading country in the two periods is the role of imperial hegemony.

The following survey of the literature on the workings of the international monetary system in the two periods seeks to highlight the role of a ‘borrower of last resort’ in the mechanisms of adjustment and liquidity in the international monetary system. The analytical argument draws on Marx’s discussion of the emergence of ‘world money’ and Keynes writings around the proposal for the International Clearing Union. In particular, the paper explores the implications of the emerging dominance of the fiat money of a single country alongside a parallel proliferation of ‘credit money’ transactions, instead of bullion, in the settlement of international payments balances. The privileged position of the currency of a single hegemonic country in the international monetary system imparts a degree of elasticity to adjustments in the developed core

of the global economy. The mechanisms of adjustment, however, generate greater instability outside this core.

Section 1 reviews the literature on the actual workings of the gold standard period, to argue that the apparent stability and liquidity of the gold standard derived from the dominance of sterling in the web of international transactions. Private capital flows and the specific role played by the British imperial system were pivotal in sustaining the dominance of the pound in the gold standard period.

Section 2 outlines the emergence of a dollar standard with the Bretton Woods system and compares the post-war dollar standard to the pre 1914 gold standard. It argues that the euro-dollar markets that arose in the sixties played a role similar to that of the imperial network in the sterling standard period. They were in fact instrumental in preserving the hegemony of the dollar through the crises ridden seventies, and were the harbinger of the Post-Bretton Woods international monetary system in which the international role of the dollar came to be underpinned primarily by unregulated private capital flows.

Section 3 draws on this survey the two international monetary regimes to make the central analytical argument about the role of the ‘borrower of last resort’ in international liquidity and adjustment.

THE INTERNATIONAL GOLD STANDARD AND THE DOMINANCE OF STERLING

Conducting the International Orchestra

The pre-war ‘international gold standard’ emerged in the last two decades of the nineteenth century, when most countries had shifted from silver and bimetallic standards to a gold standard. This international monetary regime can be seen to reflect the British domination of the international financial system as the largest capital market and trader¹. The stability of the international monetary system, during this period, has been ascribed to the ‘management’ of the system by the Bank of England. The Bank of England played the role of “the conductor of the international orchestra” and was able to calibrate international movements of gold, on the basis of relatively small gold reserves, by manipulations of the bank rate².

¹ The defeat of France and the eclipse of Paris money market after the Franco Prussian war concentrated liquidity in London. Germany’s the subsequent shift to a gold standard and its use of the war indemnity to acquire sterling claims, would have also been a defining element of this process.

² Eichengreen (1987) Scammell (1985)

A survey of the literature on the period, however, reveals that the ability of the Bank of England to 'manage' the system was by no means absolute³. Until the 1870s the techniques of monetary control were rudimentary and marked by frequent changes in bank rate. In the eighties the Bank of England often resorted to gold devices and interventions in the gold market rather than frequent discount rate fluctuations, to protect its gold reserves.⁴ It was in only at the turn of the century that bank rate policy actually became effective.⁵ Thus while the Barings crisis in 1890 was 'managed' without a significant raising of the bank rate; the 1907 crisis was contained through the deployment of the Bank rate, with a negligible intervention in the gold market.⁶

The 'management' of the international system was far from automatic, and the role of the Bank of England was not exclusively predicated on the calibration of the discount rate but in deploying a variety of means to make the discount rate effective in the chaos of unregulated short term flows that constituted the money market. To be effective the Bank of England would have to be able to induce a shortage of funds in the money market, through open market operations, and then make money available at the desired rate. The Bank of England was faced with the dual, often-contradictory pressures of protecting its profit and competitiveness on one hand and on the other the need to maintain reserves (by running down its assets or increasing its liabilities) against a possible drain on the exchequer⁷. Further, large idle reserves, while increasing the cash basis of the Bank of England, also eroded the Bank's ability to control the market.⁸

The efficacy of the instrument of the Bank rate was predicated on institutional and historical developments, in particular the tremendous growth of private international capital flows - the 'financial revolution' that was taking place in England in this period.

The emergent source of dynamism in the English banking system derived from the growth of deposit banking. Through the eighties and nineties, with the rapid development of joint stock banks, merchant banks and discount houses (the heirs to bill brokers) as integral components of the British financial system, there emerged a parallel growth of monetary mechanisms. Alongside the proliferation of international trade in the last quarter of the 19th century, the spread of sterling bills as a mechanism of finance that was independent of Bank of

³ Gallarotti (1999) stresses the absence of 'active conscious hegemonic force'.

⁴ Sayers (1970,1976) Scamell (1985)

⁵ Sayers (1970,1976) Scamell (1965)

⁶ Sayers (1970, 1976)

⁷ Gallarotti (1991) has an insightful analysis of the constraints imposed by what he calls the dual mandate of 'profit and public interest'.

⁸ Pressnell (1968)

England, had also gained prominence⁹. Deposits in the joint stock banks became an important source of the cash required by discount houses and bill brokers to discount the growing volume of bills of exchange.

The concentration of Joint Stock Banks, with the wave of amalgamations witnessed in this period accentuated the challenge to the power of the Bank of England¹⁰. The joint-stock banks were not subject to the austerity imposed by Peel's Act, and they were under no obligation to keep reserves with Bank of England¹¹. The intended curbs on 'notes issue' embedded in the restrictions on the creation of banking liabilities were thus largely circumvented. The proliferation of deposit banking underscored the diminished influence of the Bank of England on the money market, since this source of liquidity creation was untrammelled by reserve requirements. Comprehension of the workings of the gold standard and the ability of Bank of England to manage the system has to take into account the history of competition and contradiction between the Bank of England and the Joint stock banks.

The involvement of the Bank of England on behalf of government was matched increasingly by its dealings in private sector assets, in particular, through active intervention in the bill business¹². Alongside the frantic pace of expansion in the eighties was a progressively worsening asset-reserves position.¹³ The Bank of England embarked, through this period, on a process of 'conquest' of the rediscount market and sought to bring bill brokers back into its fold. The process of re-admitting the money market to its regular and rediscount facilities was signaled when the Bank began offering advances to bill brokers and discount houses on a regular basis, abandoning the 1858 rule¹⁴. In 1890 it began rediscounting bills, directly, initially accepting bills with a currency of 15 days, and subsequently accepting paper of longer maturity¹⁵.

⁹ De Cecco (1984)

¹⁰ Between 1881 and 1891 the capital of joint stock banks increased from 35 million pounds to 50 million. Less than 2% of banks total deposits were kept with the Bank of England. de Cecco (1984) p 95

¹¹ The Bank Act of 1844 (Peel's Act) split the Bank of England into the issue department and the banking department and set limits to the Bank's interventions in the money market on the basis of reserve holdings. The joint Stock Banks however were not obliged to keep their reserves with the Bank of England

¹² Pressnell (1968) p 180; de Cecco (1984) p 99

¹³ The reserve ratio decreased from 52.5% to 47% between 1886-90. de Cecco (1984). The debt conversion of 1888 also fuelled a low interest, high liquidity regime that was a prelude to the Barings crises. Eichengreen (1997)

¹⁴ In 1958, in the aftermath of banking crisis of the previous year, the Bank of England disbarred Joint Stock Banks from its discounting facilities.

¹⁵ In 1897 it began accepting bills with a currency of 3 months and in the first decade of the 20th century it admitted bills with a maturity period of four months and exceptionally six months. However, the Bank would temporarily refuse to accept bills of longer maturity in order to stiffen the market. Sayers (1970, 1976)

This competition for bill business, created potential pressures on Bank of England's reserves and would have implications for the balance of payments through drains or reductions in inflows. Interest rate manipulations could be used to regulate the demand for bills and the inflow of gold, and thus served as an alternative to maintaining large reserves. But at the same time, the period was dogged by fears of declining reserves that put a damper on initiatives at monetary reform that sought to extend the Bank's flexibility in fiduciary issue of notes¹⁶. The banking system was caught in "blind alley of maximum reserves and minimum central banking"¹⁷. However, despite this 'cautionary attitude' and the constraints of acting within the 1844 (Peel Act) limits on notes issues, the banking system evolved to accommodate a growing volume of finance on the basis of a relatively 'thin film of gold'.

It has been argued that the small stock of gold reserves with the Bank of England betrayed its essential vulnerability¹⁸. The Bank displayed a manifest 'reluctance to place British liquidity on the altar of international demand for money in restrictive periods'¹⁹ and abated public panic 'not by marshalling its own resources but by asking major British financiers and foreign central banks and governments for funds or special accommodations'²⁰.

To illustrate consider the 1907 crisis, that was precipitated by a contraction in the US economy following a speculative run on copper and the collapse of the Knickerbocker trust. In response to the threat of a gold drain, the Bank of England raised the bank rate from 4.5 % to 7 % in response to the pressure placed by the demand for gold in the US to shore its financial system²¹. Bank of France faced with the potential of an adverse spillover effect took it upon itself to discount British bills heavily. The gold reserves of France, a creditor country, were thus made available in the London gold market, pre-empting a further rise in the discount rate²². Gold flows from the continent were then recycled to the US, which borrowed largely on bills on London.²³

¹⁶ The abortive attempts at monetary reform after the Barings crises are analyzed by Pressnell (1968). He points to the prevailing notion that a gold hoard was necessary to face internal and external drains. The external protection of sterling required international means of payment, but the internal problem was soluble by assurance of adequate supplies of legal tender. Pressnell argues that the tangling of two distinct problems of international and domestic cash reserves before 1914 thwarted a more far reaching reform of the British monetary system.

¹⁷ Pressnell (1968)

¹⁸ Gallarotti (1999)

¹⁹ Gallarotti (1999)p 139

²⁰ Gallarotti (1999)p. 130

²¹ Through 1906-7 the Bank of England also curtailed loan and rediscount facilities allowed to the market. Sayers (1970)

²² In 1907, France made £ 3 millions worth of American eagles were made available to London by taking up sterling bills. Sayers (1970) p 110-113. The German Reichsbank also supplied liquidity by drawing in gold from the Russian State Bank. Eichengreen (1996)p35

²³ USA engaged in direct negotiation with France in 1910. Gallarotti (1999) p 140

It is true that through the period there was an incessant preoccupation with the British Treasury's dwindling gold reserves and the declining ratio of reserves to liquid foreign liabilities²⁴. But this 'thin film of gold' that was sustaining international liquidity was in fact a reflection of the strength of the Bank of England bank rate policy. Its efficacy hinged precisely on this ability to draw gold bullion from surplus countries and recycle liquidity in order to manage crisis.

Britain's current account surplus, from earnings on swelling foreign investment portfolio receipts on services and remittances account, offset its merchandise account deficits through much of the period. But it is doubtful that Britain's net short-term claims abroad exceeded corresponding liabilities and it is more plausible that her short-term payments position fluctuated from being a net creditor to a net debtor.²⁵ In fact as we argue, a short-term creditor position was *not* essential to the workings of the stabilization mechanism.

More important was Britain's ability to manipulate short-term capital flows. Critical to this ability was the process by which the international financial system came increasingly to be centered in England in this period. The ability of the Bank of England to use an increase in the discount rate to induce a net inflow of capital, hinged on the privileged international position of England enjoying as it did a large volume of short-term foreign claims, a currency of unquestioned convertibility and a zero exchange risk. At the heart of this dominance was the rise of the Bill on London as a means of settlement of international payments - as a form of 'world money'.

With the emergence of the bill on London as a means of international payments and settlements, private capital flows mediated through the financial center in London came to play a pivotal role in regulating and recycling liquidity. These credit instruments imparted a high degree of elasticity to the supply of money while insulating gold stocks. The concomitant growth of financial institutions and the extension of the discount market through joint stock houses enabled the creation of a credit pyramid on the basis of a relatively small gold edifice.

²⁴ The gold holdings of the bank were around 2% of money supply through the period under consideration. Sayers (1976) Vol I p 9,10. England's gold reserves as ratio of imports was stable around 5% while France was above 50% for most of the period between 1895 and 1910 falling below 40% in 1913. The ratio of gold reserves to banking liabilities in England, was around 5%. Bloomfield (1959) p 21

²⁵ Bloomfield (1964), Lindert (1967)

The Bill on London and the Sterling-Standard

The bill of exchange had been growing as a means of financing trade, in particular, since the mid nineteenth century²⁶. These bills were denominated in pounds but issued outside Britain. They provided the seller of goods with a financial instrument that could be discounted before its maturity, or reused as a means of payment after being endorsed. Its wide acceptability as a means of payment depended on the presence of an organized market for discounting and negotiating bills.

The last quarter of the nineteenth century saw the relative decline of the volume of inland bills with foreign bills becoming more dominant through the turn of the century²⁷. The immense growth of international trade and financial flows, in the nineteenth century, had fuelled the move to using ‘monetary liabilities’ instead of bullion. Foreign exchange claims that accumulated at an annual rate of about 10% outpaced the corresponding growth of gold reserves that was about 6.3% over the decade, 1904-1913²⁸. Concentration of the pattern of international settlement through the London markets, and the various measures deployed to economize on the use of bullion, also promoted the increasing recourse to sterling monetary liabilities, and the Bill on London, instead of actual bullion.²⁹

Britain typically paid for imports on a short-term basis while offering longer-term credit on exports³⁰. Exporters would draw bills on their shipments on London accepting houses or branches of foreign banks in London, and receive payments immediately. Importers on the other hand were required to make their payments only when the bill matured. In a corresponding manner, British imports were financed by acceptance credits through London and accepting houses acquired a purely domestic claim on the British importers (or their banks). The actual financing of such transactions was provided by the purchasers of the foreign drawn sterling bills in the London market or by the foreign exporters (or their banks) if they held bills till maturity³¹. London houses also financed the bulk of trade between foreign countries through transactions in

²⁶ In particular this followed the international expansion of British financial institutions and improvements in communications consequent on the spread of the telegraph. Williams (1968)

²⁷ Nishimura’s study shows that after a period of decline in the volume of bills through the seventies and eighties there was resurgence in the growth from the nineties. However, this growth was predominantly that of foreign bills. Inland bills reached a peak around 1873 (comprising about 83% of National Income in between 1861-71) and declined thereafter. Foreign bills, which had increased till 1873 also declined during the 70-80s, but the recovery of foreign bills in the 1890’s outpaced that of inland bills. The peak of this recovery was in the first decade of the 20th century Nishimura (1971) p 25, table 15

²⁸ Lindert (1967) p 26

²⁹ Lindert (1969)

³⁰ Marcuzzo and Rosselli (1991) p 69

³¹ Bloomfield (1963) p 36-7

bills. Such financing created short-term claims on importers without necessarily creating a counterpart short-term foreign liability³². Sterling bills, routed through the London, for example, financed USA's trade with Europe.

With the acceptance of the bill as a medium of international transactions and for the financing of international trade, and the role of the bill market in financial intermediation was extended internationally. The beginnings of the role of the bill of exchange in financial intermediation, internationally, can be discerned here. The London discount market became an integral part of the international monetary system. This reflects not merely the greater use of bills to finance external trade, but more importantly, the greater deployment of bills as a mechanism of international borrowing. Money market instruments came to be used for foreign investment of short-term funds and reflected the international movement of capital³³. These included interest-arbitrage operations at initiative of lenders who transferred liquid funds to London in order to profit from the difference in yields³⁴. For instance American bankers borrowed on finance bills in spring when the dollar was weak, and repaid debts later in the year when the dollar had strengthened, garnering huge profits in the process. In this sense, the bill on London had evolved from being a medium of exchange representing an actual mercantile transaction, to become a financial instrument, a 'means of payment' mediating international relations of credit.

Such 'finance bills' would be more sensitive to the interest rate rather than the volume of trade³⁵. The volume of finance bills decreased when the London discount rate was high, and the higher bank rate induced repatriation of funds employed abroad. The boom of 1906-7, for instance, prompted speculators to draw bills on London where the rate of interest was higher. In the slump of 1908 -9, the reverse happened and fewer bills were drawn on London³⁶. Thus an increase in the discount rate (if not offset by corresponding increases elsewhere) could be used to induce capital inflows by 'contracting the outstanding volume of London's acceptance and other short term claims on the rest of the world; by attracting liquid foreign balances seeking temporary investment in London; by stimulating arbitrage operations in securities quoted in London, by delaying flotation of securities in London; and through the transfer abroad of previous

³² Unless the exporter (or the exporter's bank) held the bill till maturity or foreign investors purchased it on the London market)

Bloomfield (1963) p37

³³ Bloomfield (1963) p 38. Some 60% of bank acceptances outstanding in the London market in 1913 were estimated to comprise finance bills.

³⁴ Bloomfield (1963). Such transactions were perceived to be without any exchange risk since this risk was perceived to be negligible.

³⁵ Nishimura (1971), p 66. The predominance of 'finance bills' rather than commercial bills is revealed in the negative correlation of the volume of bills to the interest rate.

flotation'³⁷. The short run impact of changes in Britain's discount rate on the payments mechanism hinged almost exclusively on the capital movements it engendered.

In no other country did the change in discount rate have such an immediate or profound impact. This stemmed undoubtedly from London's developed institutional money market, the confidence in the pound as a currency of unquestioned convertibility, and Britain's dominant role in international trade and finance³⁸. The scale of acceptance financing by London markets was unrivalled³⁹. Through the gold standard period about 60% of world trade was financed through sterling bills and about £4000 million worth of long term securities were taken up from foreigners by this market, between 1860 and 1913⁴⁰. The development of these internationalized capital and money markets depended on the growth of an international banking system centered on London.

While the pattern of capital flows was, in general, conducive to adjustment, the period was not immune to "disequilibrating movements, destabilizing exchange rate speculation, capital flight, inadequacy of reserves and a high volume of international indebtedness"⁴¹. What is remarkable is that while a predilection for destabilizing 'hot money flows' was present in this period, such episodes did not threaten the convertibility of the currency of the leading countries in the European center.

The countries on the periphery, however, did not display a similar pattern of smooth adjustment and experienced perverse capital movements, convertibility crises, devaluations and terms of trade fluctuations⁴². A sudden rise in interest rate in London could attract short-term funds from countries that had been in a balanced position, precipitating a drain of reserves. Such liquidity crises occurred for example in Argentina during the 1890 Barings crises, Brazil in the 1890's and again when Australian land company bubble burst in 1893. The dollar too, was subject to speculative attacks in 1893-96. These crises were aggravated by the sudden withdrawal of British deposits⁴³.

³⁶ Nishimura (1971)

³⁷ Bloomfield (1969)

³⁸ Bloomfield (1969)

³⁹ France and Germany had also risen as reserve centers and also attracted liquid funds. However, while the franc and mark outweighed the sterling on the continent, outside the continent the practice of keeping sterling reserves was prevalent and the sterling reserves outweighed reserves of marks and francs together. The sterling was the leading currency for instance in Asia and Africa. Lindert (p 17, 18, 25)

⁴⁰ Williams (1968) p 268

⁴¹ Bloomfield (1969)

⁴² Triffin (1964), Ford, (1956, 1960) Fishlow (1985). The different experience of the core and periphery has been explained in terms of absence of a credible commitment mechanism in these countries. Bordo and Schwartz (1999)

⁴³ Bloomfield (1969), Fishlow (1985)

The hierarchical structure of international capital markets and credit relations, and the asymmetric nature of the Britain's ability to manipulate short-term capital movements are critical to the explanation of the mechanism of adjustment under the 'international gold standard'. The emergence of the Bill on London as a source of international liquidity cannot be understood without exploring the institutional structure of the credit relations underpinning Britain's relation to its empire and to primary export producers in the 'periphery'. The privileged position of the well-developed London markets at the center of the web of international transactions resulted in a pattern of settlements that was to a significant degree denominated in sterling, permitting the accumulation of sterling to meet debt obligations.

The Imperial system and the gold exchange standard

The international gold standard can be seen as the product of the British Empire⁴⁴. Heightened international competition and the erosion of Britain's ability to penetrate the markets of Continental Europe and USA were compensated by increased exports to the countries in the Empire. At the same time countries in the British Empire, in particular India, bore a surplus with Continental Europe. The interconnecting network of multilateral trade, revolving around England, whereby it financed its deficits with USA and Continental Europe through the surpluses of the empire with these countries, became crucial to the stability of the system.⁴⁵

Thus imperial relations allowed England to "look with equanimity at her loss of competitiveness on the world's free markets for industrial goods as she kept control over the world's raw material markets and the empire generated enough financial flows to serve as raw material for the City's intermediation capacity..."⁴⁶. The triangular pattern of international settlements played a pivotal role in preserving Britain's domination of the international monetary system.

On the one hand, countries bearing a trade surplus with Britain ran up sterling balances in London so that the adverse impact was offset by short-term capital flows. Thus Britain's deficits with Europe and North America were financed to a significant degree by the formal creation of sterling claims on London. Britain's surpluses on the other hand were with countries in its Empire where the banking system was largely British, and where the bulk of transactions of the empire were centralized in London. Surpluses with its empire were financed by extending credit, but also

⁴⁴ De Cecco (1984)

⁴⁵ Saul (1960)

⁴⁶ de Cecco (1984)

by receiving gold on a large scale from the producing countries.⁴⁷ Further as a consequence of the pattern of the empire's transactions with the rest of the world, UK tended to increase its claims on the empire in the form of sterling balances.⁴⁸

The international transactions of the British imperial system attracted non-empire business and countries outside the British Empire countries also began to settle debts between themselves in sterling. Europe for instance held balances in London to clear deficits with countries of Empire and Latin America. Thus, in this period the pattern of settlement of international debt of Empire centralized in London and bilateral clearing arrangements were transformed into a multilateral clearing mechanism⁴⁹.

Britain in the pursuit of its role in financial intermediation maintained the balance between short-term indebtedness and long-term credit through these patterns of triangular trade. The system would function smoothly as long as short-term creditor countries had confidence in sterling. In practice such confidence was sustained by the fact that outside Western Europe and North America, British commercial banking was the dominant element in the financial systems internationally⁵⁰. However, the banking system in North America also indirectly relied on the London money market to ease seasonal liquidity constraints.

It has been shown that the practice of augmenting reserves with convertible foreign exchange was prevalent in the pre-war world and the gold standard was in fact a 'gold exchange standard'.⁵¹ India, Japan and Russia together held 60% global total of foreign exchange reserves.⁵²

The origins of this system lie in the period of the depreciating silver currency. As a result of this crisis, currencies that were tied to silver came to be stabilized in terms of sterling and gold

⁴⁷ Gold produced within the empire, was also sold in London for sterling, and then, in large part re-exported by the England. Williams (1968)

⁴⁸ The surplus of countries in the empire with Continental Europe was held as sterling deposits in London. Further a bulk of the trade between the Empire countries and Continental Europe was financed through sterling bills. Williams (1968) p 285-6

⁴⁹ Williams (1968) p.286

⁵⁰ Williams 1968) p 271 With the extension of British banks into domestic banking business overseas, British banks controlled about one third of deposits in Brazil, over a quarter in Argentina and Chile in 1914. Colonies and dominions were even more heavily dominated.

⁵¹ Lindert (1969) p. 18 Again, while sterling was the primary reserve it was by no means unrivaled as a reserve currency especially in Europe. Russia for instance held its reserves in marks or francs. Russian government manipulated accounts between France and Germany, wielding the convertibility of their liquid funds as a financial weapon. However in the both the Barings episode and the 1907 crises it was marshaled into serving the London market. Bloomfield (1969; p 13) also notes a sharp increase in the aggregate of official balances which increased from \$60 million \$130 million between 1880-1899, further rising to about \$ 1 billion in 1913 largely as a result of accumulation by these three countries

at the turn of the century. Sterling reserves, which were perceived to have zero risk, acted like a second line of defense that protected the gold reserves of countries that had vulnerable payments position. Long-term debtors equipped themselves with short-term creditor positions in order to defend their parities⁵³.

Countries of the empire, including India, Malaya, Ceylon, Siam and the Straits settlements all came to adopt some form of the gold exchange standard, holding external assets to the full extent of the local currency issue while maintaining external convertibility⁵⁴. The system ensured the control of currency issues through fiduciary backing in the form of foreign exchange. At the same time it imparted a greater elasticity to the sterling system as a whole and facilitated credit expansion as long as the financial centre in London did not regard the increase in liquid claims owed to foreign long-term borrowers as a reason for contracting its own credit superstructure.⁵⁵

The experience of India, the holder of the largest balances within the empire, reveals these mechanisms. At the end of the monetary vicissitudes of the last two decades of the nineteenth century, India emerged as best known pre-war manager of a gold-exchange standard after 1899⁵⁶. The slump in silver prices in the 1870's, threatened to jeopardize the fiscal management of the remittances that had to be made under 'home charges'. The proposals to initiate gold circulation were effectively preempted, and instead about half of British India's reserves were placed in London after 1899, in the form of the Gold Standard Reserve. These reserves provided an important buffer for British monetary authorities to maintain Britain at the helm of the international monetary system⁵⁷. Rather than relying solely on the mechanisms of gold arbitrage to keep exchange rates within permissible limits, the colonial government in India maintained the parity of the rupee currency by resort to the official sale and purchase of sterling against local currency.

Indian trade surpluses continued to grow between 1900-1914. The colonial government had to ensure that India absorbed £40-60 million worth of British financial instruments annually in order to prevent the transformation of trade surplus into gold reserves. In 1902, the gold standard reserve was changed into government securities. After the 1907 crises, money from the

⁵² Lindert (1969) p 13

⁵³ Bloomfield (1969), Lindert (1969)

⁵⁴ The currency board established in West Africa in 1912 is another form in which the local currency was stabilized by tying it to sterling.

⁵⁵ Williams (1968), Kindleberger (1985,1996)

⁵⁶ Keynes([1913],1971)

⁵⁷ de Cecco (1984)Ch 4

gold standard reserve came to be placed at call with London finance houses⁵⁸. The council bills arrangement was deployed as a means by which the trade surpluses of India were made to serve the imperatives of Britain's management of the international monetary system. In fact, between 1904-10, the sale of council bills far exceeded the Indian colonial government's actual requirements of gold for its British payments.⁵⁹

The Bank of England managed the India Council's substantial balances to serve its own ends. In 1890, during the Baring crises it directly squeezed money market by coming to arrangements with the India Council. In the course of the Boer War, the depleting reserves of the Bank of England were protected by transforming India's trade surpluses into sterling securities, rather than letting the country run up its reserves.

Dependence on the London markets for credit was an important determinant of the extent of official exchange holdings. The British possessions in Africa, Asia and Australia held \$150 million dollars in deposits in London of which Indian deposits alone comprised \$136.3 million.⁶⁰ Non-colonial borrowers in London capital market were required to keep a share of the proceeds as sterling. Thus for instance Brazil kept its official balances with Rothschild in London while Japan's reserves were kept with Yokohoma specie bank in London⁶¹.

Japan's large foreign reserves arose from the convertible-sterling indemnity it extracted from China after the Sino-Japanese war in 1895, and later from its borrowings to finance the war with Russia in 1904-5. Part of the reason for holding these reserves as sterling balances might have been politically motivated⁶², and there is evidence of Anglo-Japanese cooperation for instance, when the Japanese government agreed to hold deposits in the Bank of England when the Bank was trying to squeeze the market.⁶³ Again, the Bank of England could exploit its position as the Banker to the Government of Japan, which had exceptionally large balances.

There is also another aspect to Britain's position in the web of international transactions. Britain was the leading source of foreign investment globally, accounting for about 60% of total

⁵⁸ de Cecco (1984) p 71. These placements entailed capital losses in face of declining prices of British securities and a further skimming of profits as funds borrowed at 2% were reinvested in London at a higher rate of 3%

⁵⁹ De Cecco (1984) p 74-5; Keynes ([1913]1971)

⁶⁰ Lindert (1969)

⁶¹ Lindert (1969), p28. The Government of Japan's sterling balances amounted to \$101 million while the Yokohama Species Bank balances were about \$86.8 million.

⁶² The political compulsion included the need to guarantee Japanese presence in Korea and as a counterpoint to Russian expansion in the far east

⁶³ Lindert (1969) p 32

foreign investment in 1914⁶⁴. 40% of British savings (about 10% of its GDP) were invested overseas, four years before the War⁶⁵. About 35% of these market-oriented investments went to North America, followed by the primary exporting countries of Latin America (18%) and Oceania⁶⁶. Largely directed to railroads and infrastructure these capital outflows from Britain increased exports and debt service payments, creating a countervailing inflow. The increasing flow of capital exports was also used to induce foreigners to accumulate sterling in order to meet debt obligations.

The banking systems of the primary exporting countries on the periphery were more fragile and vulnerable to disturbance. Through this period, Latin American countries of Argentina, Brazil, and Chile were forced to suspend convertibility and allow their currencies to depreciate⁶⁷. The asymmetry in the adjustment mechanism between the leading financial centre, Britain and the debtors in the periphery arises from their differential pulling power⁶⁸. While the international financial capital was sensitive to changes in the interest rate in the Britain, a higher interest premium would be required in peripheral countries in order to attract capital. Thus a tightening in the financial centre in London during a crisis could be transmitted to other leading centers, sparking of a deflationary spiral. However, the ability to draw a sufficiently large inflow from the peripheral countries would impart a greater resilience to the adjustment mechanism.⁶⁹ While on one hand Britain recycled liquidity to the periphery through capital outflows, it could also by sharply curtailing investments and lending, redistribute the real burden of adjustment to the periphery during times of crises.⁷⁰

British solvency thus was bolstered by loans that could be reduced at short notice by raising the interest rate. With the increasing role of foreign deposits in London market, debt could be cleared through fluctuations in sterling balances held by foreign banks in London⁷¹. Finance houses in London were in a unique position of being able to shift capital domestic and foreign markets. The privileged position of Britain in these multilateral clearing mechanisms that financed the triangular patterns of settlement of Pax Britannia, allowed increased short-term

⁶⁴ France accounted for 22% of foreign investment flows. Fishlow (1985) p392

⁶⁵ Foreign investment which was \$480 million in 1890 declined to \$110 million by 1898 rising after that to amount to an average of \$850 million a year between 1906-13 about 10% of national income, to peak at \$110 million in 1913. Triffin (1964)

⁶⁶ Fishlow (1985) p 394. Capital imports accounted for up to a third of investment in Australia, Canada, Argentina and Brazil in this period

⁶⁷ 'Peripheral' European countries - Italy and Portugal also suspended convertibility during this period.

⁶⁸ Gallarotti (1999), Lindert (1967)

⁶⁹ Lindert (1967) p 47-50

⁷⁰ Ford (1962), Lindert (1967) p 52

⁷¹ de Cecco (1984) p 52

indebtedness to Europe, while at the same time advances and discounts granted by overseas banks were raised, thus fuelling international liquidity.

The experience of the Barings crises brings out this mechanism quite clearly. The crises for the London financial markets was brought about by the threatened collapse of the leading financial house the Barings Bank due to overexposure in Argentinean markets. Argentina had witnessed an influx of about £140 million between 1885-90, as British investors took up significant proportion of land mortgage bonds, apart from direct investment in Argentine enterprises and estates fuelling a speculative boom. The unraveling of this boom after the failure of the Buenos Aires water supply loan precipitated a crisis for the leading British Bank, Barings, leading to an immediate drop in capital inflows⁷². Britain had hiked up the interest rate from 4 to 6% at the beginning of 1890 sharply increasing debt service costs. Debt service charges at 60 million gold pesos were more than 40% of the Argentina's export earnings, and loan repayments were fixed in terms of sterling/gold⁷³. The ensuing banking crises affected most of Argentina's banking system and capital inflows resumed only at the turn of the century⁷⁴. The repercussions for Barings and the London financiers were less severe⁷⁵.

In marked contrast to the response to the collapse of Overend and Gurney in 1866, Bank of England spearheaded a bail out action for the orderly bail out of Barings in 1890 through 'a collective guarantee'. A noteworthy aspect of this bailout was the manner in which the Bank of England garnered a private fund of £18 million from the leading financial houses and a joint stock banks. The Bank of France lent £ 3 million and the Government also procured gold guarantees in the form of sales of £1.5 million worth of treasury bonds to Russia of treasury bonds⁷⁶. The Bank rate that had been hiked from a pre-crisis low of 4 % remained at 6% through the crises. The British government also sought the cooperation of India Council, which called in loans made in the market and lent the money to the Bank⁷⁷. The 1890 arrangements made for the liquidation of Barings were used to 'stiffen the market'.⁷⁸ The surge of lending through 1886-90 when British

⁷² From £23 million in 1889 new issues in London on behalf of Argentina dropped to £ 12 million in 1890 and service charges began to exceed foreign borrowing

⁷³ Ford (1956) p 134, Eichengreen (1997)

⁷⁴ Eichengreen (1997)

⁷⁵ As Eichengreen (1997) points out, the bailout of Barings was prompted by fears for the stability of financial markets in the first world and not the third.

⁷⁶ Sayers (1956) p 102 Eichengreen (1996) p34

⁷⁷ de Cecco (1984) p 41

⁷⁸ Sayers (1956)

foreign issues rose from £75 million to £139 million, came to abrupt halt in 1890, dropping to £31.5 million in 1893.⁷⁹

It is evident that in both these episodes, London tapped funds of the credit surplus countries in order to perform the function of a lender of last resort. The creation of liquid liabilities in the form of sterling bills, and long term lending were integral to financial intermediation. This special position also allowed Britain to ignore growing payments imbalances and postpone domestic adjustment.

Summing Up

This then is the institutional context of the British financial system at the time the international gold standard was established. The mechanisms of international finance that evolved in this period were based on London, and the joint stock banks played a critical role in creating and recycling liquidity. The Bill on London was transformed from an actual mercantile transaction to a purely financial instrument. A credit pyramid was created on the basis of the reserves with the Bank of England.⁸⁰ Sterling thus came to take on the mantle of an international currency, with the use of gold in the settlement of international payments becoming increasingly less important⁸¹. And thus, a relatively small stock of gold reserves with England, and comparatively small actual transfers of gold were able to support the massive growth of trade and capital flows through this period⁸². Even though the pound was convertible to gold, England managed to calibrate international movements of gold while keeping relatively small gold reserves, through movements of its discount rate.

The growth of international liquidity in this period was not constrained by the growth and distribution of gold reserves. Britain in the pre war period acted as the international lender of last resort, and injected liquidity by borrowing short and lending long⁸³. However the efficacy of this mechanism hinged on the ability of the London markets to draw short-term capital flows and stem the efflux of capital in the face of growing trade deficits and dwindling reserves.

London's ability to 'as a lender of last resort' was based on other countries willingness to hold pound liabilities. The international monetary system in 'gold standard' period was in general

⁷⁹ Bloomfield (1969) p 229

⁸⁰ de Cecco (1984)

⁸¹ However, as Lindert (1969) and Bloomfield (1969) have shown the gold reserves remained significant internationally. The 'metallic barrier' in this sense was not fully transcended.

⁸² The role of 'concentration' in keeping such reserves down to a minimum also has a bearing in this context.

⁸³ for instance England's role in the 1907 crises in the US

able to weather the crises that did erupt, relatively painlessly, and without impairing the overall mechanism or threatening 'convertibility' at the center. These include the Baring's crises in 1890, the impact of the Boer War (1902) and the crises of 1907. The Bank of England employed a variety of means, to squeeze the money market alongside an increase in the bank rate⁸⁴. While borrowing from the market was one method, the Bank of England when faced with the threat of a gold drain, was also able to borrow from 'special depositors', in particular the Governments of India and Japan.

The 'imperial system' played a critical role in sustaining the dominance of the pound in the gold standard period, by providing a critical source of surpluses which were recycled to London when countries like France proved less willing to provide the necessary cushion.⁸⁵ There was a shift in the pattern of exports towards countries in its empire, which tended to bear surpluses with Continental Europe. The pattern of triangular trade financed primarily by sterling bills became crucial to the stability of the system.

In fact the instability of the interwar period, and the ill fated attempt to restore the 'gold standard' reflect the contradictions of the system based on the ability of London to preserve the dominance of the pound in the face of the growing deficits of UK, and the unraveling of imperial hegemony. The problem stemmed not so much from the return to a gold exchange standard, but the undermining of the international financial mechanisms based on sterling liabilities. The erosion of Britain's imperial hegemony is critical to this explanation. The crises did manifest itself, however in an increased demand to convert sterling reserves into gold in the context of the volatile exchange rate fluctuations of this period. It is in this sense that the sterling financial edifice displayed a tendency to collapse back to a metallic basis, until England suspended convertibility in 1931⁸⁶.

BRETTON WOODS AND AFTER: THE DOLLAR STANDARD

Establishing the Dollar Standard

The turbulent inter war period was marked by the deleterious trade wars, the downward spiral of competitive deflation and devaluations, destabilizing capital flows and the unsuccessful attempt to resurrect pre-war gold standard. These underscored the fragility and contradictions of the international monetary system. Britain's position was considerably weakened and it was facing significant payments pressures. War-ravaged Europe was dependent on US imports for

⁸⁴ Sayers (1970)

⁸⁵ de Cecco (1984)

⁸⁶ Block (1977) p 124

reconstruction and the significant US current account surpluses buttressed the growing dominance of the dollar in international settlements⁸⁷. USA emerged from the Second World War with substantial reserves of gold and as the leading creditor in the international arena.

However, in order for the dollar to play the role of the dominant currency the critical problem of the dollar shortage had to be solved. As the principal surplus country USA would need to impart liquidity to the international monetary system, by taking on the role of financial intermediation that had underscored London's role in the Gold standard period. In the immediate aftermath of war the US was not yet in a position to don the mantle of this international role.⁸⁸

The Anglo-American negotiations leading to the Bretton Woods conference and the parallel debate around the terms of the British loan with the cessation of the Lend-Lease reflect the tensions and contradictions of reshaping the international monetary system⁸⁹. Britain was integral to the US project of rebuilding the multilateral trading system while alleviating the problem of international liquidity.

The Bretton Woods negotiations sought to weld a new international monetary order under the joint initiative of England and USA. White's initial proposal of the 'International bank and stabilization fund' and Keynes plan for an 'international clearing union' proposed to solve the problem of international liquidity and adjustment by generalizing the principle of banking to the international arena and thereby also get rid of 'the shackles of gold'. The international credit arrangements could thus accommodate adjustments without significant deflationary impact as excess balances of the surplus creditor country, instead of being withdrawn as hoards or reserves would be deployed to ease the adjustments of the deficit country. The substitution of a 'supranational' credit mechanism in place of hoarding in the international arena would thus fuel international expansion. White's proposal for international liquidity in the form of the 'unitas' was based on the 'subscription principle', with loans being granted out of subscribed capital. In the more expansionist Keynes Plan, liquidity in the form of the 'bancor' arose through the creation of overdraft facilities. Keynes also differed with White on his insistence on the principle

⁸⁷ By 1947 US was providing a third of the world's exports while absorbing only a tenth of world imports. Scamell (1985) p. 22 Further, Western Europe's import surplus with Eastern Europe had been wiped out increasing its dependence on the US

⁸⁸ See Block (1977) for the pressures and conflicts underpinning the evolution of US international policy. Britain's economic weaknesses and America's inability to use its economic power to bolster the international economy" interwar years

⁸⁹ Gardner (1969)

that the onus of adjustment should lie on the surplus or creditor country and on the ease of access of deficit countries to credit.⁹⁰

The actual outcome of the conference was different from the conceptions of both the Keynes and the White plans. In particular the 'Fund' with its modest quotas and drawing rights did not have resources to deal with the post war transition. This implied that the dollar was the only usable currency in the Fund. Thus, the Keynesian vision, that of enlarging the international monetary base by creating a fiduciary asset that was free of the constraints of 'national' politics, failed to be realized⁹¹. The post war world was marked by the emerging dominance of the US dollar as a key currency⁹². With an excess demand for dollars internationally, the burden of creating liquidity rested on the dollar. The international dominance of the dollar in the multilateral clearing mechanisms, however, would require the establishment of the dollar convertibility.

The disruptive impact of capital flight on national policy autonomy had been experienced the international financial crises of the inter war years. This fostered in the post war period a climate of opinion endorsing the need for capital controls. Recognizing the immense difficulties of controlling capital flows both Keynes and White proposed comprehensive capital controls involving both current and capital account transactions and the cooperative enforcement of controls at both ends of the transactions to render such controls effective. There was however strong opposition to the restrictive financial provisions of the Bretton Woods agreement from the New York Bankers. This opposition stemmed from the erosion of the profitable business of receiving capital flight from Europe and, more importantly, the possibility that London could use exchange controls to preempt the ascendancy of the dollar in the international monetary system. Capital controls were incompatible with establishing the dollar as the dominant international currency.⁹³

IMF articles of agreement mandated the restoration of convertibility on current account while authorizing countries to retain controls on capital account. But unless Western Europe's difficulties in earning dollars were resolved, the threat of a resort to exchange controls and bilateralism to curb the rising deficits with the US would remain.

⁹⁰ White's plan did make a concession to the principle of creditor adjustment in form of the 'scarce currency clause'.

⁹¹ In the Savannah meetings in 1946 the US pushed through its proposal for having the head office of the IMF, with full time directors in Washington rather than in New York near the UN. Further the US representatives ensured that the National advisory council had veto power.

⁹² The dollar pegged to gold while other currencies were pegged to the dollar

⁹³ Helleiner (1994) p 39-48

The US strategy to restore a multilateral clearing mechanism and address the constraints on international liquidity posed by the 'dollar shortage', was initially built around restoring sterling convertibility. The focus was on compelling Britain to dismantle the system of imperial preference and the dollar pool arrangements that had been instituted in the inter-war period. The dollar pool arrangement that required the countries of the sterling area to deposit dollar earnings with London, was regarded as discriminatory. With these obligations enforced, Britain would once again be at the centre of the multilateral clearing mechanism with the sterling becoming the channel through which the dollar hunger could be sated. Sterling financing of trade within Western Europe and between Western Europe and the sterling area would allow the re-emergence of multilateral trade relations and ease the pressure for dollar. The US would be able to evade the need to extend unlimited dollar credits or bear the whole burden of adjustment in the post war transition to convertibility. This was the essence of the 'Key Currency Plan'⁹⁴.

The terms of the British loan of \$3.75 billion, in particular the reaffirmation of contentious Article VII and the provision that convertibility had to be restored within a year of drawing on the loan,⁹⁵ were geared to this imperative. The large overhang of sterling balances of about \$14 billion did, however, pose a problem to the efficacy of a multilateral system that hinged on sterling convertibility as shield for the dollar⁹⁶. With the launch of sterling convertibility on current account in 1947, Britain faced a growing dollar deficit. Payments problems were aggravated by an annual dollar drain of about \$11 billion⁹⁷, through capital account conversions in countries that held sterling balances. The ensuing crises exhausted the loan. Britain was forced to institute tight exchange controls within six weeks, with repercussions across Europe. The repeated requests by Western European countries for US assistance in curbing the flight of capital from Europe to the US Banks were opposed, in favor of maintaining free convertibility of the dollar⁹⁸.

The failure of sterling convertibility in 1947 underscored the full dimensions of the burden of international adjustment. The State-Navy-War Coordinating committee warned in 1947 that the world would not be able to buy US exports at the same rate, with potential depressing

⁹⁴ Helleiner(1994) p 42, 52-8; Block(1977) p 52-3, 56-8, 62. Britain was to be in a position that was weak and dependent (with respect to the US) but with a payments position of sufficient strength to help finance European trade

⁹⁵ This was a reduction from the five-year transition period allowed for in the Bretton Woods agreement.

⁹⁶ Under White's Plan there was a proposal for 'blocked sterling balances' that however failed to be adopted. The Loan agreement sought to prevent the use of the loan proceeds to liquidate these balances

⁹⁷ Block (1977) p 239 fn 34

⁹⁸ Helleiner (1994) p 55-7 In 1947 the amount private assets in US held by W. Europeans was estimated to be around \$4.3 billion

effects on the US economy⁹⁹. Means had to be found for Western Europe to finance the US export surplus, while improving European competitiveness in order to enable enough dollar earnings to balance trade on a multilateral basis.

The undertaking of the Marshall plan for European recovery in 1948 was recognition of the inadequacy of the stabilization loans and the larger scale of assistance that was necessary to achieve the 'transition' to a stable multilateral order. The geo-political imperatives of 'containing' the Soviet Union with the intensification of cold war and the enunciation of the Truman doctrine also undermined some of the resistance in the US, to bearing the costs of international adjustment by providing offsetting financing¹⁰⁰. Marshal Aid is also linked to the problem of European capital flight. It has in fact been argued that this aid in effect served to provide an alternative for the US failure to institute controls on the inflow of hot money from Western Europe.¹⁰¹

By the end of the second year of the Marshal plan there were indications of the transient nature of the resolution that the Recovery program provided and of the possible need to extend the aid beyond the initial four years.¹⁰² These fears were accentuated by the recession in the American economy and the worsening of the position of the pound with the decline in England's dollar earnings. The 1949 sterling crises, when the pound fell by as much as 30% set off a chain of devaluations in other OEEC countries. While the US had been urging currency realignment as a prelude to convertibility in Europe¹⁰³ the resultant tensions in the OEEC, along with the shelving of the proposal for the International Trade Organization, raised the threat of a collapse back to bilateralism.¹⁰⁴ The establishment of the European Payments Union (EPU) in 1950 was a reflection of the priority given to the need for expansion and integration over that of restoring convertibility.¹⁰⁵ Instead of the hasty move to convertibility that was entailed in the Bank of England proposal 'Operation Robot'¹⁰⁶, liberalization of intra-European transactions was to serve the longer-term goal of multilateralism.

⁹⁹ Block (1977) p 82

¹⁰⁰ Block (1977); Helleiner (1994). Note also that the IMF was not, at this time, allowed to finance deficits arising from capital flight.

¹⁰¹ Helleiner (1994) p 59

¹⁰² Block (1977) p 91-3

¹⁰³ de Cecco (1979) stresses the critical role of the US treasury in 'talking down' the pound and forcing devaluation; though as Helleiner (1994) points out the role of the US state was more ambiguous. Also Block (1977)

¹⁰⁴ Block (1977) p 93-6

¹⁰⁵ Eichengreen, (1996) p 107 remarks that the EPU was both an elaboration and a departure from the Bretton Woods model. It was essentially a device for credit creation to finance intra-European trade but the pressure of adjustment was solely on the deficit country.

¹⁰⁶ Helleiner (1994) p 69-70

The imperative of ensuring that the region did not evolve into a monetary area insulated from the dollar area by permanent controls, remained a pressing dilemma. The outbreak of the Korean War and the domestic thrust to rearmament within the US formed the context for a transformation of the character of loan assistance to that of military aid. Military aid provided Europe with means of financing imports from the US after the Marshall plan had lapsed. It would also be the lynchpin of the US strategy to cement ties with Europe so that European regionalism developed in consonance with US interests.¹⁰⁷

On the Japanese front, the US initiated the Dodge plan in 1948, which imparted an expansionist thrust to Japan, while being accommodative to its restrictive financial regime and the centralized government control over international transactions. The Korean War and USA's emerging stakes in Indo-China gave a further fillip to the inflow of US aid into the region.

The above account shows, how within the Bretton Woods system initially foreign investment, aid and transfers to Europe and Japan fuelled international liquidity. The major portion of the loans was spent on US imports. The post war reconstruction of Europe and Japan under the Marshal and Dodge Plans, followed by the economic and military aid by USA, helped stimulate industry and exports in these economies, and these countries gradually began to accumulate reserves. This mechanism of offsetting capital flows underpinned the emergence of the dollar as an international reserve currency. The international monetary system under the Bretton Woods System was dependent on the dollar for its incremental liquidity needs and the US was able to inject international liquidity while retaining its net creditor status in the fifties and sixties.

Throughout this period of post war transition, the newly created IMF institution played only a marginal role. The IMF initially conceived as an instrument to facilitate expansionary national policies, was refashioned into a means to impose deflationary discipline asymmetrically on debtor countries. The scarce currency clause was supposed to ensure adjustment by the surplus country and once Europe completed recovery, liquidity needs were to be supplied by IMF quotas. Instead, conditions for drawing on the IMF were made progressively more stringent than those outlined in the Articles of Agreement. Recipients of Marshal Aid were denied access to drawing on the IMF, increasing the leverage of the US by cutting off access to alternative sources of liquidity. Article V was re-interpreted to give the Fund greater leeway in rejecting member countries' 'representations' to need currency while the provisions for repayment of fund drawings were made stricter. Drawings on the Fund in fact fell from \$467 million in 1947 to zero in

¹⁰⁷ Block (1977) p107-8;113-119

1950¹⁰⁸. Proposals to liberalize and expand IMF resources, in order to enable it to play an anti-deflationary role through counter-cyclical reserve flows, were thwarted. Thus the IMF was effectively distanced from the postwar payments problems.

Instead, as we have recounted, the dollar solidified its international status¹⁰⁹. The control over sources of international liquidity also enhanced the desirability of dollar denominated capital flows, paving the way for American private foreign investment resolving the problem of the dollar gap. It was towards this end that various incentives, including tax subsidies, exchange guarantees and insurance schemes were provided to private foreign investment.¹¹⁰ Finally, with the dissolution of the EPU and the restoration of convertibility (on current account) in Europe in 1958, the US attempt to forge an international monetary order pegged on the dollar was brought to fruition. Japan followed suit by liberalizing albeit on more restrictive terms through the sixties, and was included in the OECD in 1964.

Deficits and the problem of capital outflows

The stimulus to private capital flows with the restoration of European convertibility and the beginning of European economic integration was the means by which the US sought to finance its surplus. However as Europe and Japan emerged as competitors to US industries the US current account balances began deteriorating through the sixties¹¹¹. The outflow of dollars did not fuel a demand for US exports or an equivalent return flow from investment incomes¹¹². The attempts to improve its trade surplus by enforcing tariff reductions through the revived GATT negotiations and the Trade Expansion Act of 1962 did not make much headway. Military and economic aid continued to strain the US balance of payments, while the surge of private foreign investment, which had also been fostered by the state as a solution to the problem of dollar liquidity, now caused a drain of capital.¹¹³ By 1960 this accumulation of short-term dollar liabilities exceeded its gold stocks and the possibility of a speculative run on the US gold stock posed a threat to the international payments mechanism. The dollar scarcity caused by US surpluses between 1945-55, had been transformed after 1958 into a dollar surplus spawned by the growing US deficit.

¹⁰⁸ Block (1977) p111-2; Eichengreen (1996) p 108-115

¹⁰⁹ A similar pattern of retaining control over international liquidity is seen in the US opposition, through the fifties, to the demand raised by South Africa and other countries to raise the price of gold thus enhancing non-dollar liquid reserves. Block (1977) p 112

¹¹⁰ Block (1977) p114

¹¹¹ From a surplus of \$ 1-2 billion in the mid sixties to a deficit of the same magnitude in the early 1970's

¹¹² Block (1977)

¹¹³ Block (1977) p 171-3

The option of devaluation was not, strictly speaking, available to the US, but there was a significant pressure to raise the dollar price of gold, particularly once the London price of gold shot up to \$40/oz in 1961¹¹⁴. Instead of raising the dollar price of gold, the US state, however, resorted a variety of expedients that would facilitate adjustment with minimum domestic strains.

One of the first initiatives was the London Gold pool established in 1961 whereby the central banks of by Britain, EEC and Switzerland and the US shared the burden of stabilizing the gold price by acting as a sales syndicate that would relieve the pressure on the gold market. The USA was able to wrest an agreement from the other central banks to refrain from converting dollar reserves and provide (or purchase) half of the gold needed to prevent a rise (or decline) in the gold price, thus easing the burden on US gold stocks¹¹⁵.

Again, instead of the orthodox response of raising domestic interest rates and squeezing domestic credit to attract capital the US adopted a more limited measure, 'Operation twist' in 1961.¹¹⁶ This operation which involved the purchase of treasury bonds and the sale of treasury bills, sought to attract short term funds and strengthen the US capital account by changing the term structure of interest rates, raising the short term rate while keeping the long term rate unchanged. The premise was that financial capital flows were responsive to short term interest rates differentials while domestic investment responded to the long-term rate¹¹⁷.

The disappointing outcome of this measure prompted policy efforts that concentrated on minimizing capital outflows¹¹⁸. Attention was initially focused on curbing long term foreign lending.¹¹⁹ These devices included the 1962 Revenue Act that eliminated foreign tax credits and required repatriation of profits earned abroad. The Interest Equalization Tax was imposed to discourage long term lending in 1963¹²⁰. After 1965, in step with the escalation of the Vietnam War, and its impact on the budget deficit and the worsening balance of payments, exchange

¹¹⁴ Realignment of currencies by raising the dollar price of gold would also require other countries to revalue their currencies with respect to the dollar, since rates were pegged to the dollar and not directly to gold.

¹¹⁵ Eichengreen (1999,2000); Scamell (1983) p 122

¹¹⁶ There was no interest on sight deposits and Regulation Q, which put a cap on interest rates on short-term deposits made the dollar unattractive.

¹¹⁷ Eichengreen (1996), Helleiner (1994)

¹¹⁸ Eichengreen(2000) , Helleiner (1994), Hawley (1987)

¹¹⁹ Helleiner (1994) p 85

¹²⁰ It was at first applied to all new issues of foreign securities and equity sold in USA and later extended to bank loans of a duration of more than a year and non-bank credit from 1 to 3 yrs in 1964 Exemptions were granted to Japan in return for the agreement that the central Bank would hold its reserves largely in dollars. Canada was granted an exemption on the agreement that it would not allow its currency reserves from rising above a certain limit.

controls were tightened significantly¹²¹. The introduction of the Voluntary Controls program in 1965, to discourage the export of capital by US banks and corporations also marked a shift away from 'market oriented measures', culminating in the mandatory controls announced in 1968 to quell the speculative run fuelled by the peak of the Tet offensive¹²². While there was some improvement in the credit balance as a result of these controls, the more direct effect was to foster more intensive efforts by US corporations to finance their investment on foreign markets¹²³.

In the face of growing deficits, the US also changed tack on the issue of international liquidity. The pound came to serve as a 'lightning rod' for international speculative pressures and a line of the defense for the dollar¹²⁴. A common Anglo-American interest in promoting international liquidity emerged, in particular after the 1961 sterling crisis.

This also led to a shift in attitude towards the role of the IMF. The relaxation of the terms of lending that prohibited IMF lending to finance 'large and sustained capital' under the Articles of Agreement, during the Suez crises in 1956, marks an important turning point in this context. The IMF was drafted in the rescue of the pound from speculative attack that threatened to deplete Britain's dollar reserves in the aftermath the nationalization of the Suez¹²⁵. USA was also able to use the promise of an IMF bail out to effect the ouster of British from the Suez, while minimizing its bilateral contribution to the rescue.

There followed a rise in fund drawings, which further stimulated demands for increasing IMF quotas¹²⁶. USA lent its support to a move to facilitate international adjustments through the mechanism of IMF borrowing with additional resources from member countries. The General Agreement to Borrow created a credit line of about \$6 billion from the quotas of ten countries¹²⁷. While the immediate context was the vulnerability of Britain through the sixties, providing a cushion for the dollar was the critical imperative¹²⁸.

The US had initially adopted a strategy of pushing for the expansion of IMF quotas while resisting the French proposals for creating an alternative reserve currency, the Composite Reserve Unit, CRU. Finally, in 1964 with the first amendment of the IMF articles, the US acceded to

¹²¹ Block (1977); Helleiner (1994)

¹²² Block (1977); Eichengreen (2000)

¹²³ Eichengreen (2000) p 24-5

¹²⁴ Block (1977) p185-9

¹²⁵ Boughton (2001) details the manner of IMF intervention at the time, in what he calls the first crises of the 21st century.

¹²⁶ Block (1977) p 113

¹²⁷ The countries included USA, the EEC, Sweden Japan and Switzerland and Canada. The Agreement did involve USA conceding a veto power to the contributing countries.

¹²⁸ The first borrowing was by Britain in 1964

French pressure, but with the provision that the scheme would be activated only when a ‘better working’ of adjustment process was in place. A new reserve asset, the Special Drawing Rights (SDRs), was created, in 1969,¹²⁹ though stricter repayment provisions muted the expansionary potential of the device. While providing some additional liquidity the SDR arrangements did not impinge on the dollar’s international role¹³⁰.

More flexible networks for offsetting financing outside the IMF, were created through the Bank of International Settlements (BIS) which reemerged after the War as the agent of intra European payments mechanism under the Marshal Plan and later the European Payments Union (EPU)¹³¹. After the 1960 crises, US representatives negotiated a series of short term credits and swap arrangements, through the Basle Club, under which Foreign Central Banks would lend currency or hold each others currencies, in support of existing rates and to offset speculative runs on the more vulnerable currencies¹³².

Thus, the American approach to issues of international liquidity and adjustment through this period was twofold. On one hand it sought to foster alternative ‘controlled’ sources of liquidity and offsetting finance to alleviate the pressure on the dollar while preserving the asymmetric dependence of the international monetary system on the dollar for expanding liquidity. On the other the pound had effectively been set up as the immediate focus of international speculative pressures providing a measure of protection to the dollar.

In effect, the US deficit was financed by increasing dollar liabilities held abroad. Since the 1960 dollar crises the US state had attempted to postpone adjustment by persuading foreign central banks to finance its external deficit by dollar holdings through a variety of means as discussed above. This suasion was often related to issues like US military expenditures. ‘Diplomatic’ pressure, for instance in form of the threat to withdraw the US troops stationed in Germany in the event of conversions of dollar holdings, was used to enforce “regime preserving cooperation”. By passing the burden of adjustment to the foreign central banks the US was able to adopt a posture of ‘benign neglect’ towards its deficits. Capital outflows exceeding its current account surplus through the sixties served to fuel international liquidity. It borrowed by running up short-term liabilities and lent long term, acquiring productive assets abroad.

¹²⁹ The first disbursements under the SDRs were made in 1969

¹³⁰ Eichengreen (1996) p 117-20 Block(1977) Helleiner (1994)

¹³¹ In fact the US was instrumental in forestalling the abolition of the BIS during the Bretton Woods negotiations

¹³² Swap arrangements were organized in support of the pound during the crises of 1961-and 1964.

However there was a growing discontent, voiced most strongly by the French government, that the US was exercising an “exorbitant privilege” as the issuer of a key currency and abusing its seignorage privileges. The persistent deficits were beginning to erode the willingness of foreign central banks to hold dollar liabilities.

The sterling devaluation in 1967 (followed by the franc in 1969), the upward speculative pressure on gold prices, and the contingent demands of financing the war in Vietnam brought the system to a crises point. With the sterling devaluation of 1967, the dollar was in a particularly vulnerable position. US pressure on foreign governments did little to curb the increasingly important private international financial operators.¹³³ The spurt of private gold purchases through the period undermined the Gold Pool arrangement, further undermining confidence in the convertibility of the dollar. Following the withdrawal of France, the US unilaterally renounced the support of the \$ 35/oz gold price for private transactions, creating a two tier gold market in 1968. This effectively forced foreign central banks to absorb dollars in order to maintain exchange rate parity while relieving the US of the need to sell gold from its stocks to prevent a rise in the gold price¹³⁴. But the arrangement became increasingly untenable as the price of gold rose above \$40 in the private market, and gold continued to flow out of US reserves.

Sections of the US regime had been promoting the expansion of private dollar investment, as an alternative to official channels as a solution to the problem of international liquidity¹³⁵. The imperatives of the growth of these unregulated private capital flows were increasingly at odds with the institutional edifice of the Bretton Woods system. The inadequacy of the prevailing financial arrangements for providing offsetting finance and the system of unilateral capital controls to contain speculative flight was evident as capital flew from the US to Western Europe, fuelling inflation in these countries. The mark and consequently other European currencies were revalued, France and Germany initiated moves to convert dollars holdings into gold, until finally in August 1971 the US government which had been resisting pressures for domestic adjustment, suspended gold convertibility¹³⁶.

The collapse of the Bretton woods system with the closing of the gold window in 1971, and the subsequent ‘floating’ of the dollar, however, did not result in the displacement of the dollar as the international reserve currency. It did however signify that the international monetary

¹³³ Eichengreen (1996, 2000)

¹³⁴ Eichengreen (1996, 2000); Block (1977) p 194

¹³⁵ Helleiner (1994).

¹³⁶ Helleiner (1994), Eichengreen (1996)

system, based on the holdings of dollar liabilities, had moved far beyond its basis in gold¹³⁷. At the heart of this process was the emergence of parallel, unregulated monetary mechanisms that had burgeoned through the sixties and gained a further fillip with the establishment of floating exchange rate regime in 1973. Through this volatile period the US government had also tried to harness speculative pressures to encourage foreign investors to absorb adjustment burdens, through expedients like a deliberate neglect of its deficit and talking down the dollar for instance in 1971. The US agenda for a post-Bretton Woods refashioning of the international monetary system as a 'pure' dollar standard was rooted in the aggressive pursuit of liberalized financial markets and the dismantling of capital controls, thus encouraging private international capital flows denominated in dollars.

Eurodollar Market and the Resurgence of International Finance

The unilateral capital controls instituted by the US after 1964, as the discussion in preceding section underlines, were not particularly successful in eliminating the balance of payments problem. They did however pave the way for the creation of the euro-dollar market constituted by dollar denominated bank deposit liabilities held in foreign banks or foreign branches of US banks¹³⁸.

The beginnings of the euro-dollar market can be traced to 1957 sterling crises that saw the instatement of capital controls, which restricted British banks' use of the pound sterling to finance trade between countries outside the sterling area. In an attempt to circumvent this restriction British financiers began to resort to offering dollar loans against their dollar deposits¹³⁹. The subsequent attempts by the US to correct its deficit through capital controls fuelled the growth of this market. American banks and multinational firms increasingly sought out the profitable Euromarkets, in the face of the US capital controls program of the sixties¹⁴⁰. Deposits shifted to the eurodollar markets and the off shore branches of US banks began borrowing from this market and repatriating the funds back to the US. American financial business was round-tripped through the Euromarkets to evade interest ceilings. US transnationals too, increasingly began to finance their overseas operations through this unregulated market. The Eurodollar market grew from \$9 billion in 1964 to \$145 billion 1971 and to 1.4 trillion in 1981¹⁴¹.

¹³⁷ Despres et al (2000[1966]) were at the time a 'minority view' arguing against the obsession with the dwindling gold stocks.

¹³⁸ Dufey and Giddy (1994).

¹³⁹ The Eurodollar market in London, also served as a politically expedient investment for the Soviet Union which preferred Eurodollar holdings to investing directly in the US.

¹⁴⁰ Dufey and Giddy (1994), Hawley (1980).

¹⁴¹ Helleiner (1994)

The diplomatic maneuvers of Smithsonian Agreement had created new currency alignments, but speculative attacks on the pound and a new run on the dollar alongside growing inflationary pressures soon began to rend the arrangements. The German-led move to float European currencies against the dollar in 1973 ushered in the regime of floating exchange rates.

With the tremendous growth of multinational corporations which could easily use leads and lags in trade payments and intra-firm transactions to move capital globally, the scope for rigid comprehensive controls of the sort suggested in the Keynes-White plans was limited. Attempts by Western European governments and Japan to push for instituting cooperative control at the Smithsonian meetings in 1971 and later in the meeting of C-20's Committee of Deputies were also thwarted by the US¹⁴².

A second set of initiatives was directed at controlling the offshore Euromarket, which was a lucrative base for speculative market operators. Proposals included the introduction of reserve requirements and limiting Central Bank borrowings in the Euromarkets. The US was isolated in its opposition to such controls but still managed to stymie these efforts. Through the amendment to the IMF article 4-1, US representatives pushed through the vision for a 'liberal financial order' that provided a framework that facilitated exchange not only in goods and services but also importantly of capital.¹⁴³

This decisive shift in favor of liberalized capital flows was given greater substance when USA eliminated capital controls in 1974 and further through the Deregulation and Monetary Control Act of 1980. Fresh initiatives to curb the Eurodollar market which was proving disruptive to domestic austerity measures, failed to take off. Instead of regulating the Euromarkets the US state opted for bringing the market to American shores with the setting up of International Banking facilities (IBF)¹⁴⁴.

In keeping with this policy direction the US government opposed and defeated two proposals that would have channeled the oil surpluses through international multilateral institutions including the proposal for the OECD safety net.¹⁴⁵ USA also vetoed the proposal to recycle OPEC petrodollars through the IMF, on the tenuous grounds that international financial

¹⁴² Helleiner (1994) p107-9

¹⁴³ Helleiner (1994) p106, 110

¹⁴⁴ While the Eurodollar market originated in dollar deposits held in Europe (in particular London) today the term encompasses dollar deposits held in the US at the IBFs and in places such as the Bahamas, Bahrain, Canada, the Cayman Islands, Hong Kong, Japan, the Netherlands Antilles, Panama, and Singapore. Further while the Eurocurrency markets are not restricted only to dollars, it is still the dominant currency in the euro-currency markets. Dufey and Giddy (1994)

¹⁴⁵ Spiro (1999)

markets were the appropriate channels for such recycling.¹⁴⁶ Witteveen's proposals, for the creation of a facility within the IMF for 'public recycling' so as to ensure equitable and socially responsible distribution, were whittled down, and a provision imposed to deny access to credit to countries that did not commit to a reduction of capital controls. The supplementary proposal to create a facility specifically for developing countries was also opposed. The oil-facility thus came to play a negligible role in the recycling of oil surpluses as the US competed aggressively for the oil funds¹⁴⁷.

The alternative proposal of increasing SDR quotas to alleviate the oil-shock induced balance of payments problem was also vetoed by the US.¹⁴⁸ Since the SDR had not been allowed to develop into the major instrument for international settlements¹⁴⁹, the logic of international financial markets ensured that the revenue from oil exports and a significant portion of the assets of OPEC countries were denominated largely in dollars and routed through American financial markets and even more significantly the Eurodollar market. The US government thus enjoyed a 'double loan' – it could buy oil by printing more dollars and at the same time oil- importers also had to earn dollars to buy oil¹⁵⁰.

Like investors in Japan and West Europe, those from the OPEC countries too became embroiled in the need to support the dollar and prevent its depreciation. The recycling of petrodollars played a critical role in the preservation of the dollar hegemony. With the dollar denominated surpluses of the OPEC countries, being recycled through the Euro-dollar market in the seventies, the market grew to be a full-fledged capital market. However, rather than being the simple outcome of a 'flood of petrodollars deposits', the exponential growth of the Euromarkets through the seventies was conditioned to a significant degree by US monetary policy.¹⁵¹

The recycling of OPEC surpluses through market channels did not lead to an intermediation between oil-surplus and oil-deficit countries but rather to increased lending to the newly industrializing countries in the South, in particular Brazil, Mexico, Venezuela and Argentina. These private credit flows were thus instrumental in financing manufacture and capital

¹⁴⁶ Helleiner (1994)

¹⁴⁷ Spiro, (1999) p 100, Helleiner (1994)

¹⁴⁸ Spiro (1999) p 96

¹⁴⁹ US unilateralism and the 'diplomatic' efforts to prevent the emergence of the SDR as the unit of account for oil trade are detailed in Spiro (1999) p 122-4.

¹⁵⁰ Spiro (1999)

¹⁵¹ Spiro (1999) p 61-2, Dufey and Giddy (1994) explore the relation between the growing eurodollar market and the growing US deficit. Their analysis stresses the role of Euromarkets in financial intermediation.

good exports from the US and the advanced industrialized world.¹⁵² The trend towards deregulation in the US was matched by moves to liberate economies in Latin America from the yoke of 'financial repression'. Disinflation, deregulation and the freeing of the interest rates in these countries fuelled the inflow of private foreign capital.¹⁵³ The debt of developing countries had doubled from 8% in the beginning of the seventies to about 16% in 1979. Mexico, Brazil, Venezuela and Argentina together accounted for nearly three fourth of total third world debt.

The continuing surge in the US deficit and the growing inflationary pressures became increasingly more difficult to sustain. The dollar began to fall.¹⁵⁴ In the face of growing inflationary pressures after the 1978-9 dollar crisis, the US chose to adopt austerity measures, the Volcker program in order to stabilize the dollar. While the policy was motivated by domestic imperatives, this 'coup of 1979' would have significant international repercussions, and signaled the onset of the era of neoliberalism¹⁵⁵. The steep hike in interest rates precipitated payments problems for the Latin American debtor countries. The debt crisis of the eighties then became the means by which a further impetus was given to private international flows of capital, for instance through the instrumentality of the debt equity swaps. At the same time the US maintained a policy of prying open third world markets.

The rising fiscal deficit in the wake of the massive military program and corporate tax cuts of the Reagan period fuelled the need to buttress foreign purchases of US treasury bonds. The need to redress the gross overvaluation of the dollar and the surging current account deficits that had reached 3.5% of GDP, led the US government to broker the Plaza accord in 1985. The agreement committed G5 countries to adjust their monetary and fiscal policies in order to effect an orderly depreciation of the dollar¹⁵⁶. The revaluation of the yen and the mark provided some measure of relief to the US current account situation. While the dollar depreciated, the burden of adjustment fell primarily on the Japanese and German economies. Once the dollar had fallen to the point where a significant erosion of dollar asset values threatened the financial system, US policy makers engineered a new agreement between the G-7 countries, the Louvre accord of 1987, which put forward an exchange rate stabilization agreement. Foreign Central Banks undertook interventions in defense of the dollar and official purchases of dollars received the first

¹⁵² Spiro (1999), p.71-3

¹⁵³ Diaz-Alejandro (1985) discusses the consequences of these developments for financial fragility.

¹⁵⁴ The EMS was created in 1979, and the G-7 working committee actively discussed mechanisms to curtail the dollars global importance by encouraging the use of the yen and the mark. Helleiner (1994)

¹⁵⁵ Dumenil and Levy (2004) argue that the Volcker stabilization plan signaled the reinstatement of the 'power of finance that had been eclipsed in the aftermath of the World War and waws in this senses a 'coup'

big boost since the collapse of the Bretton Woods arrangements. Foreign Central Banks were obliged to finance about 66% of the US current account deficit even as the US resisted following through on its obligation to adjust domestic policies.¹⁵⁷

With this development, the post Bretton Woods system, in a sense created a triangular pattern of settlements that paralleled the pattern during the International Gold Standard Period. Official intervention by Foreign central banks played a role analogous to that of sterling deposits of India and Japan in the earlier period. At the same time the private capital flows to the periphery came to perform a crucial role in stabilizing the core, and these emerging markets came to bear the brunt of adjustment in the form of currency crises in the nineties.

Comparisons between financial crises in the international gold standard period and the debt and currency crises of the eighties and nineties have highlighted the parallel mechanisms,¹⁵⁸ and shown a common pattern of enforcing austerity measures in its aftermath.¹⁵⁹ Analyses of the pattern of episodes of financial crisis¹⁶⁰ in both the gold standard period, and after the collapse of the Bretton Woods, reveals that the incidence is disproportionately larger in the 'periphery' compared to the core. In the inter-war years, in contrast, a larger number of crises occurred in the core countries¹⁶¹.

Through this period the mark (the strongest European currency) did not constitute a significant challenge to the dollar's international role. The experience of European Snake that had been besieged by difficulties after the 1973 oil- shock, paved the way for fresh initiatives to create the European Monetary System in 1979 and the setting up of the Exchange Rate Mechanism as a stepping-stone to European integration¹⁶². After the removal of capital controls in 1987, realignment of currencies within the ERM became more difficult to arrange, as these were more prone to speculative attacks, culminating in the ERM crises of 1992-3¹⁶³. It was only

¹⁵⁶ More accurately he accord sought a commitment to the 'orderly appreciation of non dollar currencies'

¹⁵⁷ Eichengreen (1996)p 149-152; also Eichengreen (2000) p 54-6; Brenner (2002)

¹⁵⁸ Eichengreen (2002) for instances stresses the cycle of a speculative lending boom followed by a bust and a drying up of capital inflows

¹⁵⁹ Fishlow (199)

¹⁶⁰ Eichengreen and Bordo (2002)

¹⁶¹ Between 1880-1913 there were 7 episodes of crises in the industrial core and compared to 25 in the emerging markets in the periphery. The corresponding figures for the period 1973-1997 are 44 and 95 respectively. In the inter-war period, between 1919-39 the pattern is reversed, with the incidence being higher in core (36 episodes) than in the emerging markets (13 episodes). Eichengreen and Bordo (2002) Table 6

¹⁶² Eichengreen (1994,1996)

¹⁶³ Eichengreen (1994) Ch. 7

with the launch of the European Union and the euro, that a new potential challenge to the dollar's role was launched.¹⁶⁴

Summing Up

The dollar gained ascendancy in the Bretton woods period as 'international money', primarily on the strength of its dominance of world trade. By 1958, the post war dollar shortage had been transformed into a dollar glut through the post war reconstruction plans for Europe and Japan, and subsequently by the program of rearmament and military aid. These mechanisms of offsetting capital flows however came under growing strains through the sixties with the growing capital accounts deficit of the US leading to a variety of measures to stem the efflux and preserve confidence in the dollar.

The collapse of the Bretton Woods System could be compared to the dismantling of the 'gold standard' in the interwar years. The abandonment of gold convertibility by Britain in 1931, led in some senses to a collapse back to gold in international settlements, and set in motion a period of 'rolling deflation', and competitive devaluations, and ultimately the erosion of the role of the sterling in international exchange. In contrast, the closing of the gold window in 1971, and the subsequent 'floating' of the dollar, did not result in the displacement of the dollar as the international reserve currency.

Instead, developments in the international monetary arrangements in the past three decades enabled the preservation of the role of the dollar as an international reserve¹⁶⁵. The role of unregulated international capital markets, in enabling the absorption of savings by the US from the rest of the world and sustaining its large current accounts deficit, is pivotal to this process. The asymmetric nature of the adjustment process for a country facing a balance of payments deficit imparts a deflationary bias to the country. But the special position of the USA, with the dollar serving as an international reserve currency, allowed it to follow a policy of what was called 'benign neglect', and the burden of financing its current accounts deficit, came to rest on foreign investors.

¹⁶⁴ Kenen (2002,2003) discusses the question of the relative roles and competition of the dollar and the euro. The current, widely discussed strains in the euro –dollar parity due to the pressure of dollar depreciation have been seen to signal the possible collapse of the dollar. Obstfeld and Rogoff (2004) The resilience of the dollar's international status through the crises of the early seventies and the negotiated realignment in the mid eighties suggests that the implication for the euro-dollar competition could be more ambiguous.

¹⁶⁵ Kenen (2002), Shulmeister (2000), Serrano (2002), Mckinnon (2001)

The working of this mechanism hinged on the willingness of European banks, and later the investors in OPEC countries and countries in the emerging markets, to hold dollar liabilities. Specifically this role came to be played increasingly by private investors in the offshore markets. The euro-dollar market had emerged in the sixties, as an outcome of the US attempts to restrict capital outflows. This burgeoning off-shore market, which was both liquid and unregulated, proved an important means for encouraging foreign investors to finance the US deficit. It is in essence analogous to the market for sterling bills that proliferated independently of the Bank of England's regulatory ambit.

The massive growth of this offshore market signaled the decisive shift away from the restrictive Bretton Woods system. It also foreshadowed the concerted advocacy of financial openness and the integration through the nineties, in the interests of preserving dollar hegemony¹⁶⁶. Such integration, imparted a greater elasticity to the adjustment mechanisms in the core. Thus the Volcker shock of 1979 served to stabilize the dollar but at the same time had repercussions in precipitating the Latin American debt crises in the eighties.

After the Plaza accord, the holdings of US treasury bills by foreign central banks, specifically Japan also received a fillip. Japan's trade surplus with the US thus came to be financed by official holdings of US monetary liabilities. These 'official holdings' of US treasury bills, like the sterling balances of the pre-World War I Japan, played a pivotal role in the multilateral clearing mechanisms of the 'floating-dollar regime'.

Thus, liquidity in the post Bretton Woods dollar standard derived from multilateral clearing mechanisms and financial intermediation similar to the sterling bill financed triangular patterns of settlement of the British empire. At the same time the burden of adjustment fell, disproportionately, on the countries in the periphery, which were faced by financial crisis precisely because of their integration into the international financial system

INTERNATIONAL ADJUSTMENT AND LIQUIDITY: WORLD MONEY

The survey of the monetary regimes in the two periods of sterling standard and the dollar standard thus reveals some interesting parallels. The comparative analysis of the workings of the international monetary system in the two periods offers insights into the mechanisms of international liquidity and adjustment.

¹⁶⁶ Dumenil and Levy (2004) elaborate a compelling argument relating these developments to the resurgence of finance capital

The 'success' of the monetary regimes has been explained, within a monetarist framework, in terms of the presence of credible commitment mechanisms and the incentive compatibility features of the regime¹⁶⁷. The evidence of divergent experiences of 'core countries' and the 'periphery' are in this framework explicable by the absence of a credible commitment mechanism in the periphery due to prevalence of less developed financial systems¹⁶⁸. The failure of convertibility in the 'Core' during in the inter-war years similarly derives from the breakdown of the 'Gold standard rule' as a credible commitment mechanism.

The basic argument of this paper is that pursuit of global integration is premised on the relatively stable functioning of the international monetary system. In the two major phases of 'globalization'- the first under the dominion of the British Empire and the second under the American hegemony – the functioning of the international monetary system was linked to the provision of international liquidity through the currency of the leading country.

A country's dominance in world trade, its status as the leading creditor and exporter of capital, initially underwrites its emergence as international money. The currency of the country with the largest surplus and the most extensive trade relations would be demanded and accepted in the final settlement of balance of payments, and would be 'world money' in the sense of being a representation of material wealth. The use of the currency of a country as the international reserve was both a logical outcome and a necessary basis of the development of capitalist internationally and the tremendous concentration of capital and trade flows in the hegemonic country. However, the perpetuation and preservation of its dominant role does not depends on its continued 'creditor' status but rather on its ability to attract and recycle capital from the rest of the world, while incurring a growing debt burden. It has to be the 'borrower of last resort'.

Explanations of the inherent instability of the international monetary system have focused on the contradiction of the currency of a single country playing the role of an international reserve¹⁶⁹. In such a situation international liquidity can be injected only through sustained deficits of the country issuing the reserve currency. The financing of these deficits by the creation of 'liabilities', outstripping the monetary base (in gold reserves), would increasingly threaten 'convertibility' and the role of the currency as an international reserve. At the same time the

¹⁶⁷ Bordo (1993)

¹⁶⁸ Bordo and Shwartz (1984)

¹⁶⁹ Triffin (1960)

correction of the external deficits would undermine international liquidity with deflationary consequences. This creates the Triffin dilemma¹⁷⁰.

The imperative of maintaining international liquidity and maintaining sufficient global reserves depends on the ability of the country issuing the international money to sustain a deficit without eroding its status as a reserve currency. It has to withstand both the pressure to depreciate and the possibility of speculative attacks by offsetting capital flows. We argue that the triangular pattern of settlements with countries in the periphery performed a critical safety valve role in absorbing the brunt of adjustment, and enabling the hegemonic country to sustain debts and deficits without impairing the dominance of its currency.

Thus, Britain in the heyday of the international gold standard did not necessarily display a short-term creditor position on the external account. But for the tribute extracted in the form of home charges from British India, and earnings on invisibles Britain's current account balance would have been negative through much of this period. Again, through the sixties, the accumulation of dollar liabilities outpaced the gold reserves of USA, in a pattern reminiscent of the gold standard period. The US deficits, which have their historic counterpart in the comparatively meager gold reserves of England, arose in the pursuit of preserving the national currency's role as the leading international reserve currency.

It is, arguably, not appropriate to view the vulnerable US payments position (or the British position before the war) as that of a 'deficit', since US was acting as a banker to world, importing short term capital while investing long term abroad¹⁷¹. The capital outflow from the US reflected its international role of financial intermediation. Like England before the War, the US too was borrowing short term and lending long term. The hegemonic country that performs this function of financial intermediation, recycling funds internationally from surplus-creditor countries to countries facing deficits, stabilizes the system by providing a steady countercyclical flow of capital. It acts like the international lender of last resort. The deficit like England's dwindling gold reserves was the cost of providing international public good- 'international money' - the source of international liquidity and the management of a stable adjustment mechanism through 'lender of last resort actions'.¹⁷²

¹⁷⁰ Triffin (1960)

¹⁷¹ Despres et al (2000[1966])

¹⁷² Kindleberger (1981, 1996). This is in contrast to the view that the instability of the inter-war period primarily arose from the constraints on the adjustment mechanism in the face of domestic wage inflexibility. Eichengreen (1996)

The instability of the inter-war years is attributed to the absence of international lender of last resort in this explanation. Thus the US intransigence on war debt compounded the burden of reparations on Germany. Germany responded by instituting exchange controls and freezing international liabilities, shifting the crises to Britain. As the pound was progressively undermined by conversions to gold, UK finally abandoned the gold standard in 1931¹⁷³.

This paper takes the argument a step further, arguing that the collapse of the gold standard was a result of the inability of Britain to prevent the efflux of capital and preserve the sterling balances of surplus trading partners. Thus while the actual distribution of gold reserves did not circumscribe the expansion of the pre-war period, the limited ability of the financial hub in the City of London to attract inflows of capital did. The erosion of Britain's imperial hegemony is critical to this explanation.

Keynes, in his analysis of the stability of the gold standard, recognized the importance of the manner in which Britain exercised its hegemony. Thus, in the context of the post war world with the US as the dominant surplus country the crucial imperative was to ensure that the US played a similar role. The conception of the bancor plan was in essence a device to garner the benefits of the elasticity of the international monetary system based on a 'gold-exchange standard by generalizing the 'banking principle' through a supranational authority while at the same time to transcend the narrow political constraints of a system based on the fiduciary issue of a hegemonic country.¹⁷⁴ But as the historical analyses of the preceding section shows the actual development of the post-war Bretton Woods in fact instated the dollar as the 'world money', a process that was linked to the privileged position of USA in the structure of international financial relations. Paradoxically, the unregulated euro-dollar market which signaled a 'supranational' liquidity generation mechanism lying outside the ambit of control of the American Federal Reserve, came to play a pivotal role in preserving the hegemony of the dollar.

In a sense the Keynesian problem' of creditor adjustment and sustaining international liquidity has been solved historically, by the hegemonic country undertaking the role of financial intermediation and tapping the surpluses of creditor countries. With the fiat currency of the hegemonic country acquiring the status of world money the injection of international liquidity hinges on its growing debt burden. However, this overhang of debt could undermine the status of the currency as world money precipitating financial crises. USA faced such a crisis, in the wake of the deficits and payments problems created by the Vietnam War. Its ability to draw on surplus

¹⁷³ Kindleberger (1983, 1996)

¹⁷⁴ Keynes (1980)

country's willingness to hold dollar liabilities was under threat, as France and Germany sparked a move towards gold.

The closing of the gold window in 1971, however, did not result in the displacement of the dollar as 'world money'. The monetary arrangements after the suspension of gold convertibility did not collapse back to a metallic basis. Instead with the subsequent 'floating' of the dollar, the accumulation of 'world money' was in effect severed from its basis in gold. The long transition to an 'international fiat standard' was in a sense completed¹⁷⁵. Critical to the emergent monetary arrangements was the proliferation of private unregulated capital flows through the euro-dollar market. This offshore market paved the way for the neo-liberal impetus to liberalization in developing countries and the recycling of surpluses to 'emerging markets' in the South.

The parallels between the two phases of 'financial hegemony'¹⁷⁶ can be seen to be quite significant. It is clear that the adjustment mechanism for the deficit of a hegemonic country (and its impact) is qualitatively different from the deficit of less developed countries. Its special status allows the country to finance its deficit by running up monetary liabilities with other countries. Instead of being compelled to depreciate its currency and to follow deflationary policies it can shift the burden of adjustment on its trading partners. However this adjustment mechanism itself would have its limits as the increasing burden of debt erodes the willingness of other countries to hold its monetary liabilities. Both England and USA faced this situation.

However, as the historical survey of the two monetary regimes has highlighted, both England and the US have been able to extend and preserve the dominance of their currencies, its status as world money for a considerable period of time. Specific institutional mechanisms, that have enabled both countries to draw on capital inflows from countries in the periphery, played a pivotal role in preserving their hegemony.

England was able to transform the surpluses of Japan and India into sterling balances and at the same time transmit the burden of adjustment to debtor countries on the periphery. Specifically the triangular system of payments allowed Britain to finance its deficits with Europe and USA by deploying the surpluses of countries like India in the British Empire. The offshore euro-currency market played a similar role in the context of the dollar in the seventies. These flows served as a parallel monetary mechanism, analogous to the market for sterling bills that financed triangular trade in the international gold standard period. The monetary arrangements

¹⁷⁵ This is not to suggest that a possible reversion to gold in the future is precluded.

after the collapse of the Bretton Woods system, similarly allow the US to draw on the surpluses of the OPEC Countries, Japan and more recently China (and Korea) while transmitting the burden of adjustment to the emerging markets in Latin America and South East Asia. With the Plaza accord, central bank holdings of treasury bills emerged as a critical element in the financing of the US deficit. The historical parallel to the institutional mechanisms of the international gold standard, where Britain could draw on the sterling balances of 'Special Depositors' in the earlier period is reinforced. In this sense the international monetary regime that has been forged in the last two decades is not so much a 'Revived Bretton Woods System'¹⁷⁷, as a reconstruction of the parallel monetary mechanisms of the British imperial system.

Thus it would appear that mechanisms for liquidity creation and adjustment in an international monetary regime based on the credit money a hegemonic country does not depend on the dominant country retaining a 'creditor' status. Rather financial intermediation is made possible by the country's ability to borrow from surplus countries on one hand and pass the burden of deflationary adjustment shocks to peripheral debtor countries on the other. This pattern underlies both the gold standard period and the present 'floating dollar regime'.

¹⁷⁶ Dumenil and Levy (2004)

¹⁷⁷ See Dooley et al (2003,2004)

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