### Tales from the Bretton Woods

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### 1 Introduction

During the recent euro area crisis, an analogy was made by Hans Werner Sinn and Timo Wollmershaeuser (2011) and Wilhelm Kohler (2012) between the events in Europe between 2007 and 2012 and the collapse of the Bretton Woods System (BWS) between 1968 and 1971. The build up of Target balances in the Eurosystem of Central Banks after 2007 (with the GIPS countries, referring to Greek, Ireland, Portugal and Spain) having large liabilities and Germany (and several other countries) with large claims is compared to the burgeoning balance of payments deficits by the United States, the center country of the Bretton Woods gold dollar standard, corresponding to growing balance of payments surpluses in Germany (and other continental countries). As reserve currency center the USA did not have to adjust its payments deficit. It would be settled by the issuance of dollars held as international reserves by the other countries of the system. In the face of rising US inflation after 1965, growing payments imbalances and inflationary pressure on the surplus European countries, the BWS collapsed between 1971 and 1973.

Another Bretton Woods analogy with relevance to the euro area's problems is between the United Kingdom, which ran persistent current account deficits, was faced with ongoing deflationary pressure and eventually had to devalue in 1967, and Germany which ran persistent current account surpluses, was faced with ongoing inflationary pressure and on two occasions was forced to revalue the Deutsche Mark.

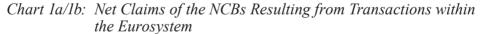
Which analogy is more apt? And are there other analogies which may be even more relevant?

## 2 Analogy 1: The Euro Area Crisis and the Collapse of Bretton Woods

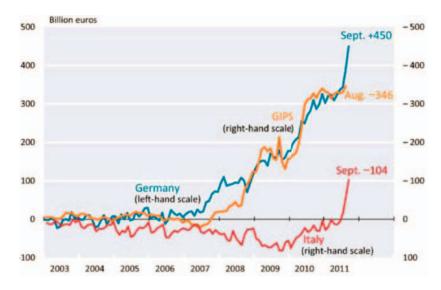
In the European Monetary Union, the European Central Bank and the Eurosystem of National Central Banks operates a real gross time payments settlement account called TARGET (Trans-European Automated Real-Time Gross Settlement Express

Transfer). TARGET has many similarities to the US Federal Reserve System's ISA (Interdistrict Settlement Accounts) which operates in the US monetary union. In both systems, in normal times, net claims between different countries central banks (Fed districts) tend to cancel out. However during major crises like between 2007 and 2012 when shocks hit unevenly across the monetary union, settlement imbalances between countries (districts) tend to build up as the central bank(s) finances the demands for liquidity.

Beginning in 2007, TARGET liabilities in the peripheral countries of Europe (Greece, Ireland, Portugal, Spain) with the reversal of capital inflows and the global seizing up of interbank markets (chart 1). At the same time TARGET claims on Germany (and the Netherlands) increased. This process was worsened by the Greek Sovereign Debt crisis in 2010 and similar (less dramatic) events in Portugal, Ireland, Spain and Italy. Sinn and Wollmershaeuser (2011) also show that TARGET balances are highly correlated with current account imbalances between the GIIPS countries (with deficits) and Germany (with surpluses) (chart 2). Sinn and Wollmershaeuser express concern that the growing TARGET imbalances pose a risk to Germany in the event of a sovereign default and exit from the euro area. They are also concerned that the provision of TARGET liquidity would prevent the peripheral deficit countries from making the necessary structural adjustments to reduce their imbalances. They and Kohler (2012) make the analogy to the events in the final years of the Bretton Woods system when the continental European countries became increasingly reluctant to absorb the dollars that resulted from the persistent and growing US balance of payments.







Source: Sinn and Wollmershaeuser (2011).

Chart 2: Annual Current Account Balances



Source: Sinn and Wollmershaeuser (2011).

Under the Bretton Woods System, members would declare a par value in terms of US dollars (peg their currencies). The USA would peg its currency to gold at the fixed price of USD 35 per ounce. The rest of the world would use dollars (and until

1968 pounds) as international reserves. The USA maintained extensive gold reserves as backing for the dollar. The Bretton Woods system (BWS) also incorporated an adjustable peg whereby members could change their parities in the event of a "fundamental disequilibrium" aka persistent structural imbalance. The BWS also prescribed capital controls.

The Bretton Woods System became fully operative in December 1958 when many European countries declared current account convertibility. As time elapsed, it evolved into a gold dollar fixed exchange rate system which embodied an asymmetric adjustment mechanism under which the USA did not need to adjust to a balance of payments deficit by contracting aggregate demand. The deficit would be financed by dollar outflows to be absorbed as international reserves by surplus countries. The USA had official settlement balance of payments deficits from 1958 until the end of Bretton Woods (with the exception of 1968) (chart 3). With the exception of 1959 the USA had a current account surplus until 1970. The balance of payments deficit arose because capital inflows exceeded the current account surplus (Bordo 1993).

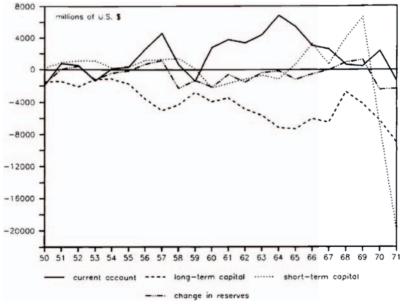


Chart 3: Balance of Payments, United States, 1950–1971

Source: Bordo (1993).

The balance of payments deficit was perceived as a problem by the US monetary authorities because of the effect on confidence. As official dollar liabilities held abroad increased with successive deficits the likelihood would increase that US

dollars would be converted into gold and the US monetary gold stock would reach a point low enough to trigger a run. By 1959, the US monetary gold stock equaled total external dollar liabilities and the monetary gold stock in the rest of the world exceeded the US monetary gold stock. By 1964 official US dollar liabilities held by foreign monetary authorities exceeded the US monetary gold stock (chart 4). A second reason the US balance of payments deficit was perceived as a problem was the dollar's role in providing liquidity to the rest of the world. Eliminating the US deficit would create a worldwide liquidity shortage (Triffin, 1960).

billions U.S. \$ external dollar liabilities 60 external dollar liabilities 50 held by monetary authorities 40 30 Rest of the World monetary gold stock 20 U.S. monetary 10 gold stock 1970 1960

Chart 4: Monetary Gold and Dollar Holdings, the United States and the Rest of the World, 1945–1971

Source: Bordo (1993).

For the Europeans, the US balance of payments deficit was a problem because, as the reserve center country, the USA did not have to adjust its domestic economy to the balance of payments. As a matter of routine, the Fed automatically sterilized its US dollar outflows. The Europeans resented the asymmetric adjustment. The Germans viewed the USA as exporting inflation to the surplus countries through its

deficits. They wanted the USA to pursue contractionary monetary and fiscal policies. The French (Charles de Gaulle) resented US financial dominance and the seigniorage earned on outstanding liabilities. In 1965 acting on this perception, France began systematically converting its outstanding US dollar liabilities into gold (Bordo, Simard and White 1996).

The policy response to the growing deficit by the US monetary authorities included; controls on capital exports; measures to improve the balance of trade; altering the monetary fiscal mix (Operation Twist); instituting measures to stem conversion of outstanding dollars into gold (the Gold Pool).

The Bretton Woods system collapsed after 1968 in the face of rising US inflation driven by expansionary monetary and fiscal policies (financing the war in Vietnam and the Great Society). US inflation was transmitted abroad by the classical price specie flow mechanism augmented by capital flows (Bordo 1993, p. 77). As US dollar reserves accumulated in Germany and other continental countries and Japan, they were sterilized to prevent the domestic money supply rising, leading to inflation. As the process continued it became increasingly difficult to sterilize the reserve inflows leading to a dramatic increase in money and inflation. The only alternative to importing US inflation for Germany and the other surplus countries was to float, which they did in 1971. The collapse of the system began in August 1971 when France and the UK signaled their intention to convert their dollar assets into gold leading President Nixon to close the gold window on August 15.

# 3 Analogy 2: Persistent Imbalances within the Bretton Woods System

In addition to the imbalance between the USA and the rest of the world emphasized by Sinn and Wollmershaeuser (2011) and Kohler (2012), another Bretton Woods imbalance has important relevance to the ongoing problems of the euro area. It was between major European countries prone to persistent deficits (e.g. the U.K.) and countries prone to surpluses (e.g. Germany). This reflected significant fundamental structural and policy differences between countries. The U.K. had a lower underlying productivity and real growth rate and tended to follow expansionary monetary and fiscal policies to maintain full employment. Its exchange rate was persistently overvalued. Germany had faster productivity and real growth and a "stability culture" which deplored excessive monetary growth and inflation. The Deutsche Mark was persistently undervalued.

The United Kingdom from 1959 to 1967

Between 1959 and 1967, the UK alternated between expansionary monetary and fiscal policy designed to maintain full employment and encourage growth, and

austerity programs when a balance of payments crisis threatened – a policy referred to as stop-go. Expansionary monetary policy and rapid growth in 1959 led to a current account deficit in 1960 and a crisis in 1961, resolved by a USD 1.5 million standby from the IMF and austerity (chart 5). The balance of payments improved and was followed by an expansionary policy in 1962/63. By 1964 the current account deteriorated and international reserves declined. The incoming Labour government refused to devalue, imposed an import surcharge in October 1964 and kept expansionary financial policy. The balance of payments again deteriorated, reserves dropped followed by a speculative attack on sterling and a USD 4 billion rescue package by the G10 and the IMF. Expansionary policy continued through 1966 and pressure on sterling led to a massive austerity package in July 1966 and assistance from the Federal Reserve. The stop-go pattern continued until a massive deterioration in the balance of payments in the summer of 1967 led to a USD 3 billion rescue package. It was insufficient to stop the pressure on sterling until a devaluation of 14.3% was announced in November 1967. That action was the beginning of the end of sterling's role as a reserve currency.

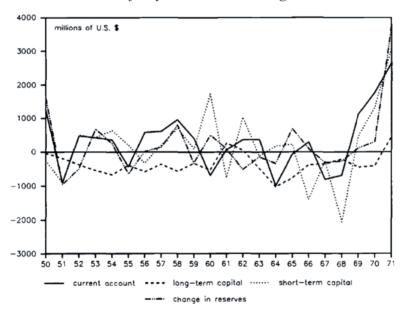


Chart 5: Balance of Payments, United Kingdom, 1950–1971

Source: Bordo (1993).

### Germany 1959 to 1968

West Germany ran persistent balance of payment surpluses and had opposite problems to the UK. It had rapid growth in real output and exports and a lower underlying rate of inflation. This led to a series of current account surpluses and reserve inflows throughout the 1950s. Concern over the inflationary consequences of balance of payments surpluses led the German monetary authorities to tighten monetary policy and institute measures to prevent capital inflows: a prohibition of interest payments on foreign deposits and discriminatory reserve requirements on foreign deposits (Bordo 1993, page 54).

8000

millions of U.S. \$

6000

-2000

-4000

50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71

current account --- long-term capital ....... short-term capital

---- change in reserves

Chart 6: Balance of Payments, Germany, 1950–1971

Source: Bordo (1993).

Tight monetary policy led to recession and further reserve inflows in 1960. In 1961, the Deutsche Mark was revalued by 5%. With the exception of two years, 1962 and 1965, the current account was in surplus until the end of 1965. The package of tight money and capital controls was repeated in 1964, 1966 and 1968. Opposition to further revaluation, largely by exporters, increased throughout the 1960s. Thus Germany resisted adjustment during Bretton Woods. The German monetary authorities believed that the key problem of the international monetary system was

inflation imported from abroad. This was the case at the end of the 1960s but not before

Some Lessons

The UK, German story is an important analogy for the euro area's ongoing problems.

The periphery euro area countries, like the UK in the 1960s have had lower productivity and real growth, higher inflation and overall uncompetitiveness compared to the core countries of Western Europe. This has led to a build up of imbalances in the euro area – current account deficits in the periphery and surpluses in the core. This is a classic case of maladjustment. But, unlike under Bretton Woods, the euro area countries with imbalances can not adjust their exchange rates and nominal and structural rigidities have impeded real adjustment. Nor can a one size fits all monetary policy be very effective in a monetary union with such large real imbalances and rigidities. Hence in the absence of a fiscal union the periphery has needed to adjust by internal devaluation. The global financial crisis of 2007/08 exacerbated the dilemma. Ongoing recession and expansionary fiscal policy (and a housing bust in Ireland and Spain) created a debt crisis and a banking crisis in the periphery.

### 4 Which Bretton Woods Analogy is More Relevant?

The Bretton Woods System was an adjustable peg international monetary system with member countries having independent monetary and fiscal policies. It also had restrictions on capital flows. By contrast, the euro area is a monetary union with perfectly fixed exchange rates with no option for adjustment. Members do not have access to monetary policy as a palliative and capital is freely mobile.

Under Bretton Woods the adjustable peg allowed some adjustment between deficit and surplus countries and independent monetary and fiscal policies, the IMF and capital controls gave members with imbalances some temporary respite. For the USA as reserve center country, devaluation would require raising the price of gold (as advocated by France). This was strongly resisted by the USA on the grounds that it would be time inconsistent and would benefit the pariah states USSR and South Africa. As it turned out, ending the system was the only way out.

The euro area is not a pegged exchange rate system nor is one member's currency used as a reserve currency. The Maastricht Treaty abolished members' currencies and created a new currency, the euro, and a new common central bank, the ECB. The escape valve of the Bretton Woods adjustable peg is not present. Moreover, unlike national monetary unions like the United States the euro area does not have a fiscal union or a Eurobond to facilitate adjustment. But a more important difference between the Bretton Woods breakdown analogy and the crisis in the euro area is the

existence of a payments clearing mechanism, the TARGET system and the Eurosystem of national central banks and the ECB. In the Eurosystem a key mandate is a uniform currency across the euro area – that a euro always be worth the same in every member country (Cour Thimann, 2013). Thus under TARGET, country imbalances are financed by access to the liquidity facilities of the Eurosystem of national central banks using the ECB as a clearing platform.

What happened in the euro area after 2007 is that the TARGET liabilities in the periphery (and the TARGET claims in the core) built up because the ECB acted to prevent the breakdown of the payments system after the interbank market collapsed and private capital flows disappeared (Cour Thimann, 2012). The Federal Reserve performed the same function in the 2007/08 crisis in the USA Bretton Woods did not have an international central bank to act as a clearing mechanism as Keynes wanted with his International Clearing Union. If it did perhaps the outcome would have been different. Clearly, the Bretton Woods breakdown analogy (1) is less relevant than the persistent imbalances between countries analogy (2).

## 5 An Alternative to the Bretton Woods Analogy: The Payments Crisis in the USA in the Great Depression

An alternative and perhaps more appealing analogy to the TARGET imbalances in the euro area than Bretton Woods is the breakdown of the payments mechanism in the US during the Great Depression. The Federal Reserve System established in 1914 had a clearing mechanism between the member Reserve banks called the Gold Settlement Fund. The Fund recorded the flow of funds among Federal Reserve districts. During the Great Contraction 1929-33 there were massive gold flows between regions (See Chart 7). This reflected a substantial drain of gold from the interior southern and western regions hardest hit by the successive banking panics which closed thousands of small unit banks, to the safety of the Eastern money centers, especially New York (Rockoff 2004).

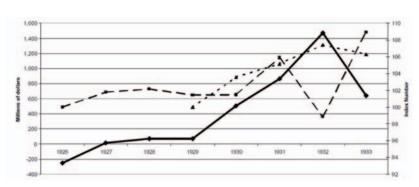


Chart 7: The Flow of Gold to Eastern Financial Centers on Private Accounts, 1926–1933

Source: Rockoff (2004).

Unlike in the recent financial crisis in Europe and the USA, the Fed did little to accommodate the demands for liquidity. By the fall of 1932, the breakdown of the payments system was so widespread that many of the US states declared banking holidays to prevent depositors from making withdrawals from their bank accounts. Banking holidays spread from state to state as the authorities in neighboring states tried to prevent depositors who could not get cash in one state turn to banks in neighboring states. The contagion culminated with Franklin Delano Roosevelt, right after he was inaugurated as President in March 1933, declaring a nationwide banking holiday which effectively ended the panic (Friedman and Schwartz, 1963). The TARGET experience reflects learning from that experience.

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