Working Paper
**476**

# INTERNATIONAL MONETARY AFFAIRS IN THE INTER WAR YEARS: LIMITS OF COOPERATION

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June 2018

**CENTRE FOR DEVELOPMENT STUDIES**
(Under the aegis of Govt. of Kerala & Indian Council of Social Science Research)
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I would like to thank Ms Amrita Roy for helpful discussions and the participants of the seminar at CDS for helpful comments.

## ABSTRACT

There were intensive efforts at monetary cooperation in the inter-war years to overcome the imbalances accumulated during the war years to reduce the rate of inflation, reduce the rate of unemployment and achieve exchange rate stability. Countries successfully cooperated in helping the newly independent countries of Eastern and South Eastern Europe establish central banks, except in the case of Germany and Romania. They also reached agreement on German reparations after some serious differences. Cooperation was possible as long as the issues were technical and did not involve a shift in economic power.

The inter-war period saw a struggle between the US and the UK for supremacy. The US would not agree to any reduction in Britain's loans. Cooperation on overall monetary policy was unsuccessful when foreign and domestic objectives clashed. Also, the US and France kept accumulating gold even though it created problems for other countries. But the clearest example of a lack of willingness to cooperate can be seen in the London Conference. The US torpedoed the agreement that had been reached even though the US dollar would have a more devalued rate than the original goal of the US negotiators.

The situation is better now. A strong network of institutions has been built up to deal with aspects that have externalities. But apart from an initial fiscal stimulus, the pressure as in the 1930s has been to cut expenditures and to balance the budget. Monetary policy has provided more of a stimulus though there have been strong voices including the BIS calling for increases in the rate of interest much before there was any recovery. Furthermore, central banks are once again independent as recommended at the Genoa Conference and concerned only with controlling inflation. No instrument is left to manage the level of employment in the economy. The belief now as in the earlier period is that if macro stability is restored "animal spirits" will ensure full employment. If there is unemployment, it is because wages are too high.

**Key words :** International Monetary Economics, Economy in inter-war period, US-UK Struggle for Hegemony.

**JEL Classification:** E58,F32, F33, F42, F51, N44

## Section I. Introduction

Leaders of major economies get together whenever the international economic system suffers a major shock. The stagflation in the developed countries following the oil price increases resulted in the convening of a meeting in 1976 among the leaders of the seven major economies of the time, Canada, France, Germany, Italy, Japan, UK, and the US. Thereafter, summits were regularly held among the leaders of these seven countries to discuss the state of the world economy and what policies may be appropriate in the circumstances. After the Asian financial crisis of 1997, a group of 20 leading economies represented by their finance ministers and central bank governors was formed to discuss what steps needed to be taken to avoid such crises in the future. After the 2008 financial crisis, the G20 was raised to the level of leaders. At the subsequent Pittsburgh Summit, it was announced that this group had the responsibility to manage the world economy to provide strong sustainable and balanced (SSB) development. Subsequently, the leaders have met every year to discuss the state of the world economy and to chart a course for the future.

The world economy was in turbulence through much of the inter–war period. Rates of unemployment were high for sustained periods of time. Unemployment in the UK was over 20 percent in 1933 (Laybourn, 1999). Between 1920 and 1939 in only two years was it less than 10%.[1].

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1. It was under 3.2 percent in the UK in 1920, helped perhaps by pent up demand from the war years, and rose to 11.3 % after the 1922 budget cuts, 9.7 percent in 1927. (Barry Eichengreen and Tim Hatton 1988). This experience is in contrast to the 33 years between 1880 and 1913, where the average rate of unemployment was 4.7 percent and for 21 years in this period it was lower than this (Moggridge 1972). Also see Orde (1990) for a discussion of performance in the immediate post war years.

In the US it was over 10 percent in1921, 1922 and 1930-38, at times reaching almost a third (Eichengreen and Hatton, 1988). It the case of Germany it averaged almost 19 percent between 1923 and 1936.

There was monetary instability. An international monetary system consists of arrangements for the provision of liquidity, for the convertibility of currencies into each other and into reserve assets, and for the adjustment of imbalances through exchange-rate changes and other measures. All of these features seemed to be lacking in the post First World War years. With the US holding the majority of the world's gold and continuing to increase these holdings there was inadequate international liquidity for other countries. This often resulted in inconvertible currencies; particularly currencies could not be converted into gold. Then there was the issue of war debts. This included reparations to be paid mainly by Germany and the debts of many of the victorious allies to the UK and of the UK and some of the allies to the US. Furthermore, systems of monetary management had to be established in the countries newly formed after the breakup of the Austro-Hungarian Empire.

Adjustment in the balance of payments (BOP) did not occur as some countries continuously had large surpluses whereas others faced deficits. Countries were reluctant to fix their exchange rates as it was not clear what they should be doing, given the inflation that had occurred during the war and its immediate aftermath. As a consequence, exchange rates fluctuated considerably. This created uncertainties in the minds of exporters and investors. Countries moved on to the gold standard (GS) as soon as they could in the expectation that stable exchange rates would improve the situation. But this required governments to manage the public accounts responsibly, i.e. not run large deficits. But cut-backs in public expenditures had a recessionary effect on the economy.

There were considerable discussion and cooperation at various levels. But these did not satisfactorily resolve all the issues. There were

continuous alarms and the performance of the world economy during this period was poor. Some analysts have attributed the problems to the lack of a hegemon. According to this idea, a hegemon would provide the public good of monetary stability and other countries would benefit from this stability (Kindleberger, 1973).[2] Such analysts argue that in the pre-World War I period the UK had been the hegemon, and the Bank of England (BE) had acted to ensure the smooth working of the GS. Eichengreen (1996, 1998) challenged this hegemonic interpretation of the gold standard, arguing that the international monetary system was essentially co-operative.[3] The Bank of England depended on lending from other central banks, the Bank of France in particular, to stabilize the system in times of crisis.[4] The extent of cooperation among central banks has been questioned. Co-operative efforts, Gallarotti (1995, ch. 3)[5] argues, were intermittent, occurred on an ad hoc basis when crises threatened, were bilateral rather than systemic, and were effected in order to protect domestic markets.[6]

Great Britain was too weakened by the war to act as a hegemon any longer, and the US, which was now the most powerful economy chose not to act to stabilise the world economy. Others argue that the BE could no longer stabilize the world economy because structural changes prevented it from playing that role (de Cecco, 1984). Still,

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2. Hegemonic theories can be divided into: the realist school and the systemic school, which can be further sub-divided. Two dominant approaches in the realist school are exemplified by Keohane (1984) and Organski (1968). Modelski (1987) and Wallerstein (2004) are the two dominant approaches in the systemic school of thought. See Gilpin,1987 for a discussion of these theories. Also see Eichengreen, (1996) and Cohen (2015).

3. See Agarwal (2017) for a detailed analysis of the working of the gold standard in the pre World War I period.

4. For details regarding central bank lending to each other see Agarwal (2017).

5. Also see Flandreu 1997.

6. The motives of the Banque de France in lending to the BE are analysed in Moure (2002).

others have held that the reparations issue vitiated the atmosphere for cooperation. Others still that the reparations imposed an unbearable burden on Germany, which weakened it and the entire world economy.

We first discuss in Section II the changes that the war had brought about and the problems these created. We next discuss in Section III how the policy makers sought to resolve these immediate difficulties. Attempts at international cooperation are discussed in Section IV. These attempts had mixed results. Agreements were reached on establishing central banks in the newly independent countries and after tortuous negotiations on reparations. The main problem with reparations was a political one, not a technical one.[7] However, they were much less successful in creating monetary stability or getting the world economy out of the depression. Consequently, as we see below, countries ultimately adopted individual strategies. Some of these were successful, but sometimes at the expense of worsening the situation of other countries. Section V concludes with some conclusions for the prospects for cooperation in the G20.

**Section II: The War and its Legacy**

Before WWI there had been fluctuations in prices but no sustained increase in the price level. The war years had changed this as there had been persistent inflation. The rate of inflation depended on how the war was financed. Germany spent a total of $47 billion on the war (in 2004 US dollars) and taxation financed only 16.7% of that (Rockoff, 2004, Balderston, 1989). France was even worse, only funding 15% of its

7. The French wanted Germany to be weakened so it would no longer be a threat to the French. But a weak Germany could not pay reparations. Alternately they wanted the UK and/or the US to guarantee to come to their rescue if the Germans attacked them. The British, in particular, wanted a prosperous Germany who would be a good customer. Furthermore, neither the UK nor the US wanted to tie their hands by promising a priori to come to the aid of the French.

$28.2 billion spending out of taxation.[8] The US financed 22 % of its war expenditures through taxation (Rockoff, 2004) and the UK about 26 percent (Balderston 1989, Daunton 1996).

The amounts raised through taxation and borrowings determined how much the money supply increased. Germany expanded its money supply by almost 400% whereas it merely doubled in the UK (Balderston 1989). France expanded its currency by 350% (Ahamed, 2009) and in the US money supply increased between 1916 and 1918 by 27 % and between 1916 and 1920 by 70 % (Rockoff, 2004). The increase in money supply, in turn, influenced the increase in prices. If 1914 is taken as the base (= 100), wholesale prices in December 1918 were 202 in the US, 355 in France, 246 in the UK and 1000 in Germany (Ahamed, 2009). Between 1916 and 1918 prices rose in the US by 47 % and between 1916 and 1920 by 92.5 % (Rockoff, 2004).

The problems at the end of the war were how to finance the reconstruction while at the same time controlling inflation which meant that the central bankers had to control the money supply which in turn meant that the government had to control the budget deficit.[9] The problem of inflation was made worse in the immediate aftermath of the war as pent-up demand from the war years appeared in the market. In the United States, this raised wholesale prices by 34 per cent between the

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8 The French did not even introduce income tax until 1916; the finance minister refrained from demanding higher taxation until then, relying on the expedient of National Defence Treasury Bills (Bons de la Défense Nationale, BDNs, Moure).

9 Cunliffe committee set up in 1918 to chart a policy course recommended the restoration of the gold standard. For this, government should reduce its influence on the Operation of market forces. This, particularly, required (1) the cessation of government borrowing, especially from the banking system, (2) the repayment of a large portion of its debt, and (3) the Bank of England once again using the discount rate to deal with movements in its gold reserves.

beginning of 1919 and the peak in May 1920.[10] Similarly, in Britain, the corresponding period saw wholesale prices increase 40 per cent.

Furthermore, monetary policy was constrained by the distribution of the world's gold supplies, which had become very uneven because of the pattern of financing the war and the need of the UK and France to import armaments and other goods from the US. Before the war the 4 largest countries, the US, the UK, France and Germany, had operated with about $ 5 billion of gold. US with about half of the output of the four countries held 2 billion of gold. France held slightly more than 1 billion and Germany slightly less than 1 billion. By 1923 the amount of monetary gold had increased to almost $ 6 billion. But now the US had 4.5billion, Germany had very very little and France about 600 million.[11]

The US which had been a debtor country before the war now became a creditor. US investment abroad increased from $ 5 billion to $ 9.7 billion while foreign investments in the US decreased from $ 7.2 billion to $ 3.3 billion.

A major problem was that once this phase of pent-up demand was over, there was a lack of demand. This together with the demobilization of the armed force which swelled the labour force resulted in very high rates of unemployment. As noted above, monetary and fiscal policy had to be kept tight and so could not resolve the problem of unemployment. In these circumstances countries banked on exports. Increasing exports required a well functioning international system. But trade had been

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10 The instability is shown by the subsequent fall in prices by 46 per cent to a low in January 1922. In Britain also they subsequently fell by 50 per cent.

11 In the UK by 1920 the money supply was 12b and gold reserves remained about the same as in 1913. So gold cover had decreased from 15c for $1 of money to less than 7c for $1 (Ahamed, 2009).

disrupted during the war[12] , and unstable exchange rates discouraged exports as the exporter was not sure of the profits from exporting. Revival of the export trade required recovery of Germany and of Russia. The revival of Germany was entangled with the problem of reparations. The problem of Russia was aggravated by the communist takeover and their repudiation of the tsarist debts. Exchange rates were unstable because the method of financing the war had resulted in very different rates of inflation in the countries and it was not clear what might be the sustainable levels of the exchange rates. The exchange rate problems were compounded by the question of war debts and reparations.

The problems of maintaining balance in the balance of payments (BOP) and high levels of economic activity was thrown into relief after the First World War. Inadequate demand, a collapsed trade system and exchange rate instability were all intertwined and required an integrated comprehensive response.

**Section III: Performance in the Immediate Years after the War**

Leaders of the UK and the US believed that world economic revival, essential for recovery of foreign trade and domestic prosperity, depended on European reconstruction which required settling war debts and reparations, balancing budgets and establishing some form of the gold standard. But each wanted to accomplish this goal in ways best suited to its national interests (Costigliola, 1977).

In order to restore the GS Britain would have to bring its prices in line with those of other countries, particularly the US. The extent of reduction in prices that would be needed would be less to the extent that US prices increased. If the US adopted expansionary policies, then

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12 For instance, British exports in 1921 were only half the pre-war amount. Correspondingly, industrial production was only 81 per cent of the 1913 level.

inflation in the US would be higher and so the pressure to reduce prices in Britain would be lesser.[13] Furthermore, expansion in the US would lead to expansion in other countries, and British exports would gain from this. It further sought that government loans should be available while countries were trying to balance their BOP. The US, on the other hand, saw no necessity to follow expansionary policies as its economy was growing strongly (Table 1), and anyway exports had a very small share in GDP.

**Table 1: Rates of growth of per capita GDP (% )**

| | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 |
|---|---|---|---|---|---|---|---|---|
| France | 17.4 | 14.8 | -4.7 | 17.4 | 4.0 | 11.3 | -0.3 | 2.0 |
| Germany | -13.3 | 8.1 | 10.1 | 8.2 | -17.5 | 16.3 | 10.4 | 2.1 |
| UK | -10.8 | -6.6 | -2.4 | 4.5 | 2.6 | 3.4 | 4.5 | -4.1 |
| US | 0.3 | -2.3 | -4.1 | 4.1 | 11.3 | 1.1 | 0.8 | 5.1 |

*Source* : www.ggdc.net/maddison/historical_statistics/horizontal-file_02-2010.xls

It was content to accumulate gold and sterilise its effects on the domestic economy.[14] The US also wanted that the BOP loans be extended by the private sector.

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13 This would reduce the strain on the social fabric which would be brought about by forcing wages down through high rates of inflation.

14 At one point the British even thought of repaying their loans by shipping a substantial amount of gold thereby increasing the money supply in the US leading to higher levels of economic activity ad higher inflation. This policy was not adopted as it was realised that the US was successfully sterilising the inflows that were occurring.

At the same time, by levying high tariffs, the US made it difficult for other countries to run the surpluses needed to repay their debts in the US and the Americans insisted on repayment of past government and private debts. Under this scheme of things, the US experienced trade surpluses, stable prices, and receipts from debt repayments. The adjustment burdens such as trade deficits, deflation, and debt payments were assigned primarily to Europe and the rest of the world.

The restoration of prosperity in Central and Eastern Europe which would lead to expansion of international trade was imperative in the view of British policy makers. Foreign capital would have to flow to these countries for their recovery. This required a well-functioning international monetary system, which in turn required handling the issue of war debts.

The UK had run up huge debts to the US in order to import armaments. In addition, it had paid for a substantial part of the costs of the war for other countries. Its ability to pay the US depended on its ability to be paid by other countries. France, in turn, depended on reparations from Germany.

The only country which could lend was the US which ran a large BOP surplus and accumulated gold. It ran a current account surplus of $3.8 billion in 1919 gradually declining to $2.8 billion in 1920 and $1.6 billion in 1921. For the next 4 years the current account surplus averaged almost $700 million a year. Expansionary US policy was essential for recovery of the world economy. The US, however, sterilized the gold inflow so that instead of high rates of inflation which would have eroded its BOP surplus, prices dropped by almost 40 percent after the war, and it continued accumulating gold (Ahamed, 2009).[15]

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15 Also see One hundred years of price change: the Consumer Price Index and the American inflation experience, www.bls.gov/opub/mlr/2014/article/one-hundred-years-of-price-change-the-consumer-price-index-and-the-american-inflation-experience-2.htm. *Retail prices: 1913 to December, 1921*, Bulletin No. 315 (U.S. Bureau of Labor Statistics, 1923), http://fraser.stlouisfed.org/docs/publications/bls/192301_bls_315.pdf

British policy was guided by the recommendations of the Cunliffe Committee. The Committee urged restoration of the gold standard as the only effective remedy for an adverse balance of trade and reining undue growth of credit. The system would resume once the developments that had occurred during the war were reversed. Contractionary monetary and fiscal policies were called for and succeeded in achieving an almost 50% decline in the price level by end 2022, and the pound had risen to almost its pre-war rate (Ahamed, 2009). Growth was most sluggish in the UK. Per capita GDP stagnated between 1918 and 1926 (Table 1). Even though the US economy also grew relatively slowly between these years, it recovered by 1922 from the post-war downturn and the unemployment rate was falling[16]. In the UK, on the other hand, unemployment persisted at about 10 per cent or more.

The current account balance in the UK usually was in surplus because of surplus on the invisible account. But this surplus gradually declined from almost 210 million in 1920 to 46 million in 1925 (http://www.bankofengland.co.uk/archive/Documents/historicpubs/qb/1972/qb72q3345363.pdf). Furthermore, this surplus was much less than the outflows of long-term capital. Consequently, these capital outflows had to be financed by short-term borrowings which resulted in a maturity mismatch and made Britain increasingly vulnerable to international developments. It also meant that the classical discount rate policy could no longer work. An increase in the short run interest rate raised the cost of this short run borrowing.[17] Consequently, the increase in gold reserves of the BE was small.

16 The UK and the US did not have to undertake expenditures to make good the ravages of the war.

17 It emphasised once again that changes in the discount rate were effective if a country was a creditor but not if it was a debtor, as was argued by Keynes(1971).

The chief concerns of the Bank of France at the end of the war were to obtain repayment of its advances to the state, to reduce the quantity of notes in circulation, and to recover the gold used to guarantee wartime borrowing. On the other hand, the chief concern of the government was to repair the war damage and restore the viability of the economy. This meant that instead of repaying the money borrowed from the Bank of France during the war it persistently asked for additional loans.[18] The government ran large deficits, but expected that it would be ultimately be able to repay its loans from the reparation payments from Germany. However, because of the large deficits and the need to borrow substantial amounts the French franc was weak and came nowhere near the pre-war parity. The franc tumbled from its pegged rate of 5.45 frs./$ to 6 frs./$ by the end of March, 10.80 at the end of the year, and 16.60 at the end of 1920 (Sterling, unpegged, fell from $4.76 to $3.30 in March 1920). The French franc fell to one-tenth its value in July 1926 and, then, after Poincare took over in 1926, the franc was fixed at about 25 francs to the dollar. Despite the financial turmoil French per capita income grew by almost 36 percent between 1918 and 1926 and except for 1921 per capita income increased almost throughout the period.[19] Furthermore, France ran a current account surplus throughout the period from1920 to 1929 particularly after the fixing of the new undervalued value for the franc (Moure, 1996). Between 1926 and 1929 France's gold holdings almost doubled (Nurkse, 1944). Between 1928 and 1932 the BF took in almost 5 billion francs worth of gold and its gold reserves increased from 8 percent of global reserves to 27 percent (Moure, 1996).

Apart from reconstruction, the main concern of Germany was reparations. Reparations would eat into the resources available for reconstruction. The German government had large budgetary deficits as

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18. The conflict between the government and the bank about repayments and new borrowings is described in Moure 1996.

19. There were far fewer years of negative growth than in the UK and the US.

money was spent freely. This was partly because of the need for reconstruction, and partly there was a moral hazard problem. Behaving responsibly, it seemed, would benefit more others who would be paid reparations than the Germans. The prewar value of the mark was about 4.2 to the dollar. By the end of 1919 it reached 63, and after the first payment of 1,000,000,000 marks under the London plan, the mark fell to 262 to the dollar and to 7,500 to the dollar in December 1922. When the hoped for a coal-for-iron exchange and market-sharing fell as others could not agree to evacuation of the Rhineland and substantial revision of the Treaty of Versailles the paper mark reached 4,000,000 to the dollar in August 1923, and the Reich treasury was at the end of its tether. (www.britannica.com/topic/20th-century-international-relations-2085155/A-fragile-stability-1922-29#ref304201.)

The US had, meanwhile, withdrawn from European affairs. Their main aim was the repayment of the war debts, and they would not countenance any reduction in these. The US economy seemed to have stabilized from the immediate cyclical swings following the end of the war and seemed less in need of European recovery for its own economic health.

## Section IV: Attempts at International Cooperation

### *Section IVa: Genoa Conference*

The Genoa Conference (GC) was held in 1922 to find a cooperative solution to the ills of the world economy, particularly the European economies. However, the major powers had very different expectations. Also, political and economic objectives were intertwined. The British and the French had called for the conference. The French were mainly interested in ensuring their security from Germany. They sought to cripple Germany's power and reparations were one way to do so and so their main concern was that reparations be paid to them and that there would be no reduction in the amount of reparations.

The British sought a revival of the world economy by agreement on monetary measures, and the reintegration of Germany, the Soviet Union and other East European economies into the world economy as this would be a boost to British exports and so to the economy. The Soviets also hoped for their reintegration into the world economy. The US, expecting that they would be pressurized to write down the war debts owing to them, did not officially attend.[20] Furthermore, the US economy seemed to have overcome its earlier recession and was now growing rapidly so that European revival seemed less necessary for its own prosperity. Furthermore, they had not recognized the Soviet Union and did not want to officially attend a conference with them.

The UK was most interested in the revival of Germany and Russia. Negotiations foundered when France and Belgium, pre revolutionary Russia's main creditors, insisted on the repayment of prewar loans and restitution of confiscated foreign-owned property in Soviet Russia. The US also was unwilling to deal with Russia unless it recognized its responsibility for the tsarist debts and met other conditions which essentially meant a repudiation of communism. On the other hand, Russia wanted to be reintegrated economically without accepting liability for tsarist debts and without any political and economic strings.

Genoa seemed to provide a map for the reconstruction of the international monetary system. The draft resolutions, piloted by the British chairman Hawtrey, were an internationalization of the Cunliffe Committee recommendations. The proposals sought to both increase the supply of gold available to the central banks and reduce the demand.

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20. Their attitude towards the debts owed to them which they wanted paid in full was very different from that towards other debts and reparations. The British had borrowed on behalf of many others who lacked credit worthiness in the US market, and so its ability to repay its loans depended on it being repaid. The tough US negotiating stance then and later during and after the Second World War reflects the US desire to eliminate the British challenge to their power.

Private demand for gold was reduced by withdrawing gold coinage. As a consequence the supply available to central banks increased as the entire amount of available gold was at the disposal of the central banks. The demand for gold was sought to be reduced and the gold exchange standard (GES) was the mechanism. Countries would hold their reserves in the form of other currencies usually the pound sterling. The GES which was proposed would mitigate the deflationary pressure arising from the demand for gold as countries returned to the gold standard.

Also, devaluation of currencies that had depreciated significantly was recommended, in order to speed restoration of the gold standard. It was also recommended that independent central banks be set up in the newly independent countries and that the central banks should cooperate continuously in order to manage the system and be free from political pressure. Cooperation among central banks would regulate credit to maintain the currencies at par and to prevent undue fluctuations in the purchasing power of gold. While all parties agreed on the need to return to gold, the resolutions fudged on just what the gold standard was and would be, and when and how countries off gold would get there. Furthermore, the French and the Belgians did not accept the need to devalue.[21]

Consequently, the progress at Genoa did not lead to a durable reconstruction of the system. The French role at the conference and policy thereafter illustrate how little real consensus existed among the conference participants, and how opposition to the Genoa principles, present from the start, developed in the later 1920s. They, along with a number of other countries, were not in favour of devaluation and wanted

21. For the French motivations see Moure (1996).

a return to the pre-war parities. Furthermore, the French were against the adoption of the GES as it would give undue importance to the pound.[22]

The Genoa conference, however, had a long run effect. The Bank of International Settlements (BIS) set up to manage the Young Plan became a forum for meetings of central bankers, which it continues to be to this day. These meetings helped develop common ideas on monetary policy and the role of central banks. Two of the ideas that have become very prominent are that the only objective of central banks should be to control the rate of inflation and that central banks should be independent.[23]

The situation seemed to worsen after the lack of resolution of problems at Genoa. Germany suffered from severe hyperinflation in 1923. It seems that the government believed that the benefits from stabilisation would accrue to the countries who would receive reparations while Germans paid the price of stabilisation. Also, the government sought to buy foreign exchange to pay the reparations as mandated by the Treaty of Versailles using German currency. This resulted in an increase in the supply of German marks causing depreciation of the German mark and inflation. However, ultimately Germans were the losers from hyperinflation, particularly those who had savings. The mark-dollar exchange rate rose from 4.2 to one in 1914 to a peak of around 4.2 trillion marks to the dollar by November 1923. The currency was finally stabilized at the value of 4.2 renten marks per dollar, the same exchange rate as the Mark in 1914 so that 1 renten mark was equal to 1 trillion marks. The new currency was backed by land used in agriculture and business. Furthermore, Germany's central bank

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22. Later, the French had opposed the role of the dollar in the post second world war international monetary system. The then French president had wanted a return to gold to end what he called the 'exorbitant privilege' of the US.

23. More and more countries are adopting the framework of inflation targeting where the central has the responsibility of maintaining inflation in range and has to justify any failure.

(the Reich bank) was not allowed to discount any further government Treasury bills, which meant the deficit would no longer be monetized.

The French policy continued to be in the doldrums with the franc depreciating rapidly. French policy changed only in 1926 and the franc was finally stabilized at a rate of almost 25 to the dollar in 1928. The UK went back on to the GS in 1926 at the old exchange rate, as after a prolonged period of deflation the pound had almost reached the pre-war rate vis-à-vis the dollar.

***Section IV b: Section Cooperation after Genoa***

There were two aspects to cooperation after the Genoa Conference. One was attempts to deal with the vexatious issue of reparations. The other was central bank cooperation, principally among the central banks of the US, the UK, France and Germany.

***Section IVb: (i) Reparations***

Reparations were important in creating uncertainty and doubt in the 1920s. Astronomical sums were thrown around at Versailles. The decision was postponed. Ultimately the 1921 London Schedule of Payments required Germany to pay 132 billion gold marks (US$33 billion) in reparations to cover civilian damage caused during the war (Marks, 1978).[24] Immediately 20 billion gold marks were to be paid, but only 8 billion was paid. The London schedule divided reparations into three groups, A, B, and C. A was the left over amount of 12 billion and B was 38 billion golden marks. The rest was designated as C and none expected this to be paid.[25] Ultimately, just over 20 billion gold marks or

24. This should be compared to the Marshall Plan under which the US gave U$ 13 billion.

25. The A and B Bonds represented the total German reparations liability of $12 billion, an amount smaller than what Germany had offered to pay at the beginning of the negotiations.

$5 billion was paid. Most of these payments were financed by foreign loans, many of which were eventually repudiated by Hitler (Marks 1978).[26]

Reparation payments were progressively reduced.[27] The Dawes Plan managed to finally get French agreement to a reparations deal after the fiasco of the occupation of the Rhineland in 1923. [28] The United States would lend $200,000,000 to Germany to "prime the pump," and Germany would pay from 1,000,000,000 to 2,500,000,000 marks in reparations for five years.[29] But it soon became obvious that Germany could not pay the required amounts. The Young Commission was set up in 1929. The Young Plan further reduced payments by about 20 percent. Also, of the annual payment of US $473 million, one third had to be paid; The rest could be postponed but would incur interest and was to be financed by a consortium of American investment banks coordinated by J.P. Morgan & Co. In the end, Germany received more money in loans than it ever paid in reparations, so that the cost of repairing war damage was borne ultimately by the taxpayers, investors, and consumers of the Allied nations and the United States.[30]

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26 Germany made its last reparations payment of US$94 million on 3 October 2010, settling its outstanding debt from the 1919 Versailles Treaty and finally closing the reparations chapter.

27 For a history of reparations see World War I reparations, Findley, Carter Vaughn and J.A. Rothney. Twentieth Century World: 6th ed. Boston: Houghton Mifflin Company: 2006.

28 The US and the UK were agreed on the necessity to reduce reparations. The UK hoped that the US would also reduce their war debts. For a discussion of the Dawes plan see Orde (1990).

29 The French government, by contrast, issued bonds worth 44,000,000,000 francs from 1919 to 1925 to finance reconstruction of its devastated regions.

30 If the US had agreed to the wiping out of both UK and other debts to the US and of reparations much grief could have been avoided.

The years 1924 to 1929 became known as the 'Golden Years' – Germany became increasingly prosperous and peaceful. The economy was rebuilt on the basis of US loans, unemployment was reduced, and people began to feel secure.

***Section IVb: (ii) Cooperation among the Central Banks***

The Genoa conference had recommended close cooperation among central banks. The intensity of central bank cooperation over different periods has been measured.[31]

**Table 2: Intensity of Central Bank cooperation**

| Period | International Relations | Prestige and independence of Central Bank | Technicality of issues requiring of cooperation | Overall Intensity cooperation (Total Score) |
|---|---|---|---|---|
| | (1) | (2) | (3) | (4) |
| 1870s-1913 | 2 | 2 | 3 | 2,33 |
| 1920s | 1 | 3 | 4 | 2,67 |
| 1930s | 0 | 1 | 1 | 0,67 |
| 1950s | 4* | 2 | 2 | 2,67 |
| 1959-73 | 3* | 3 | 4 | 3,33 |

Source: Borio and Toniolo (2006). Note: all ranking on a scale of 0-4; (*): western world only. (1) International relations are valued between an extreme unilateralism to an extreme multilateralism. (2) It refers mainly to government willingness to allow central banks discretional power in financial diplomacy. (3) It refers mainly to cooperation required by pegging the exchange rate and by agreeing on supervisory standard.

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31. See the discussion as in Pittaluga where he uses an index of cooperation developed by Borio and Toniolo (2006).

Table 2 shows the 1930s to have the lowest intensity of cooperation in both the aggregate and the individual components. The 1920s however, had a higher index of cooperation, even higher than in the pre-first World War I period. The external international relations environment had deteriorated in the 1930s and the issues were not purely technical ones on which people might recognise the technical superiority of central bankers.

***Section IVb (iii) Cooperation in setting up of Central Banks***

Many of the newly independent countries formed after the collapse of the Austro-Hungarian empire needed to set up central banks. These central banks needed a stock of gold as reserves, and these could only be provided through loans which could only be raised with the help of the older central banks, mainly the English and French central banks. Furthermore, they needed technical advice on the role of central banks and their mode of operation. There were differences of opinion as to who would provide the technical advice and the loans and a struggle for power among the central banks of the three major countries. To circumvent this competition the assistance was provided under the aegis of the League of Nations. But most of the advice and the money came from England. Most of the central banks adopted the GES. The League came up with an almost standard formula through its Economic and Financial Organization of the League of Nations set up in 1920 (Decorzant).[32] A new bank of issue would be established with the help of a foreign loan which would be secured on the basis of certain revenues. A programme of financial reforms would be implemented, and a neutral controller-general would be appointed by the League Council. Usually the loan would be raised in England and France, mainly the former. Advice was provided by a controller general appointed by the League,

32. For further details see Myers, Margaret G. "The League Loans." Political Science Quarterly 60, No. 4 (December, 1945): 492–526. For a discussion of economic and political ramifications of the Hungarian loan see Orde.

often from England. In the case of Austria, a government guarantee for the loan was necessary.[33] But this was thought to be unnecessary in the other cases.

But there were limits to the cooperation in setting up the central banks. Many of the new central banks were set up by financial help from London and with English experts. However, such a central bank could not be set up in because of objections by the US who did not want such an important economy as Germany to be under English influence. Later the French objected to a similar arrangement for Romania as they considered Romania to be part of their sphere of influence.

***Section IVb (iv) Cooperation among the Central Banks***

The Genoa Conference had recommended that a meeting among central bank heads would soon be convened. But such a meeting did not take place. The 1920s witnessed a sharp struggle for supremacy between the US and Britain.[34] To strengthen its position Britain needed the adoption of the GES to bolster demand for sterling and so retain the importance of London. It sought an expanding world economy fuelled by expansionary US policies as inflation in the US would improve Britain's competitiveness without having to undergo a debilitating deflation, and also US government loans. Specifically, the British sought a favoured status in Russian development, a financial bloc centred in London, reduced war debts, regulated world capital flows, and stabilized world prices.

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33. For a discussion of the Austrian loan see Warnock (2015).

34. This struggle is best described in Costigliola, 1977. Ahamed, 2009, also describes these events in similar terms without drawing any conclusions about whether there was a struggle for supremacy.

The US, on the other hand, wanted private lending so that New York would replace London.[35] It also wanted a pure GS so that the pound sterling would be at a disadvantage.[36]

It wanted repayment of its loans while raising tariffs that made it difficult for other countries to export to the US. The US was willing to lend to help other countries import from the US and thereby increasing their indebtedness to the US and providing the US with leverage. This US system stacked benefits, such as trade surpluses, stable prices, and debt receipts heavily in favour of the United States and assigned adjustment burdens such as trade deficits, deflation, and debt payments primarily to Europe and the rest of the world.

Ultimately, Britain was forced by US policies and the actions by the important colonies to return to the GS at an overvalued exchange rate which would hinder the growth of its economy and circumscribe its role in the world economy. [37] Return to the GS was necessary to pre-empt the colonies from adopting the GS before Britain which would have fatally weakened the control of the London money market, and the links between Britain and her colonies would be replaced by links between the US and the colonies.

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35. They kept Russia on the sidelines helped by the German Russian agreement at Rapallo.

36. For instance, while in 1923-1924 Strong supported British plans that linked Austria and Hungary currencies to the British pound, the Americans balked at the British attempt to link the new German currency with sterling during the Dawes Plan negotiations.

37. The British ambassador to Washington summed up the problem in early 1921 as the central ambition of American politicians is to be the leading nation in the world and also among the English-speaking nations. Apart from having the strongest navy and the largest mercantile marine they intend also to prevent us from paying our debt by sending goods to America and they look for the opportunity to treat us as a vassal State so long as the debt remains unpaid. Quoted in Costigliola, 1977, p. 913.

The struggle about the path of adjustment for the world economy was also a struggle for supremacy between the US and Britain.[38] As we shall see later, this struggle continued in the fashioning of the post second world war international economic system culminating in the negotiations for the US loan to British after the conclusion of the Second World War.

Norman and Strong had been meeting regularly to exchange information and views regarding the state of the international economy and measures to solve the problems. In 1924 Schacht, the head of the German central bank also joined the meetings, and from 1927 the Bank of France was also represented.[39]

Strong Governor of the NY Federal Bank supported the return of the UK to the GS. He tried to maintain a low-interest rate in the US so that capital would not flow from the UK to the US. He did so sometimes even after opposition from other Federal Reserve Banks and sometimes even the central board located in Washington (Ahamed, 2009). He facilitated the return of Britain to the GS by providing a loan of 200 million dollars from the NY Fed and also arranging for a 300 million loan from J.P.Morgan. The British did not have to draw on the loans. But ultimately when inflationary pressures became too strong and also pressure to curb the speculation on the New York stock exchange mounted he was forced to raise interest rates.

But there were limits to central bank cooperation. After the stabilization of the Franc at an undervalued rate, the French ran surpluses and accumulated considerable amounts of gold. It soon became clear

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38. Even the establishment of the GES can be seen, and the French saw it as an attempt to foist sterling on other central banks. Cooperation among central banks, many of the newer ones were established with loans from England and would be susceptible to English influence (Pittaluga).

39. The Bank of France was usually represented by the deputies as Moreau the head did not speak English.

that the interests of the French central bank were aligned with those of the US central bank as both were running surpluses and accumulating gold. Norman thought that the problem was of the US and France running surpluses. The French thought that the problem was the unrealistic British policies. Strong seemed to agree with this view creating a rift between Strong and Norman (Ahamed, 2009).

The French central bank governor wished to refinance a loan that they had received from the British. Norman did not renegotiate the loan. The French central bank governor also believed that Norman had been uncooperative at the time of the earlier French crisis. He, therefore, repaid the French loan but also withdrew the gold which had been its surety. He also converted some of the Bank of France's sterling holdings into gold. This put sterling under severe pressure (Ahamed, 2009).[40] The German economy was also doing well after the acceptance of the Dawes Plan. In the two following years, $1.5 billion flowed into Germany more than the 500 million required for reparations payments (Ahamed, 2009) and this inflow fuelled rapid growth. However, Schacht remained concerned at the running up of German debt, and his interests seemed to align more with those of Norman.

In brief, by the mid-1920s all the major currencies were on gold. France and the US ran BOP surpluses whereas Britain ran considerable deficits. While Germany ran surpluses, these were based on borrowings from the US, and there were doubts about their sustainability. As far as growth was concerned, the US, France and Germany were all growing rapidly, and only Britain was limping along.

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40. At the 1927 meeting of the central bank governors Strong advised Norman to be more cooperative with Moreau, the French central bank governor given the circumstances.

**Section V: Co-operation after the Onset of the Great Depression: The London Conference**

When England went off the GS in September 1931 the exchange rates among major currencies became very unstable. Furthermore, at that time all the economies were suffering from severe reduction in economic activity and increase in unemployment. It was believed that governments needed to act cooperatively to stabilize exchange rates which would raise investor confidence and this would lead to a revival of the world economy.

The 33 per cent depreciation in the sterling/dollar rate during the sixteen months ended December 1932 had brought a significant narrowing of Britain's trade deficit. Under the Ottawa arrangements, negotiated between Britain and the dominions in July—August 1932, a preferential trading area was being formed. Freed from external constraints, the Bank of England's monetary policy had been eased, and the domestic economy was beginning to recover. In the British authorities' view, the outlook would have been as satisfactory as could be expected but for the continued burden of war-debt payment to the United States, the annual amount of which was equivalent to 12 per cent of Britain's 1932 exports.

Economic activity in France, after weathering the first shock of the depression relatively well, dropped 12 per cent from the 1929 level. Government revenues were consequently shrinking and budgetary deficits appeared. Guided by the orthodoxy of the twenties, the authorities strove to cut expenditures and to maintain monetary discipline. The domestic economy, deprived of financial stimulus, was protected by increased tariffs and quotas from imports cheapened by currency depreciations and deflation abroad. With the devaluation of the pound, the French franc became increasingly uncompetitive which hindered the maintenance of the stability of the French currency. A principal aim of French foreign economic policy was to persuade Britain

and other countries, whose currencies were fluctuating, to restore exchange stability on the basis of the gold standard. But the British were not inclined to follow the French advice which they considered self-serving as the pound's devaluation had considerably narrowed the English trade deficit.

It soon became clear that the French franc would have to be devalued. But for the devaluation to be effective the US and England must not try to negate it. Therefore, an understanding needed to be reached among the three major counties. So a conference was organized in London in 1933.

The British, French and American experts agreed that recovery efforts called for comprehensive measures that would lead to the stabilization of exchange rates, the easing of monetary policy, and the reduction of barriers to trade and payments. However, they disagreed about the order in which such measures should be adopted. The Americans and French, as well as some other continentals, held that the return of sterling to gold at some as yet unspecified parity was a prerequisite for cooperative measures in other areas. Without exchange stabilization, no country could undertake monetary expansion or the reduction of trade and exchange restrictions without exposing itself to unpredictable changes in its external position. The British experts, however, believed that, despite accepting the virtues of a reformed gold standard, sterling could be stabilized only after (1) the adoption of expansionary measures in the major countries that would increase commodity prices to a level at which production costs would again be covered; (2) the reduction of barriers to trade and payments; (3) the acceptance of gold economy measures, including the reduction of central-bank reserve requirements; and (4) cooperative central-bank measures that, through the provision of special credits to debtor countries, would facilitate the revival of international capital flows.

Hoover, the then US president, had committed the US to attend it and the new president, Roosevelt, agreed to attend though the US dollar had gone off gold and even though he was very sceptical about the conference. He thought that the others would merely try to inveigle him to go back to the GS. Roosevelt did not want to do that, having just abandoned gold (Clarke, 1973). He also wanted the meeting to be held after he had started his domestic programme. The main aim of President Roosevelt seems to have been to avoid anything that limited his ability to adopt any policies that he thought necessary for recovery.

Agreement was soon reached among the technical experts about how to stabilize the three currencies. But negotiations on the other main issue, the measures necessary for recovery of the economies, did not make adequate headway. Every time there was news that agreement was about to be reached the dollar appreciated and the US stock market declined. When hopes for an agreement receded the stock market recovered, and the dollar depreciated. These helped US recovery (Feis, 1966). Thus President Roosevelt torpedoed the exchange rate agreement also. No agreement was reached at London[41, 42] Later a tripartite agreement between England, France and the US was reached in 1936. It allowed the French to devalue and made some vague commitments to exchange rate stability. But no specific commitments were agreed for stabilizing the exchange rates.

**Section VI: Conclusions**

There were intensive efforts at monetary cooperation in the inter-war years to overcome the imbalances that had occurred during the war years and to achieve a reduced rate of inflation, a reduced rate of

41. It is interesting to speculate how the conference might have turned out if the United States negotiators had been able to offer war-debt cancellation, exchange stabilization, tariff reduction, and support for an international monetary fund in order to obtain acceptance abroad of the cooperative recovery program outlined in the President's instructions to the United States delegation.

42. For a more sympathetic evaluation of Roosevelt's reluctance to provide the public good of monetary stability, see Morrison (1993).

unemployment and exchange rate stability. The imbalances had occurred because the different governments had adopted different means of financing their war expenditures. The greater the reliance on expansion of the money supply the greater the rate of inflation and the more the deviation of the exchange rate from the pre-war parity.

In certain matters, there was considerable cooperation. For instance, the countries cooperated in helping the newly independent countries of Eastern and South Eastern Europe establish central banks, despite differences of opinion between the French and the English. Even here there was a limit as the US would not countenance that Germany be on the GES as this would give England too much influence.

The countries also cooperated in negotiations on German reparations after some serious differences. This happened because the two major powers the UK and the US were both agreed that reparations needed to be reduced and the issue was how to get the French to agree to that.

Cooperation was possible as long as the issues were technical and did not involve a shift in economic power. But, for instance, the US would not agree to any reduction of Britain's liability for loans it had raised in the US to finance its imports from the US. On overall monetary policy, we saw the limits of cooperation between the US and UK when domestic considerations required that interest rates in the US be raised. This was done even though it created problems for the UK. Also, the US and France kept accumulating gold even though it created problems for other countries. But the clearest example of a lack of willingness to cooperate can be seen in the London Conference. Even though the US had indicated that they would be willing to stabilise exchange rates at a particular value they torpedoed the agreement even though the US dollar would have a more devalued rate.

What the inter-war period shows is the strong desire of the US to displace the UK and develop the position of the US. They would not

accept any agreement that might be a hindrance to that.[43] After the experience of the 1930s, a strong network of institutions has been built up to deal with aspects that have externalities. But these institutions are coming under increasing pressure.

There are also striking similarities with the policy situation after the 2008 crisis as in the 1930s. The network of institutions particularly the WTO has presented any significant increase in protectionism. Also BOP financing has been available from the IMF. But apart from an initial fiscal stimulus the pressure, as in the 1930s, has been to cut expenditures and to balance the budget.[44] Monetary policy has provided more of a stimulus though there have been strong voices including the BIS calling for increases in the rate of interest much before there was any recovery.[45] Furthermore, central banks are once again independent as recommended at the Genoa Conference and concerned only with controlling inflation.[46] Fiscal policy is now seen to have no role in economic management, and monetary policy has to be geared to controlling inflation. No instrument is left to manage the level of employment in the economy. The belief now as in the earlier period is that if macro stability is restored "animal spirits" will ensure full employment. If there is unemployment, it is because wages are too high.

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43 The subsequent behaviour of the US shows that they would walk out of agreements they did not agree with .For instance, the law of the sea agreement was reached taking account of the wished of the US. But finally the US did not sign it. Agriculture was kept out of the GATT because the US wished it so. It was brought back in when the US insisted.

44 Here is a striking similarity in the writings in the British papers before the London conference of 1933 and that of 2008.

45 It must be remembered that both White and Keynes wanted the BIS to be abolished. They feared that otherwise monetary orthodoxy would be restored.

46 Even here their policy response is very asymmetric. Though many have adopted a band of two percent around a central goal of two percent inflation, even when the inflation rises from say 1 percent to 1.5, still lower than the target, there is an immediate clamour to raise interest rates.

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