THE GOLD STANDARD AND THE GREAT MONETARY DEPRESSION: HOW THE MONETARY SYSTEM CONTRIBUTED TO TURNING AN 'ORDINARY SLUMP' INTO THE GREATEST ECONOMIC CONTRACTION OF THE 20TH CENTURY

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Recent calls by Robert Zoellick, the President of the World Bank, to reintroduce the gold standard as part of the global currency reserve system have brought the almost forgotten currency regime back into conversation. Amandine Lobelle examines the detrimental effects that being pegged to the gold standard had on the Great Depression, arguing that it made what would have simply been an ordinary downturn a colossal one.

Introduction

There has been a central, recurring theme in economics, from Cantillon to modern day writers, that gold is an ideal monetary standard, domestically and internationally, due to its qualities as a standard of value and a medium of exchange. The renowned classical gold standard (1870s-1914), seen as a 'seal of approval' (Bordo and Rockoff, 1996) amongst the international community, was built on this premise, whereby a certain mass of gold defined the monetary unit and served as the 'ultimate medium of redemption' (White, 2008, p.2).

Similarly, there has been a fixation amongst academics to understand the Great Depression, the ability of which has been hailed as the 'Holy Grail' of macroeconomics (Bernanke, 1995). Many academics spend their entire professional careers on determining the roots of the crisis and the long-lasting impacts it had on 20th century monetary thought and policy. This essay will analyse recent theories attributing the interwar gold standard, which existed from the mid-1920s to the mid-1930s, as a watershed that promulgated an ordinary slump into the Great Depression.

The interwar gold standard was reinstated following the massive exogenous shock of World War I (WWI). However, it was not to operate in the same environment. The repercussions of the

¹ In the United States, one ounce of pure gold was equivalent to US\$20.67 (White, 2008, p.2).

Great War meant that the 1920s were characterised by domestic political constraints in the following forms: unions and interest groups; international political disputes over war debts and reparations; hyperinflation; unemployment; and incompatible conceptual frameworks in different countries which prevented policymakers from developing a common understanding of the economic problem. Eichengreen (1995) argues that these factors were obstacles to the crucial international cooperation required after WWI to rebuild a suitable gold standard. Furthermore, as Ahamed (2010) points out, during the transitory 1920s international communication was not easy and central banks were still privately owned; their key objective was to preserve the value of the currency rather than stabilise the economy.

The Wall Street Crash and post-1929 recession that ensued was one of the greatest economic shocks of the 20th century; industrial production fell by 30% in the U.S., 25% in Germany and 20% in Britain (Ahamed, 2010, p.374) and between 1929 and 1933, unemployment rose from about 3% to nearly 25% in the US (Bernanke, 2004). Eichengreen (1995, p.4), however, maintains that had a *stable* gold standard been maintained, the post-1929 recession would have been just another economic contraction. In reality, the badly constructed system and its consequent collapse was another source of financial instability during the early 1930s. Not only did it restrict the monetary policy that governments and central banks were able to enact, but it allowed for volatile capital and gold flows to occur, which widened the gap between surplus and deficit countries and undermined the solvency of financial institutions. This uncertainty, combined with the fact that central banks were not cooperating to improve the system and had begun breaking the 'rules of the game', precipitated speculative attacks on the major reserve currencies which had a deflationary feedback effect on other gold standard countries. Indeed, no country could begin recovering from the recession whilst still being tied to the gold standard.

This essay will expand on the themes outlined above. Essentially, domestic and international finance was intimately linked through the gold standard which required high degrees of credibility and international cooperation to survive. Unfortunately, these requisites were not to hold for the early 1930s which would have dire repercussions on the world economy.

The Gold Standard Restricted Policymakers' Abilities to Combat Deflation and Economic Contractions

Liaquat Ahamed's recent book *The Lords of Finance* (2010) highlights how the decisions of the leaders of the four most important central banks of the time (Britain, France, United States and Germany) and the decisions that they took while in office were key to the Great Depression. Although human error and a lack of communication and cooperation were big factors in translating the downturn into a depression, it should be noted that countries which were bound to the fixed exchange rate monetary system could not depreciate their currency; a tool which Eichengreen (1995, p.21)

believes was crucial to macroeconomic growth, through increases in output, employment, investment and exports.

The physical aspect of this restriction, as posited by Bernanke and James (1991), is that the majority of European central banks had insufficient powers and were limited in terms of the open market operations they could use as a result of stabilisation programmes in the 1920s; they could only rely on discount policies (i.e. interbank lending rates) to affect the money supply instead of, for example, the buying and selling of government securities. Since major commercial banks borrowed quite infrequently from their central banks, their control over the money supply was quite weak and unable to deal with severe macroeconomic contractions (Bernanke and James, 1991, p.10). Furthermore, being on the managed gold standard forced countries to adopt similar discount rate policies: if one country decided to increase their interest rate, other countries would have no option but to retaliate and increase their rate too. Failure to do so could risk the loss of gold reserves as financial investors transferred their funds to countries where returns were higher (Bernanke, 2004). Eichengreen (1995) even attributes the worldwide downturn of 1929-1930 to the degree of monetary policy interconnection between countries on the gold standard.

In addition to physical restraints and obligations, the mental paradigm of the time also restricted policymakers. The consensus ideology was that the gold standard should be saved at all costs. Indeed, policymakers perversely believed that macroeconomic impairments such as unemployment would stabilize and output would resume if the gold standard was maintained, while any attempts to increase employment directly would fail (Eichengreen and Temin, 2000, p.195). This is possibly why, despite dealing with grueling deflation, output losses and mass unemployment, it took most of the Western powers (who seemed to idly sit by as their economies plummeted) several years to abandon the gold standard, with Switzerland being the last to leave in 1936.

Hamilton (1988) argues that the speculative attack on the dollar in 1931 was caused by the restrictive monetary policy of the Federal Reserve in the second half of 1931. In fact, 'on October 9 1931, the Reserve Bank of New York raised its rediscount rate to 2.5% and on October 16 to 3.5% - the sharpest rise within so brief a period in the whole history of the system, before or since' (Friedman and Schwartz, 1963, p.317). This contractionary policy in the midst of rapid economic decline was characteristic of the gold standard mentality.

The Gold Standard Broke Down the Price-Specie Flow Mechanism and Encouraged Volatile Capital Flight

Given that the gold standard was a managed system, there was no automatic check to redistribute gold reserves between member countries; hence Hume's automatically adjusting price-specie flow mechanism did not hold. Theoretically, under a gold standard with fixed exchange rates, a contractionary monetary policy in one country, such as the United States, should be matched by gold

inflows to neutralize the effect of the Federal Reserve's actions on the money supply. However, Hamilton (1987) specifies three reasons why the price-specie flow mechanism did not hold from 1929-1931. Firstly, the money supply was falling not just in the United States but all over the world, partially due to a shortage of gold. Secondly, even though the discount rate fell in 1929-1930, bills discounted fell faster following a failure to increase un-borrowed reserves: despite the inflow of gold, high powered money fell by 5% to the effect that the Federal Reserve was in fact sterilizing gold inflows and further contracting high powered money. Thirdly, the collapse of world trade following the rise of trade barriers such as tariffs, quotas, and domestic content laws was also a disruption to the price-specie flow mechanism (Hamilton, 1987, pp. 159-160).

This failure in the price-specie flow mechanism led to the build-up of gold reserves by certain countries and furthered the already-existing balance of payments disequilibrium and financial instability. In fact, France and the United States, two surplus countries, were particularly guilty of augmenting this asymmetry. By 1932, the two countries owned 70% of the world's stock between them (Cesarano, 2006, p.55). Nurkse (1985, p.213) even attributes the buildup of French gold imports to the breakdown of the gold standard. An unavoidable consequence of this was that other (deficit) countries were forced to adopt restrictive measures to defend their gold reserves which in turn widened the asymmetry, accentuated a deflationary bias in the system, worsened the economic climate and hastened the collapse of the gold standard; surplus countries essentially shifted the burden of adjustment to deficit countries by forcing them to deflate.

Furthermore, uncertainty about the soundness of banks following the worldwide banking panics of 1929 and 1930 reinforced fears of exchange-rate devaluation and was a source of mounting financial instability and a fall in confidence in domestic banking systems during the early 1930s. Both of these factors precipitated volatile capital flight; expectations of devaluations triggered outflows of 'hot-money' deposits (as well as those held by domestic depositors) and a fall in confidence in the banking system often led to a flight of short-term capital from the country, draining international reserves and threatening convertibility (Bernanke, 1995, p.7). These large and sudden capital flows were exacerbated by the gold standard because 'speculators necessarily will continuously reappraise the profit opportunities arising from any potential change in gold parity' (Hamilton, 1988, p.68); the gold standard essentially further undermined the solvency of financial institutions. By 1931, it became evident that the Federal Reserve and the Bank of England had 'succumbed to the lure of managed money', had begun breaking the 'rules of the game' and had committed abuses of credit by sterilising international gold flows (Eichengreen and Temin, 2000, p.195). This further prevented the capital flows from exerting their normal stabilising influence on credit conditions and respectively prevented costs and prices from adjusting. Ferderer and Zalewski (1994, p.836) argue that this loosening of

² Short-term deposits held by foreigners in domestic banks (Bernanke, 1995, p.7).

³ An example of such sterilisation of gold flows could be selling government securities on the open market.

credit conditions and the withdrawal of highly mobile foreign deposits led to further bank failures and attacked the basic premise of the gold standard, the ability of a country to convert its currency to gold.

Capital Flight Under the Gold Standard Resulted in Speculative Attacks on Currencies

Following the emergence of volatile capital and gold flows outlined above, in June 1931, the government commissioned Macmillan Committee called a 10% devaluation of the gold parity of the sterling and laid out a detailed plan for Britain to do so within the confines of the gold standard (Macmillan Committee on Financy and Industry, 1931, p.195-196). Unfortunately, such plans were not to bear fruit. Following the financial upheaval and bank runs in Continental Europe (notably that of Credit Anstalt in Austria), the soundness of Britain's international long-term loans had been called into doubt, which led speculators to attack the British pound (Bernanke, 2004). However, this may not have been the only incentive for a speculative attack. As Hamilton posits, it may be that the most persuasive argument simply lies in the fact that, ex-post, we can see that anyone who bet against the pound during the summer of 1931 profited very well (Hamilton, 1988, p.74). The nature of speculative attacks is such that as rumours of the devaluation spread, the damage was self-fulfilling; over the summer of 1931 capital began to flow out unchecked by the Bank of England who hesitated to raise the Bank rate out of fear of the damage this could cause to an already depressed economy (Ferderer and Zalewski, 1994, p.836). Essentially her unwillingness to raise interest rates left Britain with no other choice but to abandon the gold standard in September 1931, allowing the pound to float freely and have its value determined by market forces.

It is difficult to imagine the paradigm-shift that must have occurred following Britain's departure from gold. Although smaller countries had left the gold standard previously, these had been peripheral economies that were not at the heart of international trade and finance. For a core country and leading (albeit already severely depleted) economic power to actually abandon the mechanism that had governed policymaking throughout the downturn threw an already unstable international financial system into turmoil. As expected, this financial uncertainty and speculative activity would spread to other countries and eventually force other countries to abandon gold convertibility. In fact, although the United States remained on the gold standard until 1933, 'between September 16 and October 28, 1931, Federal Reserve holdings of gold fell from \$4.729 billion to \$4.002 billion' (Hamilton, 1988, p.74). This meant that the Federal Reserve had to pursue extreme measures in the discount rate policy, to reinstate that its commitment to gold was credible. It also meant that the United States was again susceptible to large and sudden capital flows which again increased uncertainty and deflationary pressures in other countries. In summary, as Hamilton argues, 'private speculators' potential profit opportunities should be regarded as an irresistible force in international finance, and any central bank policy that leaves open such opportunities is doomed to failure' (Hamilton, 1988, p.69). Failure, for the Bank of England, was being forced out of the gold standard.

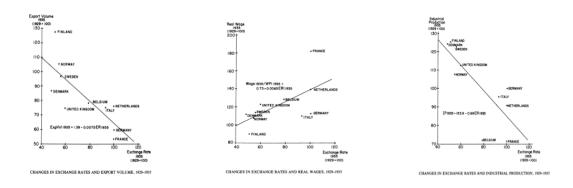
The Gold Standard Impeded Grounds for Economic Recovery

Perhaps the most potent argument for how the gold standard affected the onset of the Great Depression is that it impeded grounds for recovery. Temin (1993) goes as far as to argue that the gold standard was *the* primary transmission mechanism of the Great Depression: 'the single best predictor of how severe the Depression was in different countries is how long they stayed on gold. The gold standard was a Midas touch that paralyzed the world economy.' (Temin, 1993, p.92) Indeed, the gold bloc member countries were to endure severe contractions that lasted into 1935 and 1936.

Bernanke (1995, p.4) states that no country exhibited significant recovery whilst remaining on the gold standard, and there have been various econometric analyses to support this hypothesis. He found that subsequent to 1931 or 1932 there was a sharp divergence between countries which remained on the gold standard and those who left it; the difference in real wage growth was equivalent to about 6 percentage points per year (Bernanke, 1995, p.21). This discrepancy was attributed to the fact that countries which had left the system had greater freedom to initiate expansionary monetary policies, even if there was a 6 month time lag before expansionary policies were applied (a necessary interlude to convince the public and policymakers that abandoning gold was not going to cause inflation) (Eichengreen, 1995, p.393). Regaining monetary autonomy severed the link between the balance of payments and the price level to allow countries to lower interest rates or expand production without the onslaught of a currency crisis.

Eichengreen and Sachs (1985) found that countries were only able to begin recovering after leaving the gold standard with their study on the variance in industrial production, real wage and export volume. The data collected is from 10 European countries, consisting of the gold bloc countries still on the gold standard and those that had left and devalued by 1935. They find that gold bloc countries systematically had high wages and lower levels of industrial output than those who abandoned the gold standard, relative to their respective 1929 levels, as shown in the graphs below.

Figure 1: Changes in export volume, real wages and industrial production vis-à-vis exchange rates for 10 European countries 1929-1935

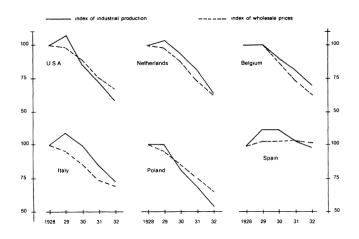


(Eichengreen and Sachs, 1985)

This analysis essentially shows the macroeconomic effect of depreciation once countries had left the gold standard (Eichengreen and Sachs, 1985). For all three macroeconomic variables in the graphs above, the gold bloc countries had not regained their 1929 levels in 1935. France in 1935, for example, relative to 1929 levels, had an export volume of c. 54%, real wages were c. 185% and industrial production was c. 72%. Conversely, Britain⁴, who had left four years prior, was experiencing an export volume of c. 75%, a wage rate of c. 123% and industrial production of c. 113% relative to her 1929 levels. The graphs also show that countries which devalued early (Britain, Denmark, Sweden, Norway and Finland) grew more rapidly. There also seems to be a positive relationship between the magnitude of depreciation and the rate of growth, possibly due to the first mover advantage of regaining autonomy and depreciating their currencies. This final thought can be extended to the fact that Argentina and Uruguay, who suspended gold convertibility in 1929, largely avoided the financial crisis (Temin, 1993, p.96).

The final study by Choudhri and Kochin (1980) posits that flexible exchange rates insulate domestic output and prices from the influence of foreign output and price disturbances. To prove this, they perform a counterfactual evaluation by comparing gold bloc countries to Spain, who never joined the international monetary system. The graph of their results (below) shows that, despite substantial differences in industrialisation and trade, the impact of the severe contraction in the United States and other gold standard countries was not felt by Spain, who actually maintained a pretty consistent wholesale price index and whose industrial production output in 1932 was similar to in 1928. Additionally, this suggests that a contagion effect was in play; the gold standard countries' output and prices mirrored that of the United States suggesting that the gold standard was the binding mechanism

Figure 2: The Behaviour of Industrial Output and Wholesale Prices During 1928-1932: The Gold Bloc Countries and Spain Compare to the U.S.



⁴ Britain's exchange rate of 59 indicates a 41% depreciation compared to 1929 levels.

Conclusion

The purpose of this essay has been to show that the gold standard was a crucial instrument in propelling the ordinary downturn of 1929 into the Great Depression, a colossal shock in economic history and one which gave birth to a new field of macroeconomics, still revered and being used today. The fact that the gold standard was conceived in economically and politically turbulent times, and with very little international cooperation, meant that there were inherent structural weaknesses which added to the mounting financial instability of the early 1930s. In particular, the contradiction of having a *managed* system of gold exchange convertibility allowed certain surplus countries to take advantage of their balance of payments positions by hoarding gold reserves at the expense of other member countries. The distortion this created in the international economy, and the fact that deficit countries such as Britain were left without enough gold reserves to defend themselves against speculative attacks, undermined the credibility of the gold standard which proved to be detrimental for all in the long run. As Hamilton (1988) puts it, the interwar gold standard was not 'as good as gold' but just as good as the *credibility* of the government's promise to maintain gold convertibility.

Furthermore, not only were policymakers from gold standard countries restricted to the 'rules of the game', but the semi-religious strength of the mental paradigm was such that their lacklustre reactionary policies seem almost laughable today. By 1931, when Britain let go of her commitment to gold, the system had lost the remains of its international reputation which resulted in further deflation and macroeconomic losses for the gold bloc countries over the following four years. In hindsight, we can see that the gold standard was the ballast to economic recovery in the early 1930s; no country could begin to recover while still tied to gold, and the last to leave the monetary system were the worst hit. In fact, those who never joined the monetary system to begin with were largely exempt from the depression.

The early 1930s experience with the gold standard is exemplary of the macroeconomic 'Impossible Trinity' whereby only two of capital mobility, independent monetary policy and fixed exchange rates can be met. With fixed exchange rates and free capital flows, central banks could not exert autonomous monetary policy; when they tried to and began breaking the 'rules of the game', the system collapsed. Today, the key objectives of central banks are generally the price level, output and sometimes unemployment rather than the value of the currency. Nevertheless, the current economic crisis has led to calls, notably by Robert Zoellick, President of the World Bank (Zoellick, 2010, cited in Financial Times, 2010), for a return to some form of gold-backed monetary system in the attempt of regaining economic stability. While some degree of international reform is definitely in order, history shows us that the limitations and contradictions of classical gold standard variants are not to be underestimated.

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