Fetters of Gold and Paper

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While we are lucky to have avoided another catastrophe like the Great Depression in 2008-9, mainly by virtue of our policy makers' aggressive use of monetary and fiscal stimuli, the world economy still is experiencing many difficulties. As in the Great Depression, this second round of problems stems from the prevalence of fixed exchange rates. Fixed exchange rates facilitate business and communication in good times but intensify problems when times are bad. We argue that the gold standard and the euro share the attributes of the young lady described by Henry Wadsworth Longfellow (American, 1807-82):

> There was a little girl, who had a little curl
> Right in the middle of her forehead,
> And when she was good, she was very, very good,
> But when she was bad she was horrid.

We describe in this essay how fixed exchange rates share this dual personality, why the gold standard and the euro are extreme forms of fixed exchange rates, and how these policies had their most potent effects in the worst peaceful economic periods in modern times. We do not ask or attempt to answer whether the widespread adoption of the gold standard in the mid-1920s or the creation of the euro in 1999 were mistakes.[1] Both decisions reflected deep-seated historical forces that developed over long periods of time: a set of gold standard conventions and a *mentalité* that flowered in the 19th century, allowing the gold standard to be seen as the normal basis for international monetary affairs, and a process of European integration with roots stretching back well before World War II which came into full flower in the fertile seedbed that was the second half of the 20th century, culminating in the emergence of the euro at the century's end. We take these deep-seated circumstances as given and ask whether and how they could have been managed better. We ask, in particular, whether they could have been managed to prevent economic disaster.

The gold standard was characterized by the free flow of gold between individuals and countries, the maintenance of fixed values of national currencies in terms of gold and therefore each other, and the absence of an international coordinating organization. Together these arrangements implied that there was an asymmetry between countries experiencing balance-of-payments deficits and surpluses. There was a penalty for running out of gold reserves (and being unable to maintain the fixed value of the currency), but no penalty (aside from foregone interest) for accumulating gold. The adjustment mechanism for deficit countries was deflation rather than devaluation, that is, a change in domestic prices instead of a change in the exchange rate.[2]

This last point—the choice of deflation over devaluation—can be seen clearly in contemporary views at the nadir of the Depression. Lionel Robbins argued that 'a greater flexibility of wage rates would considerably reduce unemployment'. He applied this view to the Depression: 'If it had not been for the prevalence of the view that wage rates must at all costs be maintained in order to maintain the purchasing power of the consumer, the violence of the present depression and the magnitude of the unemployment which has accompanied it would have been considerably less'. Robbins had the wit to acknowledge that this was a 'hard saying' and to insist that all prices, not just wages, needed to be flexible. These caveats do not moderate his prescription; they simply expose the depth of his conviction that internal deflation was the only way to deal with a fall in demand (Robbins 1934, p. 186). (He regarded this view later as a 'fundamental misconception'.)

The gold standard was preserved by an ideology that indicated that only under extreme conditions could the fixed exchange rate be unfixed. The euro has gone one step further by eliminating national currencies. Modifying the policy regime unilaterally is even more difficult than under the gold standard. While it is conceivable, in theory, that an incumbent member of the euro area could opt to reintroduce its national currency and then depreciate it against the euro, there is no provision for doing so in the Lisbon Treaty.[3] It similarly is conceivable that an incumbent member might choose to disregard its treaty obligations. But, even then, if the decision to reintroduce the national currency and convert all the financial assets and liabilities of residents into that unit was not done instantly, a period of extreme financial instability would follow, as investors withdrew their money from the domestic banking system and financial en masse, creating what one of us has called 'the mother of all financial crises' (Eichengreen 2010). This spectre raises the question of whether the operation can be done at all, parliamentary democracies not being good at taking decisions overnight. And, if it cannot, the question is what to do instead.

The Gold Standard

Keynes was clear about the impulse that set off the Great Depression. He said in mid-1931 that in 'the fall of investment…I find—and I find without any doubt or reserves whatsoever—the whole of the explanation of the present state of affairs'. (Keynes 1931, pp. 349-351). His interest—like his modern-day followers and critics—was in the propagating mechanism, and he consequently did not examine more closely his candidate for the shock. We follow Keynes but take the argument one step further. The tight monetary and fiscal policies of the late 1920s that induced investment to fall were due to the adherence of policymakers to the ideology of the gold standard. Choices made by monetary and fiscal authorities in the years around 1930 were made according to a worldview in which maintenance of the gold standard—such as it was by the late 1920s—was the primary prerequisite for prosperity. As a result of this ideology, monetary and fiscal authorities implemented contractionary policies when hindsight shows clearly that expansionary policies were needed. No analogous pressure to adopt expansionary policies was felt by the authorities with the freedom to do so.

The ideology that determined specific actions was a policy *regime*. It indicated a stable reaction to external events. This regime was well known to contemporary observers. Both policy-makers and people affected by their actions operated within this regime. When they thought of alternative actions, they thought of alternatives within this regime, that is, within the gold standard. Alternatives outside the regime were not taken seriously, whether by policymakers when proposed or by investors and consumers when undertaken.[4] They were interpreted as aberrations from the stable gold-standard regime. In previous work we have identified this policy regime as a *gold-standard mentalité* (Eichengreen and Temin, 2000).

The gold standard was revived with some difficulty after the First World War in an effort to extend the stability and prosperity of the great Victorian boom (Wolf, this issue). All of the major industrial countries of Europe and America went back on gold, many at pre-war levels.[5] Yet within a few years, the asymmetry of the gold standard had made its maintenance impossible. We show this evolution by analysis of the four major countries in turn: the United States, the United Kingdom, France, and Germany.

The story is summarized in Figure 1, which shows world gold reserves for several interwar dates by the four major countries and a residual. The height of the bars show that total reserves rose continuously from 1927 to 1935. The bottom (black) bars show that US gold reserves jumped dramatically after 1933. The next (speckled) bars show that France's gold reserves rose continuously from 1927 to 1933 and then declined. The UK and Germany never had reserves anywhere near as large, and German gold reserves vanished in 1931. The disparity of gold reserves and their scarcity in the UK and Germany drove the economic fortunes of these countries.

We speak of the interwar years, but contemporaries in the 1920s knew only that the world was different after the Great War. Trade patterns had shifted as European agriculture was largely out of commission during the war. The capital positions of countries changed even more drastically as the combatants used up their capital stocks to fight one another. And the pattern of international debts after the war was complicated by reparations imposed on Germany, war debts owed to the US by England and France, and loans from the US to Germany.

Inflation during the war also put strain on the gold standard. Prices in the 1920s were higher than before in relation to the value of gold reserves. This created a deflationary bias that aggravated the pressure for deficit countries to reduce prices (Johnson 1998, Mundell, 2000).

The United States never went off gold during World War I. To the contrary, the Federal Reserve Act that went into operation in 1914 limited the legal cash reserves of the U.S. central bank to gold and lawful money. It required that reserve banks hold gold equal to 40 percent of the value of Federal Reserve notes issued to them, not merely Federal Reserve notes in public circulation. This effectively raised the gold backing requirement for the note circulation by a quarter, from 40 to 50 percent. The provision was designed to assure the public that Federal Reserve notes were 'fully backed' with gold and real bills. If eligible securities fell short of 40 percent of notes issued to reserve banks, the shortfall had to be covered with additional gold. Additional gold equal to 35 percent of deposits placed with the reserve banks also had to be maintained.

The United States in the 1920s thus became a gigantic sink for the gold reserves of the rest of the world. Despite accumulating by the end of the decade nearly 40 percent of global gold reserves, the Fed's free gold—the amount left over after statutory requirements were subtracted—was small. The US central bank had only limited scope for engaging in expansionary open market operations. Moreover, there was reason to fear that these restrictions would bind precisely when the need for expansionary open market operations was greatest. In a recession, as lending opportunities evaporated, member banks would use their available liquidity to pay back their borrowings from the Fed. As the Fed's rediscounts of member bank paper declined in consequence, so would its eligible securities, increasing the required gold cover and further reducing the scope for expansionary open market operations.

Scholars debate when and exactly how tightly these constraints bound (Eichengreen 1992; Hsieh and Romer 2002). The important point, however, is not when the free gold constraint technically bound or whether it could, theoretically, have been circumvented, but whether its presence, in conjunction with the *mentalité* of the time, inhibited tendencies to adopt more expansionary policies. For example, the Federal Reserve's expansionary open market operations in the summer of 1932, analyzed by Hsieh and Romer, came in the aftermath of its stunning support of the gold standard the previous autumn. No investor could doubt the Fed's commitment to maintaining the gold standard in 1932, even if at the moment it was not up against that constraint.

France also accumulated gold in the run-up to the Depression. In the first half of the decade, the left and right had engaged in a protracted struggle over who would bear the burden of taxation after the war. The fragmentation of the polity, attributable in part to the modified system of proportional representation under which members of the Chamber of Deputies were elected, heightened the difficulty of resolving the dispute. Unwillingness to compromise was reinforced by the reparations tangle, for to raise taxes was to admit the unrealism of the nation's reparations demands and reduce the pressure on Germany. The longer the stalemate persisted, the further the franc depreciated, and more perilous the financial situation became.

France's crisis had two distinct phases. The war of attrition over taxes and public spending produced a succession of budget deficits that could be financed only with money creation. Inflation and currency depreciation were outgrowths of this budgetary deadlock. By 1924 the situation had deteriorated so alarmingly that the politicians, to avert disaster, finally compromised. The *Bloc National*, the governing coalition of centre-right parties led from January 1922 by Raymond Poincaré succeeded in increasing existing taxes—mainly turnover and excise duties—by 20 percent. The budget moved into balance, inaugurating an interlude of financial stability.

In the second phase of the crisis, from mid-1924 through mid-1926, the dispute over taxation provoked a series of speculative attacks on the bond market, even though the budget was broadly balanced. Each time it appeared that the tax burden might be shifted from workers to rentiers, the latter refused to renew their maturing treasury bills, forcing the authorities to print money to refund the principal. Monetization produced inflation, depreciation, and a deepening crisis. When financial chaos reached intolerable heights, the left-wing Chamber finally accepted the leadership of Poincaré, whose opposition to economic radicalism was beyond question. Poincaré's accession to power is popularly credited with reassuring effects even though, as revealed by the earlier episode of financial instability that Poincaré had also overseen, it was not his personal reputation that mattered. Instead, his return to office at a time of left-wing control of the Chamber signalled wider recognition of the need for political compromise.

It would seem that the fiscal crisis had come to an end. Yet the exchange rate crisis reappeared, in even more virulent form, in 1925-26. Though there was no obvious fiscal problem, the franc fell, from 19 to the dollar at the beginning of 1925 to 27 at year's end and to more than 41 at the height of the crisis in July 1926. Presumably it was future rather than current policies about which investors were so concerned. Parliament granted Poincaré full powers of decree to take unilateral financial action. In effect, financial decision making was temporarily removed from the political arena. To buttress the budgetary position, Poincaré imposed increased indirect taxes and spending reductions. The magnitude of these measures has been the subject of some exaggeration, perhaps because a dramatic return to financial stability accompanied their adoption. France took the opportunity offered by this stability and stabilized the franc at the low level that had resulted from the inflation. It was this decision to restore the franc's gold standard parity, de facto in 1926 and de jure in 1928, that was designed to signal that the new policy regime was permanent.

This combination of policies—fiscal tightening in conjunction with one last depreciation—can be understood as a way of making stabilization politically tolerable. It allowed Poincaré to cut domestic demand as needed for budget balance while goosing export demand as a way of avoiding a more painful post-stabilization recession. But the strategy had implications not just for France but also for the larger international system. As a result of the low value at which the franc was stabilized, French exports were rendered artificially competitive. France accumulated gold at a rapid rate after 1927, as shown in Figure 1.

Debate over how to apportion the costs of stabilization took place also in Britain. Labour felt that it already had paid enough during the Great War. After its defeat in 1924, the Labour Party adopted a program of 'socialism now', which meant a minimum wage and state-provided family allowances legitimated by the workers' contribution to the war effort. Allowances were required because the reduction in costs required for the restoration of gold payments at the pre-war parity was threatening to reduce wages. For defenders of the gold standard, the problem was not that wages would fall, of course; the danger was that they would not. The growth of trade unionism, the provision of unemployment benefits, and the existence of minimum wages for unskilled workers in industries where Trade Boards had been established immediately before or during the war all worked to slow downward wage adjustment. In this setting the danger was that deflation would worsen the lot of the workers by both lowering wages and producing unemployment.

The wage issue was particularly contentious in the coal industry, a hotbed of labour activism. The demand for coal received a boost in 1923-24 when Ruhr supplies were disrupted by the French occupation. For the miners, these were favourable circumstances for wage negotiations, and the agreement they negotiated guaranteed a minimum wage. But when the conflict on the continent went into remission, the demand for British coal fell, and the agreement collapsed.

The Conservative Prime Minister, Stanley Baldwin, repeated the mantra of the gold standard: men would have 'to face a reduction in wages' to put the coal industry on its feet.[6] This of course was just one way of putting industry on its feet. But it was the only way open under the gold standard, alternatives involving higher prices and a lower exchange rate being inadmissible.[7] Countries on the gold standard could not devalue their currencies or allow the demand for exports to determine their exchange rate. They could not expand the money supply to stimulate domestic demand, for doing so would push up prices, provoke gold exports, and weaken the currency. The only way of reducing prices was to reduce production costs, the largest of which was labour.

The Royal Commission on the Coal Industry, chaired by a Liberal, Sir Herbert Samuel, insisted that wages had to be lowered. The mine owners based their wage offer on the Commission's recommendation, insisting on lower wages and longer hours. From labour's point of view, pushing down wages reduced the purchasing power of the employed and implied job losses insofar as the mechanism for depressing wages was further restriction of demand. And union leaders did not share the central bankers' apocalyptic vision of a world of managed money. They were not sufficiently secure to trade current sacrifices for purported future gains. They had participated in the war effort and now expected recompense.

The result was not just a coal strike but a general strike. It ended in defeat for labour, which only hardened the unions' opposition to the constraints of the gold standard. Ultimately, that opposition would weaken both the Tory government (defeated in 1929) and Britain's commitment to the gold standard (abandoned in 1931). The Treasury tried to defuse this conflict in the late 1920s by asserting that the 'rationalisation' of industry, rather than wage reductions, was a better way of cutting labour costs, but the gold-standard mantra of lowering costs remained clear.

Montagu Norman, the long-standing governor of the Bank of England, was so eager to maintain this pressure on the British economy and on wages that he refused to expand the money supply even on those relatively rare occasions when he had excess gold, such as in the immediate aftermath of the 1925 stabilization. Norman hid his excess gold in an account at the Federal Reserve Bank of New York, where it was not visible to contemporaries.[8] The excess gold dissipated in late 1928, but Norman still understated the Bank of England's gold reserve in order to maintain control over the increasingly volatile foreign-exchange market (Garrett, 1995).

Germany represented the other side of the French coin. Balancing the budget and stabilizing the currency might be seen as admissions that the government's obligations did not exceed its financial capacity—that the Reich could afford to pay reparations after all. The incentive to inflate preceded France and Belgium's invasion of the Ruhr, but foreign occupation of Germany's industrial heartland provided ample justification for running the printing presses full out. Hyperinflation, though an effective weapon in the diplomatic battle with Paris, grew increasingly disruptive of the operation of the German economy. As inflation ran out of control, its main effects came to be aggravating uncertainty and demoralizing consumers. Industrial production went into decline, and influential industrialists like Hugo Stinnes swung toward compromise, accommodation, and exchange-rate stabilization. In 1924 these shifts in sentiment allowed stability to be re-established under the provisions of the Dawes Plan, a critical component of which was restoring the mark to its pre-war parity with the aid of a massive loan from the United States.

The sanctimonious quality of the restored gold standard is evident in the missions sent by the U.S. government to help Weimar. The Agent-General for Reparation Payments appointed under the Dawes Commission, S. Parker Gilbert, was clear that he saw the means for doing so as preserving the gold standard at all costs. As he explained the motivation for the Dawes Plan, 'The Experts' Plan thus established a protected system, which was intended to safeguard the German exchange against the danger of instability through excessive reparations transfers'.[9] There was no need in Gilbert's mind to do more than assert the link between a stable exchange and a stable economy.

The Great Depression

Like the Baring Crisis and the Great War, the Great Depression was a shock to this happy world. It started out as a not atypical economic contraction, first in Germany and then in the United States. This unexceptional downturn then was converted into the Great Depression by the actions of central banks and governments, notably in the wave of currency crises in the summer and fall of 1931. Economic policies did not alleviate the Depression; they worked to intensify it. Actions that worked well in more prosperous times had damaging results when economies contracted in the early 1930s.

Policies were perverse because they were formulated to preserve the gold standard, not to stabilize output and employment. Central bankers thought that maintenance of the gold standard would in time restore employment, while attempts to increase employment directly would fail. The collapse of output and prices and the loss of savings as banks closed in the early 1930s were precisely what the gold standard promised to prevent. Reconciling outcomes with expectations consequently required interpreting these exceptional events in unexceptional terms. Where the crisis was most severe, blame was laid on the authorities' failure to embrace the gold-standard *mentalité*. The Federal Reserve and the Bank of England, it was alleged, had succumbed to the lure of managed money. Having refused to obey the rules of gold standard, they had committed abuses of credit, sterilized international gold flows and prevented them from exerting their normal stabilizing influence on credit conditions. This in turn prevented prices and costs from adjusting.

This was the view that prevailed in Washington D. C. and in the regional branches of the Federal Reserve System. As unemployment spiralled upward, Lynn P. Talley of the Federal Reserve Bank of Dallas wrote George Harrison of the New York Fed that his directors were not ‘inclined to countenance much interference with economic trends through artificial methods’. Treasury Secretary Andrew Mellon famously advised

President Hoover that the only way to restore the economy to a sustainable footing was to ‘liquidate labor, liquidate stocks, liquidate the farmers, liquidate real estate . . . purge the rottenness out of the system . . . People will work harder’, Mellon insisted (Hoover, 1951-52, 3, 30). Those espousing the puritanical strand of gold-standard dogma grew more strident as unemployment mounted. Hoover himself regarded the gold standard as little short of a sacred formula. Any deviation he dismissed as collectivism, an all-embracing label for economic and social decay.

The British Committee on Finance and Industry (the Macmillan Committee), reporting in the summer of 1931, was prepared to entertain the heresy of a tariff before recommending that the gold standard be abandoned. Even internationalist politicians like the Labour Prime Minister Ramsay MacDonald were prepared to turn their backs on nearly a century of free trade before jeopardizing sterling’s hallowed status (Boyce, 1987; Williamson, 1992). Keynes, the committee's leading intellectual light, had opposed Britain’s return to gold at the pre-war parity, arguing that the proper target for monetary policy was internal price stability rather than exchange rate stability, but once the decision was made he reconciled himself to it. He was unwilling to recommend going off gold in 1930, which he saw as the linchpin of the international financial system and essential for financial stability. Only when he grew convinced that the gold standard was doomed, in the summer of 1931, did Keynes recommend bowing to the inevitable and abandoning convertibility (Moggridge, 1969; Clarke, 1988). But as the Depression deepened, his desperation grew. He ‘was willing to try anything—a tariff, quotas, a national treaty on wages, profits and rents, foreign lending restrictions—anything except suspending the gold standard, which was too drastic to contemplate’ (Boyce, 1987, 293).

The gold standard consequently was not abandoned. Its rhetoric was deflation, and its *mentalité* was one of inaction. Central banks stood ready to withstand financial panics like the Baring Crisis of 1890 or the New York panic of 1907 but not to preserve output and employment. The Federal Reserve System, inferring from low interest rates and excess bank reserves that no panic was in sight, counselled inaction. But when there was a threat to the U.S. commitment to gold in October 1931, it responded by raising interest rates and driving the country deeper into depression.

In this environment, supplies of money and credit depended on the quantity of gold and foreign exchange convertible into gold in the hands of central banks. As uncertainty mounted about the stability of key currencies, and hence about the future price at which they might be converted into gold, central banks liquidated their foreign balances and scrambled to replace them with gold reserves. The share of foreign exchange in global monetary reserves fell from 37 per cent at the end of 1928 to a mere 11 per cent by the end of 1931 (Nurkse, 1944, Appendix A). But there was only so much gold to go around. Central banks jacked up interest rates in a desperate effort to obtain it, destabilizing commercial banks and depressing prices, production and employment. Bank closures disrupted the provision of credit to households and firms, forcing the former to cut their consumption, the latter to curtail production. Deflation magnified the burden of outstanding debt, forcing debtors to curtail their spending still further in the effort to maintain their credit worthiness. As the gold-exchange standard collapsed back into the pure gold-based system, markets were destabilized as never before.

Sustaining the gold standard required a stomach for harsh medicine, as true believers incessantly repeated. But deflation that once might have elicited mute acceptance now provoked hunger marches and mass demonstrations. In Germany, the Communist-led Reich Committee of the Unemployed took to the streets in December 1929 before the streets were taken over by the Nazis. The British National Unemployed Workers' movement staged demonstrations. Farm workers in California and auto workers in Michigan clashed with police; the 1932 Bonus Army of veterans who camped out in Washington to get their bonus had their tents in 'Hooverville' set on fire by the army. Hunger and despair which had once led to alienation from politics and disenchantment with political parties now led workers to organize and voice their objections. Even conservative governments intellectually committed to deflationary measures hesitated to stay the course for fear of inciting a political backlash.

Importantly, these national policies had cross-border repercussions—in economist's terminology, 'externalities'. When the United States jacked up interest rates in October 1931 to defend the dollar's gold parity—the sharpest such increased in the short history of the Federal Reserve System—it drained gold and ratcheted up the deflationary pressure on other gold standard countries. When in 1933 France did likewise, it intensified the deflationary pressure on other members of the so-called gold bloc. Had there been a policy regime where countries acknowledged their interdependence and acted on it—where they sought to internalize the externalities in question—things might have been different. While it was impossible for one country acting alone to cut interest rates to counter deflation, because doing so would cause gold losses and jeopardize gold convertibility, several countries acting together would have been able to do so, since my interest rate cuts would cause me to lose gold but your interest rate cuts would cause me to gain it (Eichengreen 1984). But this kind of cooperation was not part of the policy regime. Efforts to arrange it at, inter alia, the London World Economic Conference of 1933, went nowhere.

Similarly, emergency financial assistance to counter threats to financial stability in individual countries—Austria in May 1931 being the prototypical example—came to naught. The effort to arrange a Bank for International Settlements loan in response to the Creditanstalt crisis was torpedoed by France, angry that Austria and Germany were engaged in customs union negotiations in violation of the provisions of the Versailles Treaty and worried that Germany was building pocket battle ships. Domestic politics got in the way of international financial cooperation. In the petrie dish that was the gold standard *mentalité*, what started as a threat to one bank was allowed to mutate into a threat to the international financial system and the world economy.

The Euro and Renminbi

The 21st century analogues—the euro and the dollar-renminbi peg—are not identical to the gold standard, but the parallels are there. Adopting the euro, unlike adopting the gold standard, was an absolute rather than a contingent commitment. Countries could leave the gold standard during wars without angering investors, but countries cannot temporarily abandon the euro in times of crisis.[10] No provision was made in the Maastricht Treasury or the subsequent Lisbon Treaty for a participating country to withdraw.[11] Procedures by which a member state adopting their euro might abandon it and reintroduce its own national currency were not even alluded to, much less detailed. This reflected a political logic: European leaders wanted their new monetary union to appear solid, progressive and irreversible. This approach also had an economic logic: escape clauses providing for exit might become destabilizing if investors began to bet on their activation. Since the expectations they engendered could become self-fulfilling, it was better not to lift the lid on this Pandora's Box.

The euro area did not simply follow the gold standard, it also followed the Bretton Woods System implemented after the Second World War. The importance of this interlude for our story is not the Bretton Woods System itself, but rather the war-time negotiations that led to it. Keynes in particular had come to realize the pernicious influence of the gold standard as it operated in the interwar years. He acknowledged that trying to achieve internal balance by deflating in response to a loss of reserves was not only harmful for the country itself but also had the external effect of depressing economic activity in other countries—leading to the race to the bottom seen in the Great Depression (Vines 2003).

Keynes sought to avoid a similar outcome in the post-war world. He wanted to avoid the conditions shown in Figure 1 where asymmetries in the operation of the international system imparted a chronic deflationary bias. He therefore proposed a clearing union that would oversee the distribution of international reserves. The essence of his plan was that surplus countries would be obligated to curtail their imbalances in more or less the same way that deficit countries were obliged to curtail their imbalances under the gold standard. These plans did not come to fruition because of the conflict of interest between the U.S. and Britain as expressed in the conflict between Keynes and White. Keynes did not want Britain to be forced into the continued austerity of the interwar years; White did not want to give the UK a free ride after the war. White, harking back to the gold standard, advocated using monetary restraints to keep excessively expansive countries in line; Keynes implied that fiscal policy would work better in a setting of low interest rates—anticipating a fateful gap in the architecture of the euro area. The issues were not resolved, and they were largely forgotten by the 1990s (Skidelsky 2000; Vines 2003).

The euro area differed from the gold standard in that it talked the talk, but it didn't also walk the walk, of international cooperation. There was awareness that fiscal and financial policies were a matter of common concern, and that coordinated adjustments in which countries in chronic surplus expanded while countries in chronic deficit did the opposite, were desirable. But the area's various mechanisms for coordination, the Stability and Growth Pact, the Excessive Deficit Procedure, and he Broad Economic Policy Guidelines, were honoured mainly in the breach. Representatives of Europe's national governments went to Brussels to discuss them, and then they went home and mainly did as they pleased. Like the Pope, the European Commission had no army to enforce its decisions. While national politicians spoke the language of cooperation, they were more concerned with the reaction of their domestic constituents when taking actual decisions. In Southern Europe, deficit spending and government debts were allowed to grow all out of control. In Central Europe, meanwhile, there was nothing to prevent the pursuit of a chronic deflationary bias. For a time, this preference in one region for deficits, combined with a preference in the other for surpluses, seemed like a happy symbiosis – just as it had in the second half of the 1920s. But this did not mean that it was any more sustainable than it had been 80 years earlier.

The other thing Europe lacks, in addition to mechanisms for adequately coordinating national macroeconomic policies, is an emergency financing facility to provide adjustment assistance to countries in exceptional financial difficulty. In 1931, as we have seen, when the international system began coming apart, there was an unsuccessful attempt to arrange an international loan for Austria through the BIS. When in 2010 it became necessary to arrange an emergency loan for Greece, there was no analogous organization suitable for arranging a loan for a euro area country. Some suggested that this responsibility should be assigned to the International Monetary Fund. Others objected that the Greek tragedy was Europe's internal affair; bringing in the IMF would be a little bit like having the Fund bail out California. Unable to decide, Europe in the end had it both ways, which did little to reassure the markets. More generally, this approach ran up against the difficulty that no mechanism existed for extending a loan; a formula for contributions had to be agreed on, and the resulting package of financial aid had to be ratified by the whole set of national parliaments.

The other important exchange rate peg in this recent period, the dollar-renminbi peg, is best thought of as a central element of the ideology of Chinese development policy. China's policy is not unlike that of other late-developing Asian economies before it. It is to grow its economy by moving workers from low-productivity agriculture to high-productivity manufacturing industry, the output of which is sold to consumers in high-income countries. It is to limit consumer spending and financial liberalization so that a high fraction of GDP can be plowed into investment in fixed capacity and now infrastructure. It is to augment domestic savings by attracting foreign direct investment. The fixed peg to the dollar, maintained rigidly until June 2005 and then put back in place in response to the financial crisis in 2008 after three years during which the renminbi had been allowed to appreciate slowly and gradually against the dollar, was part and parcel with these goals. The role of the peg in China's development strategy was three-fold: to facilitate the export of manufactures, to ease the decisions of foreign companies contemplating investment in China, and to enlarge the earnings of Chinese enterprises that were the main source of the savings (retained earnings) ploughed into capacity expansion. Insofar as other Asian countries were concerned with their competitiveness vis-à-vis China, the renminbi's peg to the dollar became a broader pan-regional and international dollar standard.

As in Europe both in recent years and in the 1920s, there was some awareness that policies in each of the countries linked together by this regime had implications for the other participants but little willingness to act on that awareness. In 2006 the IMF engaged in a Multilateral Consultation Initiative involving the U.S., China and three other large economies with the goal of encouraging them to take those cross-border implications into account and undertake mutually beneficial policy adjustments, but to no avail. The U.S. and China meet annually in a bilateral Economic and Strategic Dialogue, but this did not result in significant changes in bilateral currency policy. The IMF conducts multilateral surveillance exercises in conjunction with its World Economic Outlook exercise twice a year, in the process of which it gives public (and, presumably, private) advice on mutually beneficial policy adjustments. But, as of the time of writing, no actual adjustments of any significance are evident.

Toward Symmetry

The point of this discussion is not to let deficit countries—Germany in the context of the gold standard, Greece in the context of the euro, the United States in the case of global imbalances—off the hook. All three were reluctant, for political and other reasons, to acknowledge that they faced budget constraints. They lived beyond their means, running budget and current account deficits and financing them by borrowing abroad, Germany mainly from the United States in the period 1925-28, Greece mainly from its European partners in the period 2002-08, the United States mainly from China and the oil-exporting economies of the Middle East.

In all three cases, borrowing was facilitated by the facade of stability created by pegged exchange rates. The perception that currency risk had been eliminated encouraged finance to flow from capital-abundant economies where interest rates were low to capital-scarce economies where they were high. Deficits were financed more freely, encouraging governments to run them, until markets were disturbed by financial upheavals that raised doubts about the solvency of sovereign borrowers. This of course is just the problem of 'capital-flow bonanza' followed by 'sudden stop' familiar from the literature on 19th and 20th century emerging markets.[12] The only surprising thing is that parochial advanced-country observers and policy makers, whether in the 1920s or more recently, did not understand that the problem also applied to them.

The solution, it is easy to say (ignoring political realities), is for the countries on the receiving end to exercise more restraint: to eliminate excessive budget deficits and, realizing that good times don't last forever, to borrow less abroad while capital is still flowing. In the U.S. there is now a discussion of whether the Fed erred by keeping interest rates below levels consistent with the Taylor Rule in 2003-5 and whether it should have moved quicker to take away the punch bowl when housing and asset market bubbles were building. There is discussion of whether excessive budget deficits following the Bush tax cuts of 2001-03, passing an unfunded prescription drug plan, and fighting two expensive wars caused an excessive build-up of debts and deficits, much of which were funded by selling the securities of the U.S. Treasury and the quasi-governmental agencies Freddie Mac and Fannie Mae to China. There is discussion of whether the Fed and the Administration should exit from recent policies of monetary and fiscal stimulus sooner rather than later to prevent dependence on foreign capital from resuming (avoiding the reappearance of global imbalances).

In Europe, there similarly is discussion whether the Stability and Growth Pact can be tightened and new rules can be promulgated to prevent countries from living beyond their means. There is a discussion whether Europe needs to create an emergency financial mechanism (a 'European Monetary Fund') to regularize the provision of financial assistance to temporarily illiquid governments and take an orderly approach to restructuring the debts of any which are insolvent.

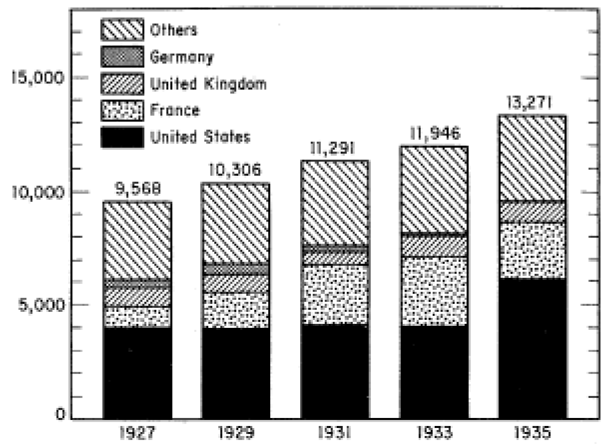
But there is another side of this coin: namely, the policies of the surplus countries. In the late 1920s and early 1930s the difficulties of Germany and other Central European countries were greatly aggravated by the policies of gold and foreign exchange sterilization undertaken by the U.S. and France. With these countries in balance of payments surplus, someone else had to be in deficit. With their refusal to expand once the Depression struck, someone else had to contract. With their refusal to extend emergency financial assistance to the countries impacted in this way, the extent of the contraction to which the deficit countries were subjected became almost unimaginable. In the end, the political consequences were disastrous.

Now, when the surplus countries are Germany and China, we see a similar process begin to unfold. Greece trades with its European neighbours, notably with Germany, which is in strong surplus. With Germany's reluctance to raise spending, a cash-strapped Greece has no alternative but to deflate. Whether it can cut government spending by ten per cent of GDP and the wages of civil servants and other domestic costs also by 10 per cent in short order is to be seen; an adjustment of this order of magnitude has never been made, to our knowledge, except in conjunction with other policy adjustments (like M. Poincaré's sharp depreciation of the currency, something that is not available to Greece). Greece's problem now, like Germany's in the early 1930s, is that cutting costs only makes the burden of indebtedness heavier. This is why even US President Hoover, not exactly a progressive economic thinker, was ultimately forced to recognize the need for a German debt moratorium, and why internal devaluation, the only form of devaluation available to Greece, will require restructuring its debts, hopefully sooner rather than later. Just as the Hoover Moratorium required a change in policy on the part of the US, a Greek restructuring will require a volte face by the European Union and the IMF.

Similarly, in the absence of a willingness of China and other countries shadowing the dollar to move faster to boost domestic spending and allow their currencies to rise, the only way for the United States to grow employment faster is by cutting costs so as to make its exports more competitive. President Obama's stated goal of doubling U.S. exports within five years is designed to map this route to full employment. But absent an adjustment in the real exchange rate delivered by more spending and either nominal currency appreciation or inflation in Asia, this would have to be done by cutting costs or miraculously raising productivity, something that is likely to be wishful thinking.

The point is that an exchange rate system is a *system*, in which countries on both sides of the exchange rate relationship have a responsibility for contributing to its stability and smooth operation. The actions of surplus as well as deficit countries have systemic implications. Their actions matter for the stability and smooth operation of the international system; they cannot realistically assign all responsibility for adjustment to their deficit counterparts. This was the lesson that Keynes drew from the experience of the Great Depression. It was why he wanted taxes and sanctions on chronic surplus countries in the clearing union proposal that he developed during World War II. Sixty-plus years later, we seem to have forgotten his point.

Figure 1



Source: Eichengreen, 1992, p. 192.

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Wolf, Nicolaus, this issue.

Notes

[1] This kind of counterfactual history has its place, but not here.
[2] Dam, 1982. For more details and documentation on the following argument about the gold standard and the Great Depression, see Eichengreen and Sachs, 1985; Temin, 1989; Eichengreen, 1992; Eichengreen and Temin, 2000.
[3] The treaty contains an obscure provision providing for the possibility that a member might withdraw from the EU, which would presumably entail abandoning the euro (although not necessarily, since a number of non-EU members such as Montenegro utilize the euro). But withdrawing from the EU is an extreme step that even financially-distressed member states would hesitate to take.
[4] Thus, while Keynes had famously opposed Winston Churchill's decision to put sterling back on the gold standard at the prewar parity in 1925, once the decision was taken he took the gold standard as a given – as an immutable constraint on policy. For more on this, see below.
[5] Some like France went back to gold at significantly devalued exchange rates, which will be important to our story.
[6] Baldwin was quoted in the newspaper as saying, 'All the workers of this country have got to take reductions in wages to help put industry on its feet,' but this more inclusive statement was denied by the government. Middlemas and Barnes, 1969, 387.
[7] Keynes famously had argued for a lower exchange rate in 1924-5, but his was a voice in the wilderness. And once the prewar parity was restored, he too took it as a given
[8] Sayers, 1976, 3, 349-54, however could see the excess gold in retrospect without difficulty.
[9] Gilbert, 1925-1930, 10 Dec. 1927, 172.
[10] Martin Feldstein has suggested otherwise, but this does not make it so.
[11] See note 3 above.
[12] See Fishlow 1985 and Calvo, Leiderman and Reinhart 1993.