

The demise of the gold standard

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It is ironic that most of the recent agitation for a return to some form of gold standard has come from the United States, whose official policies played a leading role in the destruction of that standard. After describing the conduct of governments necessary for the successful operation of a gold standard, this article tells the story of the failure of the post-World War I attempt by the British to restore the pre-1914 monetary system—an attempt doomed to failure by the refusal of the United States and France to play by the rules of the gold standard game.

Governments and the gold standard

We begin with a system in which the medium of exchange—i.e., money—consists only of some useful commodity and paper claims on specified amounts of that commodity. Many commodities have served the dual function of money and the monetary base and the theory portions of our story are applicable to any of them. However, gold will be the only commodity considered because of its almost universal acceptance as money, to the exclusion of other commodities, by western societies in the 19th and 20th centuries.

Governments are not necessary to the gold standard. If there are free markets in gold and wheat, their relative prices—i.e., the rate of exchange of gold for wheat—will depend upon private supplies and demands for the two commodities. Suppose one ounce of gold (of a particular degree of fineness) is worth seven bushels of wheat in the market place. Also suppose that business is transacted partly with gold coins that weigh $1/35$ of an ounce and are called “dollars.” The dollar is the unit of account and other coins and goods are valued in terms of the dollar. For example, one bushel of wheat, which is worth $1/7$ of an ounce of gold, is quoted at a price of \$5. Gold coins weighing $10/35$ of an ounce

carry the stamp “Ten Dollars” on one side and the likeness of Alexander Hamilton on the other side.

However, people find it convenient to transact most of their business not with gold coins but with pieces of paper—bank notes and checks—that are convertible into gold. When you deposit 100 ounces of gold in a bank, the bank either credits your checking account with \$3500 or presents you with bank notes of various denominations totaling \$3500. Banks hold reserves of gold in order to carry out their promise, under threat of bankruptcy, to convert their paper liabilities into gold upon demand. Given the public’s money-holding preferences for gold relative to bank liabilities and the proportions of gold held by banks as reserves against those liabilities, the quantity of money (i.e., bank liabilities plus gold coins held by the nonbank public) in an economy is determined by the monetary gold stock. The monetary gold stock is in turn determined by the domestic production of gold, the acquisition or loss of gold through international transactions, and fluctuations in the demand for gold for non-monetary uses.

All of these factors were from time to time sources of fluctuation in the money supply under the gold standard. But an upper limit was placed on the rate of increase of the money supply by the rate at which an economy’s monetary gold stock could be augmented and by the minimum reserve ratio which banks could hold without provoking fears for their failure on the part of creditors. There is no such upper limit under our present “paper standard” in which the greater part of the monetary base is not the monetary gold stock but central bank liabilities that are limited by neither legal nor prudential considerations.

Government may play a part in the operation of the “pure” gold standard described

above, for example, by verifying the weights of coins and by imposing reserve requirements on banks. These activities may (or may not) contribute to the smooth operation of the system, but they play no *essential* part. The only essential pattern of behavior that the system requires of government is that it allow itself to be limited by the same constraints to which private actors are subject. Specifically, when the government issues paper currency of its own, that currency, like bank liabilities, must be convertible into gold. This limits its paper issues in the same way that prudential reserve considerations limit the deposits of banks.

Although governments *need* not play an active part in the operation of the gold standard, they have in fact done so. The remainder of this paper is largely a story of the supportive and destructive interventions of governments in the functioning of the gold standard preceding and immediately following World War I.

Automatic adjustment under the gold standard

The theory (and, to a large extent, the practice) of the gold standard provided for an automatic mechanism that corrected balance-of-payments disequilibria and prevented unlimited inflations or deflations. First, consider a domestic monetary disturbance in the form of an expansion of bank credit and the money supply. Suppose banks respond to increases in credit demands and interest rates by reducing their reserve ratios. The consequences are inflation and a balance-of-payments deficit as domestic goods rise in price relative to foreign goods. Americans are buying more from foreigners than they are selling to foreigners. If the international means of payment is gold, as it was in the 19th century, instead of dollars, as has been the case since about 1940, the dollar claims accumulated by foreigners will be converted into gold. The loss of reserves by American banks, even given their new and lower desired reserve ratios, forces a contraction of money and

credit. American prices stop rising and perhaps even decline, and the balance-of-payments deficit is corrected as the American inflation is exported—for foreign banks expand their lending as they acquire gold from the United States.

In addition to the *external drain* of gold discussed above, there will also probably be an *internal drain* as more money of all kinds, including gold coin, is needed to carry out transactions at the higher prices. R. G. Hawtrey argued that the internal drain was normally a larger and swifter force than the external drain in 19th-century gold standard adjustment.¹

Now consider a second, non-monetary disturbance: a balance-of-payments deficit due to a bad harvest. The mechanism of adjustment is identical to that in the first case: a loss of bank reserves, monetary contraction, deflation, and restoration of the balance of payments. Harvest fluctuations were probably the most important source of monetary and price instability in the United States between its return to the gold standard in 1879 and the formation of the Federal Reserve System in 1913.²

As a third and final example, consider the effects of a “Keynesian” depression in Western Europe, characterized by a drastic fall in income but without a significant fall in prices, on money and prices in the United States. Unemployed Europeans reduce their purchases of American goods, causing an outflow of gold from the United States and resultant declines in money and credit.

In summary, automatic adjustment under the gold standard is neither more nor less than the international transmission of economic disturbances. Under the gold standard, inflations, deflations, high incomes, and unemployment are exported to and imported from other countries. Our own inflations and

¹R. G. Hawtrey, *A Century of Bank Rate* (London: Longman, Green, and Co., 1938), ch.3.

²Milton Friedman and Anna J. Schwartz, *A Monetary History of the United States, 1867-1960* (Princeton: Princeton University Press, 1963), ch. 3.

deflations are limited in extent by the gold standard—at the price of accepting the inflations and deflations of others. Discretionary monetary policy is severely limited. American money and prices are controlled to an important extent by foreigners; and foreign money and prices are subject to fluctuations in the United States.

The operation of this automatic adjustment mechanism requires at least passive acceptance by governments, including non-interference with the free flow of gold and other goods. Domestic inflations may be prolonged by restrictions on the export of gold, subsidies for exports, and tariffs and quotas on imports. Free trade is necessary to the full realization of the corrective effects of the gold standard mentioned at the beginning of this section.

Central banks and the rules of the gold standard game

But governments can do more than refrain from interference with the gold standard. The adjustments described above are probably indeed “automatic” in the sense of being inevitable, under the conditions assumed, given enough time to work. However, those adjustments may be too slow for those concerned with the solvency of banks and the preservation of a country’s gold reserves. When this is the case, governments can play an active role in speeding up the adjustment process, sometimes called the “rules of the gold standard game.”³ The players designated by governments to play this game are central banks. In order to understand how the game should be played, it is necessary to examine the conduct of the Bank of England, which was the only major central bank willing to play by the rules.

The Bank of England (Bank) was until 1945 a private firm. But from its inception in 1694 the Bank had important, well-defined public responsibilities. No harm is done by

thinking of the Bank as an official, or at least a quasi-official, agency. It enjoyed special monopoly privileges regarding note issue in London, operated under a series of short-term charters renewable by parliament, and served as the Treasury’s main depository and an important source of credit to the government. However, the Bank was not at first a “central bank” in the sense in which that term came to be used in the 19th and 20th centuries; i.e., it was not conceived as a regulator of the monetary base or a lender of last resort to the financial system. Nevertheless, by a combination of its monopoly privileges, its special roles as government depository and creditor, and, most important, its conservative lending behavior, the Bank had by the end of the 18th century acquired the substance of the central banking powers and responsibilities later conferred by law on the Bank, the Federal Reserve System, and other official central banks.

Because of the Bank’s well-deserved reputation for soundness, its note and deposit liabilities were considered “as good as gold.” As a consequence, the reserves of other banks were held predominantly in the form of the note and deposit liabilities of the Bank of England. Claims on banks by the nonbank public and by other banks were routinely settled by the exchange of claims on the Bank of England because people were satisfied that the latter were always, with certainty, convertible into gold. The Bank had become the holder of “the ultimate cash reserve of the country.”⁴

The effect of this arrangement was that the Bank’s liabilities, with the gold held outside the Bank as currency or as reserves in banks, constituted the monetary base. When gold came into the Bank, due either to a favorable balance of payments or to a reduction in the domestic demand for currency, the Bank was in a position to expand its lending. This meant an increase in the reserves of other banks and therefore a multiple expansion of total bank credit and the money

³John Maynard Keynes, *A Treatise on Money*, vol. II (London: Macmillan, 1930), p. 306.

⁴Walter Bagehot, *Lombard Street* (New York: Scribner, Armstrong, and Co., 1873), p. 315.

supply—precisely in the manner of a Federal Reserve open market purchase in the 1980s.

By behaving in this manner, by doing what comes naturally to any profit-seeking bank, the Bank of England—long before the development of the term or even the theory—was by the end of the 18th century playing according to the rules of the gold standard game. Consider, for example, a flow of gold to Britain resulting from inflation on the Continent. Much of this gold found its way to the Bank of England. Under these conditions, the Bank often expanded its lending by a multiple of the increase in its gold reserve. Other banks, which tended to hold the additional note and deposit liabilities of the Bank as their own reserves, also expanded their own credit. British financial institutions had developed in such a way that the central bank, the Bank of England, accentuated the effects of gold flows. A gain or loss of gold had a twice multiple effect on money and prices—first on the monetary base through central bank lending, and then on the lending of other banks due to changes in the monetary base.

The operation of the pre-1914 gold standard

In order to understand the Bank's behavior between 1844 and 1914, we must begin with the Restriction Period of 1797-1821, when Britain was not on the gold standard. Official policy between that time and 1931 was dominated by a reaction to what was generally thought to be the Bank's misconduct while free of gold standard constraints.⁵

Maintenance of convertibility between the nation's money and gold at a fixed rate of exchange was only the Bank of England's second most important objective. First was support of the state. During the 1790s, the Bank purchased substantial quantities of

⁵For an extensive discussion of the events and the controversies arising from those events between 1797 and 1865, see Jacob Viner, *Studies in the Theory of International Trade* (London: George Allen and Unwin, 1937), ch. 3-5.

government securities issued to finance the war with Napoleon. The consequences were expansions of the monetary base and the money supply, inflation, and a loss of gold. The Bank was very close to being unable to make good on its promise to convert its liabilities into gold at the historic rate of exchange. The choices faced by the Bank and the government were either a restriction of credit, thereby forcing the government to finance the war without resorting to the Bank (i.e., to rely upon taxes and private lending), or a legal suspension of the Bank's obligation to redeem its liabilities in gold. The latter course was chosen in 1797 and again during World War I, as was the case for American banks during and for several years after the Civil War.

Present-day Americans will not be surprised to learn that the Bank of England's behavior under these conditions—i.e., its response to (1) a release from the necessity of keeping a prudent gold reserve and (2) pressure from a government running large deficits—was expansionary. The Bank only did what has come to be expected of central banks during wartime. But it was severely criticized and held responsible by politicians and economists for the rapid increase in prices, averaging nearly 4 percent per year, between 1797 and 1813.

Then, when it was assigned the task of reversing the wartime inflation so that the currency might increase in value sufficiently to restore the gold standard at the prewar rate, the Bank came under even more widespread attack—this time joined by unemployed workers, failed bankers, and bankrupt businessmen—for causing a 50 percent fall in prices (nearly 7.5 percent per year) between 1813 and 1822. Even after the resumption of convertibility in 1821, the Bank's behavior was highly erratic and continuously a source of controversy in and out of parliament. Unrestrained central banks have considerable discretion even under the gold standard, at least in the short run, until their policies force the suspension of the system. This had occurred in 1797 and fears of a repetition of that expe-

rience were widespread.

The country had had enough of discretionary monetary policy and attempted to rectify matters in the Bank Charter Act of 1844 by tying the Bank to a rule. The Bank was divided into two departments. Gold was held in the Issue Department, which had no function except to exchange bank notes for gold. This was the monetary rule: changes in the Bank's note liabilities were tied, pound for pound, to its gains and losses of gold. The Banking Department, on the other hand, was designed to be free to behave "like any other bank."⁶ The Banking Department was expected to pursue profits, with no thought of any larger public responsibility, by extending credit on the basis of its reserve, which took the form of its holdings of the Issue Department's notes.⁷

But the Act of 1844 was badly designed. It took no account of the Bank's deposit liabilities. Then, as now, most business purchases were paid for by check, and the money supply consisted principally of demand deposits. Consequently, a rule for the Bank's notes left the main portion of the monetary base untouched. For the Bank's deposit liabilities were now the special preserve of the Banking Department, which had in effect been told to pretend that its lending policies did not dominate the reserves of other banks or the country's money supply.⁸

A consequence of the Act of 1844 was that the Bank began to play by the rules of the game with, if possible, even more zeal than before. It immediately embarked on an expansion that, in combination with other circumstances, including a poor harvest in 1846,

⁶Bagehot, p. 41.

⁷See John H. Wood, "Two Notes on the Uniqueness of Commercial Banks," *Journal of Finance*, vol. 25 (March 1970), pp. 99-108 for a formal description of the Bank's structure and its role in the monetary system under the Act of 1844.

⁸All of this was recognized at the time by Tooke and other critics of the Act of 1844. See Thomas Tooke, *An Inquiry Into The Currency Principle; the Connection of the Currency with Prices and the Expediency of a Separation of Issue from Banking* (London: Longman, Brown, Green, and Longmans, 1844), pp. 101-24.

led to an adverse balance of payments and a loss of gold. The Bank accordingly sharply reversed its liberal policy, causing the panic of 1847. Undaunted, the Bank persisted in its destabilizing policies, precipitating further financial crises in 1857 and 1866.

The Bank changed its behavior after 1866 as it apparently became more conscious of its role as the country's central bank—i.e., as the regulator of the monetary base and the lender of last resort. Some people attributed this change to Walter Bagehot's articles in *The Economist* and his book *Lombard Street* (1873), which remains unsurpassed as a description of the responsibilities of a central bank under the gold standard. Whatever the reason, the Bank now began to play the gold standard game with a little less enthusiasm. It adopted a middle way between the rules of the game and concern for domestic stability.

The years between 1880 and 1914 have been called the heyday of the gold standard. The gold standard had been adopted by most major western countries by 1880 but never fully recovered from the changes arising out of World War I. One of the most interesting and informative studies of the conduct of the Bank of England, as well as other central banks, during this period was published by Arthur Bloomfield in 1959.⁹ Bloomfield presented two sets of data bearing on the degrees to which 11 central banks played by the rules of the gold standard game. First, Bloomfield found that for most countries, including the United Kingdom, central bank discount rates and reserve ratios tended to be inversely correlated. For example, central banks usually lowered their lending rates when they acquired gold and usually raised their rates when they lost gold.¹⁰ This is consistent with the rules of the game, although the correlations were not sufficiently high to persuade

⁹Arthur I. Bloomfield, *Monetary Policy Under The International Gold Standard: 1880-1914* (New York: Federal Reserve Bank of New York, 1959).

¹⁰See *ibid.* pp. 30-35. The countries were the United Kingdom, Germany, France, Belgium, the Netherlands, Denmark, Finland, Norway, Switzerland, Russia, and Austria-Hungary.

Bloomfield that the game had been played with as much enthusiasm as he had expected to find.

But changes in discount rates are important only to the extent that they induce changes in central bank credit. The evidence presented by Bloomfield on the response of central bank credit to changes in gold holdings strongly suggests that the rules of the game were violated more often than obeyed. In nine of the eleven countries, annual changes in central bank credit tended to offset the effects of gold on the monetary base far more than half the time. Only the Bank of England and the Bank of Finland accentuated the effects of gold inflows almost as often as they neutralized those flows.¹¹

The choice

By adopting the gold standard and playing by the rules, Britain purchased long-run price stability at the cost of short-run instability.¹² Other countries joined the game, but only half-heartedly, and Britain's own enthusiasm waned with time. The choice that had been made and the price that had been paid were well understood by economists, the general public, and central bank officials. The Bank of England, the Act of 1844, and the gold standard were subjected to almost continuous attack from most sectors of society, especially businessmen. Chambers of Commerce passed resolutions condemning the gold standard

¹¹Ibid., pp. 47-51.

¹²See Benjamin Klein, "The Impact of Inflation on the Term Structure of Corporate Financial Instruments: 1900-1972," in William L. Silber, ed., *Financial Innovation* (Lexington, Mass.: D.C. Heath, 1975), pp. 125-49 and Michael D. Bordo, "The Classical Gold Standard: Some Lessons for Today," *Review*, Federal Reserve Bank of St. Louis, vol. 63 (May 1981), pp. 2-17 for evidence that year-to-year fluctuations in prices and output were greater under the gold standard than since 1945 but that longer-run changes in prices have been greater in the latter period.

¹³See "The Petition of the Merchants, Bankers, and Traders of London Against the Bank Charter Act; July 1847" in T. E. Gregory, ed., *Select Statutes, Documents and Reports Relating to British Banking, 1832-1928*, vol. II (London: Oxford University Press, 1929), pp. 3-7.

and petitioned parliament to compel the Bank to alter its behavior.¹³ Following the crises of 1847 and 1857, parliament formed committees to inquire into the workings of the financial system.

Horsley Palmer, a director and former Governor of the Bank, testified in 1848 that an increase in Bank Rate "presses upon all branches of commerce in a way that is most prejudicial to them; the raising of the rate of interest, I am given to understand, stopped very largely the mercantile transactions of the country—exports as well as imports."¹⁴ The fall in prices resulting from a restriction of the Bank's credit "destroys the labor of the country; at the present moment in the neighborhood of London and in the manufacturing districts you can hardly move in any direction without hearing universal complaints of the want of employment of the labourers of the country." James Spooner, Birmingham banker and member of parliament, continued the questioning: "That you ascribe to the measures which it was necessary to adopt in order to preserve the convertibility of the note?" Palmer replied: "I think that the present depressed state of labour is entirely owing to that circumstance." The then Governor and Deputy Governor of the Bank agreed with Palmer. A colleague of Spooner's, Edward Cayley, suggested to the Governor in a hostile leading question that "the price of the convertibility of the note under that state of things is the disemployment of labour and the ruin of the merchants of the country." After squirming a bit, the Governor admitted that an increase in Bank Rate would "Probably for a time . . . lead to a disemployment of labour."

A half century later leading economists were still deploring the "evils of our present monetary system."¹⁵ Knut Wicksell predicted that "the danger of basing the whole of our economic system on something so capricious

¹⁴The quotations in this paragraph are from Hawtrey, pp. 27-29.

¹⁵Alfred Marshall, "Remedies for Fluctuations of General Prices," *Contemporary Review* (March 1887), reprinted in A. Pigou, ed., *Memorial of Alfred Marshall* (London: MacMillan, 1925), p. 188.

as the occurrence of a certain precious metal must sooner or later come to light.”¹⁶ Wicksell,¹⁷ Alfred Marshall,¹⁸ and John Stuart Mill¹⁹ in England and Irving Fisher²⁰ in the United States gave lengthy accounts of gold’s sins and how they were aggravated by central banks. But economists were confronted by a dilemma that still has not been solved. The choice of monetary systems lay between “the cross of gold”²¹ and a discretionary monetary authority under the thumb of a profligate government. Except for the overseas section of the City of London, which believed that London’s financial supremacy depended on the maintenance of a fixed rate of exchange between the pound and gold, no one seemed fond of the prevailing system. However, based on their bitter experience of unrestrained paper standards, especially the 1791-1821 Restriction Period in Britain and the colonial paper issues and Civil War greenbacks in America, they liked the alternative even less. A third possibility—a discretionary system managed in an intelligent, non-political, non-inflationary way—appeared so outlandish that it was rejected out of hand.²²

The necessities of war finance forced the

¹⁶Knut Wicksell, *Lectures on Political Economy*, vol. II, translated by E. Classen (London: Routledge and Kegan Paul, 1935), pp. 125-26.

¹⁷Wicksell, *Interest and Prices*, translated by R. F. Kahn (London: Macmillan, 1936) pp. 165-96.

¹⁸Marshall, pp. 188-211.

¹⁹John Stuart Mill, *Principles of Political Economy* (London: Longmans, Green and Co., 1848), pp. 651-77.

²⁰Irving Fisher, *The Purchasing Power of Money* (New York: Macmillan, 1911), pp. 234-348.

²¹William Jennings Bryan, Speech closing the platform debate at the Democratic Convention, July 8, 1896. Published in Bryan’s *Speeches*, vol. I (New York: Funk and Wagnalls, 1913), pp. 238-49.

²²Published proposals for solving this dilemma would fill a good-sized library. Several of the better known schemes may be found in Mill, Bk. III; Marshall, pp. 192-211; Knut Wicksell, *Interest and Prices*, ch. 12, and Fisher, ch. 13. Most were designed to alleviate the rigidity of the gold standard without accepting the flexibility of a discretionary monetary authority. For a discussion of our continued failure to find a satisfactory solution, see John R. Hicks, “Monetary Theory and History—An Attempt at Perspective,” in *Critical Essays in Monetary Theory* (Oxford: Clarendon Press, 1967).

effective suspension of convertibility during World War I, as the government again borrowed heavily from the Bank. Inflation during and immediately after the war was much more severe in the United Kingdom than in the United States. Wholesale prices increased approximately 175 percent between mid-1914 and the end of 1920 in Britain, compared with 100 percent in the United States. The adverse influence of these price changes on the dollar value of the pound was exacerbated by Britain’s loss of important export markets during the war. The value of the pound was maintained by exchange controls and other expedients while the war lasted. But the lifting of controls allowed the pound to fall from its prewar value of \$4.86 to a low of \$3.44 in November 1920.²³

The return to gold

These events did not alter the government’s determination, expressed in 1918, “that after the war the conditions necessary to the maintenance of an effective gold standard should be restored without delay.”²⁴ This meant a restoration of the prewar parity with gold, and therefore with the dollar. The Bank of England sought to achieve this objective by means of a severely contractionary monetary policy. Its credit was reduced 20 percent during the next two years and wholesale prices fell 34 percent. The United States was sub-

²³Converting shillings and pence to decimals, the pound had been defined early in the 18th century such that one fine ounce of gold was worth approximately £4.2479 (although the rate of £3.89375 per standard ounce was quoted more frequently.) The dollar had been defined by law in 1792 such that one ounce of fine gold was worth \$20.67. The dollar/pound exchange rate was therefore

$$1 = \frac{20.67}{4.2479} = \$4.866.$$

Our use of \$4.86 is slightly inaccurate but follows custom.

²⁴First Interim Report of the Committee on Currency and Foreign Exchanges After the War, 1918, Summary and Conclusions,” reported in Gregory, vol. II, p. 361. This Committee was called the Cunliffe Commission after its Chairman, Lord Cunliffe, who was Governor of the Bank of England from 1913 to 1918.

jected to similar, but less extreme shocks and American wholesale prices fell 16 percent. By the end of 1922, the pound had risen to \$4.61 and “the Authorities were in a position to begin serious consideration of the tactics for a return to par.”²⁵

What tactics? Central bankers knew neither more nor less in the 1920s than in the 1980s about how to reduce inflation or, in the case at hand, how to cause deflation. What other course is there but a restriction of credit? Furthermore, they had learned nothing since 1848, as we have learned nothing since 1922, about how to do this without severe economic disruption. Unemployment was 14 percent of the labor force when the Bank perceived itself to be closing in on the goal of \$4.86. Economists and businessmen, while not quite rejecting the gold standard completely, recoiled from the government’s program.²⁶ But the permanent staffs of the Bank and the Treasury were determined to return to gold as soon as possible regardless of the “discomforts”²⁷ involved and persuaded politicians to go along.²⁸ With some exceptions due to domestic pressures, restrictive monetary and fiscal policies were continued until, after a fall to

²⁵D. E. Moggridge, *The Return to Gold 1925: The Formulation of Economic Policy and its Critics*, (Cambridge: Cambridge University Press, 1969), p. 16.

²⁶Nearly all economists who wrote or testified on the subject opposed a return to gold at the prewar parity at the real costs that they argued were implied by the government’s policies. For examples, see John Maynard Keynes, *A Tract on Monetary Reform* (London: Macmillan, 1923) and A. C. Pigou, “Memorandum on Credit, Currency, and Exchange Fluctuations,” submitted to the Brussels Conference, 1920. Partially reproduced in W. A. Brown, *The International Gold Standard Reinterpreted, 1914-34*, vol. I (New York: National Bureau of Economic Research, 1940), pp. 222-23. For a discussion of the opposition of other groups, see W. A. Brown, *England and the New Gold Standard, 1919-1926* (New Haven: Yale University Press, 1929), ch. 10.

²⁷This was the euphemism applied by Montagu Norman, Governor of the Bank of England from 1920 to 1944, to the costs of the gold standard.

²⁸For a detailed account of official thinking during this period see D. E. Moggridge, *British Monetary Policy, 1924-1931: The Norman Conquest of \$4.86* (Cambridge: Cambridge University Press, 1972).

\$4.26 in January 1924, the pound was gotten up to \$4.86 in June 1925 and the Gold Standard Act officially restored the country to the summer of 1914.²⁹

The United States, France, and the collapse of the gold standard

The question of whether the pound was overvalued at \$4.86 during and after 1925 is still controversial. In any case, external considerations continued to dominate British monetary and fiscal policy. Deflation and unemployment continued through 1929, and after that matters got worse. Although the authorities were prepared to bear the costs (and in the event did bear the costs) of deflation sufficient to return to and then to maintain the gold standard at the prewar parity, they had hoped that deflation would not be necessary. To a large extent, British policies were based on the expectation that the large accumulations of gold in the United States during and after the war would eventually be allowed to affect American money and prices.

The British waited in vain for the United States to begin to play the gold standard game as the Bank of England had played it before 1914. But they cannot complain that they were deceived. Benjamin Strong, President of the Federal Reserve Bank of New York and the most influential official in the Federal Reserve System until his death in 1928, made clear that his goal was price stability and that the rules of the game were something devoutly to be avoided rather than followed. In 1923, Strong wrote to Montagu Norman, Governor of the Bank of England, that with America’s “excessive gold stock we must entirely ignore any statutory or traditional percentage of reserve and give greater weight to what is taking place in prices, business activity, employment, and credit volume and

²⁹Except that domestic gold circulation was abolished and the complete, pure gold standard was succeeded by an international gold standard in which gold would be paid only to foreigners.

turnover.³⁰ Then, perhaps thinking that his message was a bit harsh in view of what the British were trying to accomplish, Strong added: “Of course we must not close our eyes to the bearing this may have upon Europe. . . .” As we shall see below, American officials in fact took little account of the effects of their policies on others.

Strong opposed legislation that would have required the Federal Reserve to stabilize the price level because, among other reasons, he felt that factors outside the System’s control also affect prices. Nevertheless, he accepted price stability as the Fed’s primary goal, which he proposed to achieve by a monetary base rule: “If I were Czar of the Federal Reserve System I’d see that the total of our earning assets did not go much above or below their last year’s average, after deducting an amount equalling from time to time our total new gold imports.” Such a gold neutralization policy is, of course, the exact antithesis of the gold standard game.

In 1944 Ragnar Nurkse presented evidence on the willingness of central banks to play by the rules of the game during the interwar period.³¹ With one small and one large exception, his results were similar to Bloomfield’s for the prewar period. The central banks whose behavior was reported by both Bloomfield and Nurkse at least partially neutralized gold flows 64 percent of the time between 1880 and 1914, compared with 67 percent of the time between 1922 and 1931.³² The small exception was that the Bank of England conformed to the rules 60 percent of the time during the 1922-31 period compared with 48 percent of the time between 1880 and 1914—a difference that may not be statisti-

³⁰This and other statements by Strong are quoted from Lester V. Chandler, *Benjamin Strong, Central Banker* (Washington, D.C.: The Brookings Institution, 1958), ch. 6, which is appropriately titled “New Goals, New Methods.”

³¹Ragnar Nurkse, *International Currency Experience: Lessons of the Inter-War Period* (Princeton, N.J., Princeton University Press, 1944), pp. 237-39.

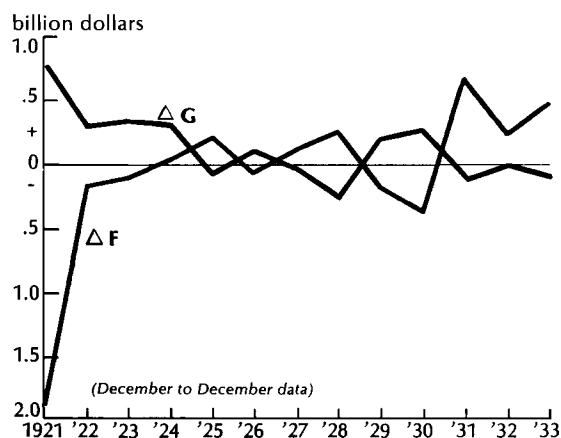
³²Nurkse presented no data for Belgium or the Soviet Union and reported both Austria and Hungary.

cally significant in view of the small number of observations in the later period.

The major difference between the monetary systems observed by Bloomfield and Nurkse was the emergence of a new and dominant actor in the form of an American central bank that had discretionary powers and was determined to prevent the gold standard from undermining domestic stability. Nurkse reported that the Federal Reserve at least partially neutralized gold flows during nine of the ten years 1922-31. His results are shown in the chart, which covers a somewhat longer period, 1921-33. During 12 of these 13 years, changes in Federal Reserve credit (ΔF) were the opposite of changes in the government’s gold holdings (ΔG), which until World II made up the largest part of the monetary base.³³ The American government’s stock of gold grew from \$1,290 million in December 1913 to \$2,451 million in 1920, \$3,985 million in 1925, and \$4,225 million in

³³The exception to this neutralization policy in Nurkse’s data, which were March-to-March changes, was 1931. The exception in the end-of-year changes shown in the chart is 1924.

Changes in Federal Reserve credit (ΔF) and U.S. official gold holdings* (ΔG)



*G is the monetary gold stock less gold coin in circulation.

SOURCE: *Banking and Monetary Statistics, 1914-1941* (Washington, D.C.: Board of Governors of the Federal Reserve System, 1943), pp. 369-71.

1930—from 27 percent of the world’s gold reserves in 1913 to 38 percent in 1930. This accumulation of gold was due not only to the Federal Reserve’s conservative monetary policy (American money and prices in 1929 were virtually unchanged from their 1925 levels) but to successively higher protective tariffs culminating in the Smoot-Hawley Act of 1930.

American policies were reinforced beginning in December 1926 by France, which returned to the gold standard at a rate of exchange considerably below that prevailing during most of the preceding several years and which is widely thought to have undervalued the franc. It now became a race between the United States and France to see who could accumulate the most gold. French gold reserves rose from \$711 million in December 1926 to \$2,699 million in 1931. At the end of 1931, the United States and France owned 60 percent of the world’s gold reserves, compared with 39 percent in 1913 and 43 percent in 1920.

Money, prices, and income fell rapidly in Britain between the fall of 1929 and the fall of 1931, but not as rapidly as in the United States and France. The British balance of payments worsened, gold drains became more severe, and, finally, in September 1931, the Bank of England was no longer able to maintain the convertibility of the currency. The pound was allowed to float and by the end of the year had fallen to \$3.37.

Postscript

The British must accept a large part of the blame for the timing of the collapse of the gold standard. In retrospect, it appears that they returned to gold too soon or at the wrong rate or both—although their argument that a return to gold at a different rate would have been inconsistent with the essential idea of a gold standard is unanswerable. A

³⁴For evidence that official French policy was to return to gold at a rate that would give its export industries an advantage in world markets, see R. S. Sayers, “The Return to Gold, 1925,” in L. S. Pressnell, ed., *Studies in the Industrial Revolution* (London: Athlone, 1960).

³⁵Moggridge, *British Monetary Policy*, p. 7.

gold standard under which rates are adjusted whenever currencies come under pressure is not worth its name. Certainly, it performs none of its intended functions—in particular, the elimination of monetary discretion. However, the stated objectives and behavior of France³⁴ and especially the United States suggest that the gold standard would not have had much of a future regardless of the conditions under which it was restarted. It is inconceivable that a gold standard can work when the dominant trading country treats domestic objectives as paramount.

Britain has been called variously the umpire and the conductor of the pre-1914 gold standard. But these terms understate Britain’s importance, for she was also the major player. She played as well as called the tune. An understanding of the role of London in the operation of the system requires a grasp of “the immensely strong underlying position of Britain in the international economy. In the century before 1913, in every year but two, Britain had been in surplus on current account.”³⁵ London was also, as the world’s banker, the depository for large amounts of foreign funds. These factors meant that London exerted a large and continuing pull on the world’s gold—which was allowed to flow out again because Britain was also the world’s largest overseas investor. She lost this position after the war to a country that showed a strong inclination to accumulate gold.

The Bank of England treated gold as an instrument, something to be used to expand credit when it flowed in and something to be paid out, without regret, upon demand. In common with others, the British loved easy money and good times, which the Bank supplied whenever it was able. The Bank’s apparent eagerness to see how close it could trim its reserves without quite falling off the gold standard was a source of amazement and concern.³⁶ This pattern of behavior, probably

³⁶The admonition to keep a larger reserve was probably the most urgent advice of both Tooke, *An Inquiry Into the Currency Principle*, and Bagehot, *Lombard Street*.

essential to a successful gold standard, was diametrically opposed to that of France and the United States not only during the 1920s but also in the 1960s, when the former country again evinced a strong desire to accumulate gold and the latter worried that gold was actually being called upon to perform its function as a reserve. The decision of the United States in August 1971 to renege on its promise to foreign central banks to redeem dollars in gold—i.e., to apply its gold reserve to the use for which it was presumably in-

tended³⁷—raises serious doubts about this country's ability to succeed Britain as manager of an international gold standard. Perhaps more importantly, the high domestic costs of adhering to the rules of the gold standard game raise serious doubts about any country's ability and willingness to take on such a responsibility.

³⁷What possible function can America's gold reserve now perform except as a continuing reminder to foreigners of our unreliability as an international banker?

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