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A Brief History of International Monetary Relations

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Benjamin J. Cohen describes the evolution of the international monetary system over the past century. He shows how the system has evolved away from a gold standard toward the use of national currencies not backed by precious metals for international trade and payments. As Cohen indicates, the national goals of independent states have often conflicted with the more general international goal of a stable, workable means of international payments. The two most successful experiences in overcoming the contradiction between national desires and global cooperation have been in the periods before World War I and after World War II, in which Great Britain and the United States, respectively, served as bankers to the world. From an international political perspective, Cohen argues that in these eras one nation managed and enforced international monetary relations in ways that conformed both to the hegemon's national goals and to the maintenance of international monetary stability—which is not to say that the resultant order was benevolent to all concerned, as Cohen points out. In any case, just as the decline of British political and economic power undermined the classical gold standard, so too has the United States' relative decline since 1970 led to a reshuffling of existing international monetary arrangements.

THE CLASSICAL GOLD STANDARD

...It is impossible to specify a precise date when the international monetary order began. The origins of international monetary relations, like those of money itself, are shrouded in the obscurity of prehistory. We know that there were well-defined monetary areas in many parts of the ancient world. But it is only with the rise of the Roman Empire that

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we begin to find documentary evidence of a very explicit international monetary order. The Roman monetary order, which was based initially on the gold coinage of Julius Caesar and later on the gold solidus (bezant, nomisma) for Byzantium, lasted some twelve centuries in all. Though confronted from the seventh century on with competition from a silver bloc centered on the newly emergent Muslim dinar, the Roman system did not break down completely until the sacking of Constantinople in 1203. The next five centuries were characterized by fluctuating exchange rates and a succession of dominant moneys—the “dollars of the Middle Ages,” one source has called them—including in later years the Florentine fiorino, the Venetian ducato, the Spanish reale and the Dutch florin. After the beginning of the Industrial Revolution, it was the British pound sterling that rose to a position of preeminence in world monetary affairs.

As its name implies, the pound sterling was originally based on silver. In fact, however, England began practicing a loose sort of bimetallism—gold coins circulating alongside silver ones—even as early as the fourteenth century. (Gold coinage was first introduced into England in 1344, during the reign of Edward III.) Gresham’s Law was coined during the reign of Queen Elizabeth I. Sir Isaac Newton, as Master of the Mint, tried to cope with the problem of bad money driving out good by calculating the value of the gold guinea (named after the region in West Africa where gold was mined) in terms of silver shillings. And in 1817 gold was formally declared legal tender in England alongside silver. From the time of the Napoleonic Wars, the United Kingdom moved rapidly from bimetallism to a single-money system. In 1798 the free coinage of silver was suspended and a £25 limit set on the legal-tender power of silver coins. In 1816 silver’s legal-tender powers were further limited to £2. And after 1819 silver could no longer be used to redeem circulating bank notes: paper could be redeemed in gold coin only. From that date onward, the pound was effectively based on gold alone. The British were on a full gold standard.

Other countries, however, resisted the gold standard for several decades more. Most European nations, as well as the United States, remained legally bimetallic for at least another half century: most others, especially in Asia, formally retained silver standards. It was only in the 1870s that the movement toward a full-fledged international gold standard picked up momentum and it is from this decade that the modern history of international monetary relations is customarily dated. In 1871 the new German empire adopted the gold mark as its monetary unit, discontinuing the free coinage and unlimited legal-tender powers of silver. In 1873 a parallel decision followed in the United States (the “Crime of ‘73”), and by 1878 silver had been demonetized in France and virtually every other European country as well. During this decade, the classical gold standard was born. During succeeding decades, it spread to encompass virtually all of the world’s independent countries, as well as all of the various colonial empires of Europe.

The classical gold standard was a comparatively brief episode in world history, ending with the outbreak of World War I in 1914. It was defined by two key features. A country was considered to be “on” the gold standard if (1) its central bank pledged to buy and sell gold (and only gold) freely at a fixed price in terms of the home currency and (2) its private residents could export or import gold freely. Together these two features defined a pure fixed-exchange-rate mechanism of balance-of-payments adjustment. Fixed exchange rates were established by the ratios of the prices at which central banks pledged to buy and sell gold for local currency. Free export and import of gold in turn established the means for reconciling any differences between the demand and supply of a currency at its fixed exchange rate. Deficits, requiring net payments to foreigners, were expected to result in outflows of gold, as residents converted local currency at the central bank in order to meet transactions obligations abroad. Conversely, surpluses were expected to result in gold inflows. Adjustment was supposed to work through the impact of such gold flows on domestic economic conditions in each country.

The mechanism of liquidity creation under the classical gold standard was very nearly a pure commodity standard—and that commodity, of course, was gold. Silver lost its role as an important reserve asset during the decade of demonetization in the 1870s. And national currencies did not even begin to enter into monetary reserves in significant

quantities until after 1900. The most widely held national currency before World War I was the pound; its principal rivals were the French franc and the German mark. But even as late as 1914, the ratio of world foreign-exchange reserves to world gold reserves remained very low. The monetary standard even then was still essentially a pure commodity standard.

After World War I, observers tended to look back on the classical gold standard with a sense of nostalgia and regret—a sort of Proustian *Recherche du temps perdu*. As compared with the course of events after 1918, the pre-1914 monetary order appeared, in retrospect, to have been enormously successful in reconciling the tension between economic and political values. During its four decades of existence, world trade and payments grew at record rates, promoting technical efficiency and economic welfare; yet, looking back, it seemed that problems of balance-of-payments adjustment and conflicts of policy between nations had been remarkably rare. The gold standard seemed to have succeeded to a unique degree in accommodating and balancing the efficiency and consistency objectives. For many, it had literally been a “Golden Age” of monetary relations.

The image of a Golden Age, however, was a myth, based on at least two serious misconceptions of how the gold standard had actually operated in practice. One misconception concerned the process of balance-of-payments adjustment, the other involved the role of national monetary policies. The process of balance-of-payments adjustment was said to have depended primarily on changes of domestic price levels. The model was that of the so-called price-specie-flow mechanism: outflows of gold (specie) shrinking the money supply at home and deflating the level of domestic prices, inflows expanding the money supply and inflating domestic prices. National monetary policies, although reinforcing the adjustment process, were said to have been actually concerned exclusively with defense of the convertibility of local currencies into gold. Central banks were said to have responded to gold flows more or less mechanically and passively, with a minimum of discretionary action or judgment. They simply played the “rules of the game,” allowing gold flows to have their full impact on domestic money supplies and price levels. Combined, these misconceptions produced a myth of an impersonal, fully automatic, and politically symmetrical international monetary order dependent simply on a combination of domestic price flexibility and natural constraints on the production of gold to ensure optimality of both the adjustment process and reserve supply.

More recent historical research has revealed just how misleading this myth of the Golden Age really was. Regarding the role of monetary policy, for example, Arthur Bloomfield has convincingly demonstrated that central banks before 1914 were rarely quite as mechanical or passive as observers later believed. In fact, central banks exercised a great deal of discretion in reacting to inward or outward flows of gold. The rules of the game could be interpreted in either a negative or a positive sense. In the negative sense, central banks could simply refrain from any actions designed to counteract the influence of gold flows on domestic money supplies; in the positive sense, central banks might have been expected to magnify the domestic monetary influence of gold flows according to their deposit-reserve ratios. Bloomfield has shown that under the classical gold standard, central banks hardly ever adhered to the rules in the positive sense, and sometimes even departed from them in the negative sense. Of course, this was still an era of predominantly laissez-faire attitudes in government economic policy. Yet, even then, central banks were neither entirely unaware of, nor indifferent to the effects of gold flows on domestic prices, incomes, or public confidence. To counteract such effects when it suited them, monetary authorities developed a variety of techniques for evading the rules of the game—including manipulation of the margins around exchange rates (technically, the “gold points”), direct intervention in the foreign-exchange market, and loans between central banks. Monetary policies in this period were never really either fully passive or simply automatic.

Similarly, regarding the process of balance-of-payments adjustment, Robert Triffin has convincingly demonstrated that domestic price levels rarely played as much of a role before 1914 as observers later believed. In fact, the process of adjustment depended at

least as much on changes of domestic income and employment as on price changes. But most of all, the process depended on capital movements. The role of international capital movements in adjusting to payments disequilibria was far more important than any role that the terms of trade may have played. .

However, capital movements were not something that all countries could avail themselves of with equal facility. Triffin drew a distinction between countries that were capital exporters and those that were capital importers. Capital-exporting countries usually could avoid the consequences of balance-of-payments deficits— domestic deflation or a possible threat to the gold convertibility of the local currency—simply by slowing down investment abroad. The customary instrument in this regard was the central-bank discount rate (in England, Bank rate); that is, the rate at which the central bank discounted collateral when lending to commercial banks. A rise of the discount rate, cutting back cash reserves of banks, could normally be relied upon to reduce the rate of capital outflow and improve the balance of payments. Borrowing countries, on the other hand, were far less able to control the rate of their capital imports, these being primarily determined by credit conditions in the capital-exporting countries. The Golden Age, therefore, was really limited only to the “core” of advanced nations of Europe and the so-called regions of recent settlement (including North America, Australia, South Africa, and Argentina). Elsewhere, the gold standard was far less successful in preserving payments stability or avoiding policy conflict. . .

Thus, not only was the gold standard neither impersonal nor fully automatic; it was also not politically symmetrical. In fact, the pre-1914 monetary order was arranged in a distinctly hierarchical fashion, with the countries of the periphery at the bottom, the core countries above, and at the peak—Britain. Great Britain dominated international monetary relations in the nineteenth century as no state has since, with the exception of the United States immediately after World War II. Britain was the supreme industrial power of the day, the biggest exporter of manufactured goods, the largest overseas investor. London was by far the most important world financial center, sterling by far the most widely used of the world’s currencies for both current- and capital-account transactions. It is sometimes claimed that the gold standard was in reality a sterling-exchange standard. In one sense this appellation is misleading, insofar as most monetary reserves before 1914 (as mentioned above) were still held in gold, not sterling, and insofar as governments continued to be concerned with maintaining the gold value of their currencies, not the sterling value. Yet in another sense the facts cannot be denied: the classical gold standard was a sterling standard—a hegemonic regime—in the sense that Britain not only dominated the international monetary order, establishing and maintaining the prevailing rules of the game, but also gave monetary relations whatever degree of inherent stability they possessed.

This stability was ensured through a trio of roles which at that time only Britain had the economic and financial resources to play: (1) maintaining a relatively open market for the exports of countries in balance-of-payment difficulties; (2) providing contracyclical foreign long-term lending; and (3) acting as lender of last resort in times of exchange crisis. These were not roles that the British deliberately sought or even particularly welcomed. As far as the Bank of England was concerned its monetary policies were dictated solely by the need to protect its narrow reserves and the gold convertibility of the pound. It did not regard itself as responsible for global monetary stabilization or as money manager of the world. Yet this is precisely the responsibility that was thrust upon it in practice—acquired, like the British Empire itself, more or less absentmindedly. The widespread international use of sterling and the close links between the larger financial markets in London and smaller national financial markets elsewhere inevitably endowed Britain with the power to guide the world’s monetary policy. Changes of policy by the Bank of England inevitably imposed a certain discipline and coordination on monetary conditions in other countries. . .

It is important to recall, however, that the stability ensured by British monetary management was confined largely to the core of advanced nations in Europe and the regions of recent settlement—countries that were themselves capital exporters or, when necessary, were capable of availing themselves of the lending facilities of London or other financial centers. The less-developed countries of the periphery were, as

emphasized, far less able to control the rate of their foreign capital imports: moreover, they suffered from Britain's related power to avoid the continuing cost of adjustment by manipulating its international terms of trade. ... As Fred Hirsch has argued, Britain "managed" the system partly at the expense of its weakest members."² Over time, this was bound to become a source of serious policy conflict in the monetary order.

In fact, it may be argued that behind the deceptive facade of the Golden Age, the classical gold standard actually bore within itself the seeds of its own destruction. Not only did the order require the continued acquiescence of periphery countries in order to preserve a semblance of stability in the core; it also depended on the continued hegemony of Great Britain in the world's economic affairs. But as many economic historians have noted, this dominance was already beginning to fade, even as early as the turn of the century. From the decade of the 1870s onward, British industrialists were faced with a mounting wave of competition in world export markets, first from Germany and the United States, and later from France, Russia, and Japan. From the 1890s onward, London was faced with growing competition from newly emergent financial centers like Paris, Berlin, and later New York: the pound found itself rivaled *inter alia* by the franc, the mark, and eventually the dollar. As a result of these developments, the British gradually lost a good part of their power to manage the international monetary order. Thus, when it was brought down by the outbreak of World War I, the classical gold standard had already become a rather fragile thing. It is perhaps too much to argue, as does one economic historian, that "the tree felled by the crisis was already rotten."³ But signs of decay there most certainly were.

THE INTERWAR PERIOD

When World War I broke out, all of the belligerent nations—and soon most others as well—took action to protect their gold reserves by suspending currency convertibility and embargoing gold exports. The classical gold standard was dead. Private individuals could no longer redeem paper currency in gold, nor could they sell it abroad. But they could still sell one paper currency for another (exchange control not being invented until the 1930s) at whatever price the exchange market would bear. The fixed exchange-rate mechanism of the gold standard, therefore, was succeeded by its absolute opposite: a pure floating exchange-rate regime. In the ensuing years, as currency values varied considerably under the impact of wartime uncertainties, the international monetary order could not even come near to realizing its potential for joint gain.

Accordingly, once the war was over and peace arrangements taken care of, governments quickly turned their attention to the problem of world monetary reform. Lulled by the myth of the Golden Age, they saw their task as a comparatively simple one: to restore the classical gold standard (or a close approximation thereof). The major conundrum seemed to be an evident shortage of gold, owing to the extreme price inflations that had occurred in almost all countries during and immediately after the war. These had sharply reduced the purchasing power of the world's monetary gold stock, which was still valued at its old prewar parities. One plausible solution might have been an equally sharp multilateral devaluation of currencies in terms of gold, in order to restore the commodity value of gold reserves. But that was ruled out by most countries on the grounds that a return to "normal" (and to the Golden Age) must include a return to prewar rates of exchange. Yet at the same time, governments understandably wanted to avoid a scramble for gold that would have pushed up the metal's commodity value through competitive deflations of domestic prices. Some other solution had to be found.

The "solution" finally agreed upon was to *economize* on the use of gold. An international economic conference in 1922 (the Genoa Conference) recommended worldwide adoption of a gold-exchange standard in order to "centralize and coordinate the demand for gold, and so avoid those wide fluctuations in the purchasing power of gold which might otherwise result from the simultaneous and competitive efforts of a number of countries to secure metallic reserves."⁴ (Central banks were urged to substitute foreign-exchange balances for gold in their reserves as a "means of economizing the use of gold."⁵ Gold holdings were to be systematically concentrated in the major financial centers (e.g., London); outside the centers, countries were to maintain their exchange rates by buying and selling "gold exchange"

(i.e., currencies convertible into gold, such as sterling) instead of gold itself. The monetary order was thus to combine a pure fixed exchange-rate mechanism of balance-of-payments adjustment modeled on the classical gold standard, with a new mixed commodity-currency standard to cope with the shortage of gold.

The gold-exchange standard came into formal existence early in 1925, when Britain reestablished the gold convertibility of the pound and eliminated restrictions on gold exports. Within a year nearly forty other nations had joined in the experiment, either *de jure* or *de facto*, and most other independent governments joined not much later. But the experiment did not last long. In 1931, following a wave of bank failures on the European continent, the British were forced by a run on their reserves to suspend convertibility once again, and in the chaos that ensued the international monetary order broke up into congeries of competing and hostile currency blocs. The largest of these was the sterling bloc, comprising Britain, its overseas dependencies and dominions (except Canada, which had closer financial ties with the United States), and a variety of independent states with traditionally close trading and banking connections with Britain. This bloc was a shrunken remnant of the world that the British had dominated and in effect managed prior to 1914. Members were identified by two main characteristics: they pegged their currencies to sterling, even after convertibility was suspended; and they continued to hold most of their reserves in the form of sterling balances in London. A second bloc after 1931 was informally grouped around the United States (the dollar area), and a third around France (the “gold bloc”). In addition, there was a large group of miscellaneous countries (including, especially, Germany and the states of Eastern Europe) that abandoned convertibility altogether in favor of starkly autarkic trade and financial policies.

The decade of the 1930s, the decade of the Great Depression, was a period of open economic warfare—a prelude to the military hostilities that were to follow after 1939. Never had the conflictual element in international monetary relations been laid quite so bare. It was truly a free-for-all regime. With public confidence shattered, exchange rates tended to fluctuate widely, and governments consciously engaged in competitive depreciations of their currencies in attempting to cope with their critical payments and unemployment problems. As in the years during and immediately after World War I, the monetary order failed to come even near to realizing its potential for joint gain. In 1936 a semblance of cooperation was restored by the Tripartite Agreement among Britain, France, and the United States for mutual currency stabilization. But this was only the barest minimum that might have been done to restore consistency to international monetary relations. Genuine monetary reconstruction had to wait until after World War II.

Why did the interwar experiment fail? Why did the attempt to return to the Golden Age end so disastrously? Mainly because the Golden Age *was* a myth, a myth based on misconceptions and a fundamental misunderstanding of how much the world economy had really changed. Governments failed to read the signs of decay in the prewar era; more importantly, they failed to realize how anachronistic a restored gold standard would be in the new circumstances of the postwar era. Conditions in the 1920s simply did not lend themselves to the adoption of an impersonal and fully automatic monetary order. In reality, the experiment was doomed from the start.

In the first place, governments were in the process of abandoning their inherited attitudes of *laissez-faire* in general economic policy. Social and political conditions had changed. A Bolshevik revolution had succeeded in Russia; elsewhere, socialism was almost universally on the rise. Governments could no longer afford to tolerate a certain amount of price or income deflation or inflation simply for the sake of maintaining convertibility of their currencies at a fixed price. Domestic stability now had to take precedence if politicians were to hold onto their jobs. If before World War I central banks rarely adhered to the gold-standard rules of the game in the positive sense, after the war they rarely adhered to them even in the negative sense. Instead, a variety of new instruments were devised to counteract and neutralize the domestic monetary influence of external payments disequilibria, just the opposite of what was needed to make a restored gold standard work....

In the second place, prices and wages were becoming increasingly rigid, at least in a downward direction, under the impact of rising trade unionism and expanding social welfare legislation. Domestic price flexibility was a key requirement for a restored gold standard. Without it (and with exchange rates fixed), a disproportionate share of the adjustment process had to consist of changes

of domestic incomes, output and employment. It was precisely in order to avoid such impacts, of course, that governments were becoming increasingly interventionist in economic affairs. But the consequences of such interventionism inevitably included a complete short-circuiting of the external adjustment mechanism that the same governments were laboring so hard to rebuild.

A third problem was the distorted structure of exchange rates established under the new gold-exchange standard. In insisting upon a return to convertibility at their prewar parities, governments were taking insufficient note of the fact that price relationships between national economies had been dramatically altered since 1914. Inconvertibility and floating exchange rates had broken the links between national price movements, and domestic inflation rates had varied enormously. When convertibility was finally reestablished after 1925, many govern-merits found themselves with currencies that were overvalued and undervalued by quite significant amounts. Yet they were prevented from doing much about it by the straitjacket of fixed exchange rates. The pound, for example, restored to convertibility at its old prewar parity of \$4.86, was overvalued by at least 10 percent; but since subsequent changes of the parity were ruled out by the gold-standard rules of the game, it was not surprising that the British balance of payments stayed under almost continuous strain until 1931, and British unemployment rates remained uncomfortably high. The French, on the other hand, who were an exception to the general rule in returning to gold (de facto in 1926, de jure in 1928) at just one-fifth of their prewar parity, undervalued the franc by perhaps as much as 25 percent. The result in this case was an almost immediate drainage of funds from London to Paris, adding to Britain's woes and, in the end, contributing importantly to the final collapse of the ill-fated experiment in 1931.

A fourth problem was the war's legacy of international indebtedness, which imposed a severe strain on monetary relations throughout the 1920s. The United States was the net creditor in a complicated network of obligations arising from wartime interallied loans and postwar German reparations: the biggest debtor, of course, was defeated Germany. As it turned out, most countries simply did not have the capacity to generate the net current-account surpluses necessary to effect their obligated transfers on capital account. In large measure, therefore, they had to rely instead on private capital outflows from the United States (much of which went to Germany) in a vast circular flow of funds. The Germans paid their reparations essentially with funds borrowed from America; Germany's creditors then used the same funds or other American loans to pay off their debts in the United States. How precarious all of this was became clear in 1929, when the stock-market crash and ensuing Great Depression abruptly cut off virtually all U.S. investment overseas. It is no accident that within two years reparations and inter-allied debt payments were abruptly cut off as well.

Finally, there was the problem of divided responsibility in the monetary order. If what ensured the apparent stability of the classical gold standard before 1914 was a single dominant center capable of acting as money manager of the world, what ultimately brought down its successor in 1931 was the emergence of competitive financial centers effectively rendering Britain's traditional hegemonic role impossible. Rivals to London had begun emerging even before World War I. During the 1920s this process continued, as Paris reasserted itself as a financial center and New York suddenly appeared on the scene. Still losing ground industrially and now saddled with an overvalued currency as well, Britain was no longer capable of playing the trio of roles that had provided the prewar monetary order with its semblance of stability. Unfortunately, neither were the French capable of shouldering such heavy responsibilities—they lacked the requisite economic and financial resources—and the Americans, who did have the resources, were as yet unwilling to do so. As a result, the system drifted without a leader. As Charles Kindleberger has written: "The United States was uncertain of its international role... The one country capable of leadership was bemused by domestic concerns and stood aside . . . The instability [came] from the growing weakness of one driver, and the lack of sufficient interest in the other."⁶

Could the two drivers, together with France, possibly have managed the monetary order cooperatively? Perhaps so. But this would have called for greater mutual trust and forbearance than any of the three seemed capable of at the time. Britain was still trying to lead, albeit from weakness, and the United States had not yet learned how to lead from strength. The French, meanwhile, resented both Anglo-Saxon powers, and all three were competing actively for short-

term money flows – and even for gold itself. (After 1928, for example, the Bank of France added to the pressure on the British by suddenly opting to convert its sizable accumulation of sterling balance into gold.) The result of this lack of coordination was a continual problem of large-scale transfers of private funds (“hot money” movements) from one financial center to another – the confidence problem. “This shifting of balances from one market to another [was] inevitable in a gold standard system without a single dominating center.”⁷ In the end, it was such a shifting of balances out of London in 1931 that finally brought the system down. In fact, it was not until 1936, with the Tripartite Agreement, that the three powers eventually got around to acknowledging formally their mutual responsibility for the monetary order. By that time, however, it was too late.

THE BRETTON WOODS SYSTEM

World War II brought exchange control everywhere and ended much of what remained of the element of cooperation in international monetary relations. But almost immediately, planning began for postwar monetary reconstruction. Discussions centered in the Treasuries of Britain and the United States, and culminated in the creation of the International Monetary Fund at a conference of 44 allied nations at Bretton Woods, New Hampshire, in 1944. The charter of the IMF was later intended to be the written constitution of the postwar monetary order – what later became known as the Bretton Woods systems. The Bretton Woods system lasted only twenty-seven years, however, and died in August 1971.

The Origins of the Bretton Woods System

The Bretton Woods system originated as a compromise between rival plans for monetary reconstruction developed on the one hand by Harry Dexter White of the U.S. Treasury, and on the other hand by Lord Keynes of Britain. In 1944 the differences between these two plans seemed enormous. Today their differences appear rather less impressive than their similarities. Indeed, what is really striking, a third of a century later, is how much common ground there really was among all the participating governments at Bretton Woods. All agreed that the interwar experience had taught them several valuable lessons: all were determined to avoid repeating what they perceived to be the errors of the past. Their consensus of judgment was reflected directly in the contents of the IMF’s Articles of Agreement.

Four points in particular stand out. First, it was generally agreed that the inter-war period had demonstrated (to use the words of one authoritative source) “the proved disadvantages of freely fluctuating exchanges.”⁸ The floating rates of the 1930s were seen as having discouraged trade and investment and encouraged destabilizing speculation and competitive depreciations. Nations were loath to return to the free-for-all regime of the Depression years. But at the same time, they were also unwilling to return to the exchange-rate rigidity of the 1920s. The experience of those years was seen as having demonstrated the equal undesirability of the opposite extreme of permanently fixed rates. These, it was agreed, could “be equally harmful. The general interest may call for an occasional revision of currency values.”⁸ Accordingly, the negotiators at Bretton Woods were determined to find some compromise between the two extremes—one that would gain the advantages of both fixed and flexible rates without suffering from their disadvantages.

What they came up with has since been labeled the “pegged-rate” or “adjustable-peg” regime. Members were obligated to declare a par value (a “peg”) for their currencies and to intervene in the exchange market to limit fluctuations within maximum margins (a “band”) one percent above or below parity; but they also retained the right, whenever necessary and in accordance with agreed procedures, to alter their par values to correct a “fundamental disequilibrium” in their balance of payments. What constituted a fundamental disequilibrium? Although key to the whole operation of the Bretton Woods adjustment mechanism, this notion was never spelled out in any detail anywhere in the Articles of Agreement. The omission was to come back to haunt members of the Fund in later years.

Second, all governments generally agreed that if exchange rates were not to be freely fluctuating, countries would need to be assured of an adequate supply of official monetary reserves.

An adjustable-peg regime “presupposes a large volume of such reserves for each single country as well as in the aggregate.”¹⁰ The experience of the interwar period—the gold shortage of the 1920s as well as the breakdown of fixed rates in the 1930s—was thought to have demonstrated the dangers of inadequate reserve volume. Accordingly, a second order of business at Bretton Woods was to ensure a supplementary source of reserve supply. Negotiators agreed that what they needed was some “procedure under which international liquidity would be supplied in the form of pre-arranged borrowing facilities.”¹¹

What they came up with, in this instance, was the IMF system of subscriptions and quotas. In essence, the Fund was to be nothing more than a pool of national currencies and gold subscribed by each country.

Members were assigned quotas, according to a rather complicated formula intended roughly to reflect each country’s relative importance in the world economy, and were obligated to pay into the Fund a subscription of equal amount. The subscription was to be paid 25 percent in gold or currency convertible into gold (effectively the U.S. dollar, which was the only currency still convertible directly into gold) and 75 percent in the member’s own currency. Each member was then entitled, when short of reserves, to “purchase” (i.e., borrow) amounts of foreign exchange from the Fund in return for equivalent amounts of its own currency. Maximum purchases were set equal to the member’s 25 percent gold subscription (its “gold tranche”), plus four additional amounts each equal to 25 percent of its quota (its “credit tranches”), up to the point where the Fund’s holdings of the member’s currency equaled 200 percent of its quota. (If any of the Fund’s holdings of the member’s initial 75 percent subscription of its own currency was borrowed by other countries, the member’s borrowing capacity was correspondingly increased: this was its “super-gold tranche.”) The member’s “net reserve position” in the Fund equaled its gold tranche (plus super-gold tranche, if any) less any borrowings by the country from the Fund. Net reserve positions were to provide the supplementary liquidity that was generally considered necessary to make the adjustable-peg regime work.

A third point on which all governments at Bretton Woods agreed was that it was necessary to avoid a recurrence of the kind of economic warfare that had characterized the decade of the 1930s. Some “code of action” was needed to “guide international exchange adjustments,” some framework of rules to ensure that countries would remove their existing exchange controls and return to a system of multilateral payments based on currency’s convertibility. At Bretton Woods such a code was written into the obligations of Fund members. Governments were generally forbidden to engage in discriminatory currency practices or exchange-control regulation, although two exceptions were permitted. First, convertibility obligations were extended to current international transactions only. Governments were to refrain from regulating purchases and sales of foreign exchange for the purpose of current-account transactions. But they were not obligated to refrain from regulation of capital-account transactions; indeed, they were formally encouraged to make use of capital controls to maintain equilibrium in the face of “those disequilibrating short-term capital movements which caused so much trouble during the ‘thirties.’”² And second, convertibility obligations could be deferred if a member so chose during a postwar “transitional period.” Members deferring their convertibility obligations were known as Article XIV countries; members accepting them had so-called Article VIII status. One of the functions assigned to the IMF was to oversee this code of action on currency convertibility.

Finally, governments agreed that there was a need for an institutional forum for international consultation and cooperation on monetary matters. The world could not be allowed to return to the divided responsibility of the interwar years. “International monetary relations especially in the years before the Tripartite Agreement of 1936 suffered greatly from the absence of an established machinery procedure of consultation.”¹³ In the postwar era, the Fund itself would provide such a forum. Of all the achievements of Bretton Woods, this was potentially the most significant. Never before had international monetary cooperation been attempted on a permanent institutional basis. Judged against the anarchy of the 1930s, this could be considered a breakthrough of historic proportions. For the first time ever, governments were formally committing themselves to the principle of collective responsibility for management of the

international monetary order.

These four points together defined the Bretton Woods system—a monetary order combining an essentially unchanged gold-exchange standard, supplemented only by a centralized pool of gold and national currencies, with an entirely new pegged-rate mechanism of balance-of-payments adjustment. The Fund itself was expected to perform three important functions: regulatory (administering the rules affecting exchange rates and currency convertibility), financial (supplying supplementary liquidity), and consultative (providing a forum for the cooperative management of monetary relations). The negotiators at Bretton Woods did not think it necessary to alter in any fundamental way the mixed commodity-currency standard that had been inherited from the interwar years. Indeed, it does not even seem to have occurred to them that there might be any inherent defect in the structure of a gold-exchange standard. The problem in the 1920s, they felt, had not been the gold-exchange standard itself but the division of responsibility—in short, a problem of management. “The nucleus of the gold exchange system consisted of more than one country; and this was a special source of weakness. With adequate cooperation between the centre countries, it need not have been serious.”¹⁴ In the Bretton Woods system the IMF was to provide the necessary machinery for multilateral cooperation. The management problem would thus be solved and consistency in monetary relations ensured.

Implicit in this attitude was a remarkable optimism regarding prospects for monetary stability in the postwar era. Underlying the choice of the pegged-rate adjustment mechanism, for instance, seemed to be a clear expectation that beyond the postwar transitional period (itself expected to be brief) payments imbalances would not be excessive. The adjustment mechanism was manifestly biased in principle against frequent changes of exchange rates, presumably because of the experience of the 1930s; governments had to demonstrate the existence of a fundamental disequilibrium before they could alter their par values. At the same time, no government was prepared to sacrifice domestic stability for the sake of external equilibrium. Yet nations were left with few other instruments, other than capital controls, to deal with disturbances to the balance of payments. This suggests that the negotiators at Bretton Woods felt that the major threat to stability was likely to come from private speculation rather than from more fundamental price or income developments. It also suggests that they were confident that most disequilibria would be of a stochastic rather than nonstochastic nature. Underlying the IMF’s financial function seemed to be a clear expectation that its centralized pool of liquidity would be sufficient to cope with most financing problems as they emerged.

As matters turned out, this optimism proved entirely unjustified. Monetary relations immediately after the war were anything but stable, and the transitional period anything but brief. Only the United States, Canada, and a small handful of other countries (mainly in Central America) were able to pledge themselves to the obligations of Article VIII right away. Most others were simply too devastated by war—their export capacities damaged, their import needs enormous, their monetary reserves exhausted—to commit their currencies to convertibility. Payment problems, especially in Europe and Japan, could hardly be described as stochastic; the Fund’s initial pool of liquidity was anything but sufficient. After a short burst of activity during its first two years, mainly to the benefit of European nations, the Fund’s lending operations shrank to an extremely small scale. (In 1950 the Fund¹ made no new loans at all, and large-scale operations did not begin again until 1956.) The burden instead was shifted to one country, the only country after the war immediately capable of shouldering the responsibility for global monetary stabilization—namely, the United States.

Fortunately, this time, for reasons of its own (see below), the United States was willing. As dominant then as Britain had been in the nineteenth century, America rapidly assumed the same trio of managerial roles—in effect, taking over as money manager of the world. A relatively open market was maintained for the exports of foreign goods. A relatively generous flow of long-term loans and grants was initiated first through the Marshall Plan and other related aid programs, then through the reopened New York capital market. And a relatively liberal lending policy was eventually established for the

provision of short-term funds in times of exchange crisis as well. Since monetary reserves were everywhere in such short supply—and since the IMF’s pool of liquidity was manifestly inadequate—the United States itself became the residual source of global liquidity growth through its balance-of-payments deficits. At the war’s end, America owned almost three-quarters of the world’s existing monetary gold: and prospects for new gold production were obviously limited by the physical constraints of nature. The rest of the world, therefore, was more than willing to economize on this scarce gold supply by accumulating dollars instead. The dollar thus was enshrined not only as principal “vehicle currency” for international trade and investment but also as principal reserve asset for central banks. In the early postwar years, America’s deficits became the universal solvent to keep the machinery of Bretton Woods running. It may be misleading, as I have indicated, to call the classical gold standard a sterling-exchange (though not, I have suggested, to call it a hegemony); it is not at all misleading to call the postwar monetary standard a dollar-exchange standard. Indeed, the Bretton Woods system became synonymous with a hegemonic monetary order centered on the dollar. Though multilateral in formal design, in actual practice (like the classical gold standard before it) the Bretton Woods system was highly centralized.

In effect, what the United States did was to abjure any payments target of its own in favor of taking responsibility for operation of the monetary order itself. Other countries set independent balance-of-payments targets; America’s external financial policy was essentially one of “benign neglect.” Consistency in monetary relations was ensured not by multilateral cooperation but by America’s willingness to play a passive role in the adjustment process, as the *n*th country, in effect: “other countries from time to time changed the par value of their currencies against the dollar and gold, but the value of the dollar itself remained fixed in relation to gold and therefore to other currencies collectively.”¹⁵ The growth of the world’s liquidity supply was largely determined, consequently, by the magnitude of America’s deficits—modified only to the extent that these deficits were settled in gold, rather than dollars, reflecting the asset preferences of surplus countries.

Like the British in the nineteenth century, the Americans did not deliberately seek the responsibility of global monetary management. (In the interwar period they had evaded it.) On the other hand, unlike the British, once the Americans found themselves with it, they soon came to welcome it, for reasons that were a mixture of altruism and self-interest. Being money manager for the world fit in neatly with America’s newfound leadership role in the Western Alliance. The cold war had begun, and isolationism was a thing of the past. The United States perceived a need to promote the economic recovery of potential allies in Europe and Japan, as well as to maintain a sizable and potent military establishment overseas. All of this cost money: the privilege of liability-financing deficits meant that America was effectively freed from balance-of-payments constraints to spend as freely as it thought necessary to promote objectives believed to be in the national interest. The United States could issue the world’s principal vehicle and reserve currency in amounts presumed to be consistent with its own policy priorities—and not necessarily with those of foreign dollar holders. Foreign dollar holders conceded this policy autonomy to America because it so directly contributed to their own economic rehabilitation. America accepted the necessity, for example, of preferential trade and payments arrangements in Europe, despite their inherent and obvious discrimination against U.S. export sales: likewise, America accepted the necessity of granting Japanese exporters access to the U.S. internal market at a time when other markets still remained largely closed to goods labeled “Made in Japan.” In effect, as I have argued elsewhere, an implicit bargain was struck.¹⁶ America’s allies acquiesced in a hegemonic system that accorded the United States special privileges to act abroad unilaterally to promote U.S. interests. The United States, in turn, condoned its allies’ use of the system to promote their own economic prosperity, even if this happened to come largely at the expense of the United States.

The History of the Bretton Woods System

The subsequent history of the Bretton Woods system may be read as the history of this implicit bargain. The breakdown of the system in 1971 may be read as the bargain's final collapse...

The chronology of Bretton Woods can be divided into two periods: the period of the "dollar shortage," lasting roughly until 1958; and the period of the "dollar glut," covering the remaining dozen years or so. The period of the dollar shortage was the heyday of America's dominance of international monetary relations. The term "dollar shortage," universally used at the time, was simply a shorthand expression of the fact that only the United States was capable of shouldering the responsibility for global monetary stabilization: only the United States could help other governments avoid a mutually destructive scramble for gold by promoting an outflow of dollar balances instead. As David Calleo has written: "Circumstances dictated dollar hegemony."¹⁷ Dollar deficits began in 1950, following a round of devaluations of European currencies, at American insistence, in 1949. (Dollar surpluses prior to 1950 were financed largely by grants and long-term loans from the United States.) In ensuing years, deficits in the U.S. balance of payments (s conventionally measured) averaged approximately \$1.5 billion a year. But for these deficits, other governments would have been compelled by their reserve shortages to resort to competitive exchange depreciations or domestic deflations; they would certainly not have been able to make as much progress as they did toward dismantling wartime exchange controls and trade restrictions. Persistent dollar deficits thus actually served to avoid monetary instability or policy conflict before 1953. Not since the Golden Age before World War I, in fact, had the monetary order been so successful in reconciling the tension between economic and political values. The period to 1958 has rightly been called one of "beneficial disequilibrium."

After 1958, however, America's persistent deficits began to take on a different coloration. Following a brief surplus in 1957, owing to an increase of oil exports to Europe caused by the closing of the Suez Canal, the U.S. balance of payments plunged to a \$3.5 billion deficit in 1958 and to even larger deficits in 1959 and 1960. This was the turning point. Instead of talking about a dollar shortage, observers began to talk about a dollar glut; consistency in monetary relations no longer appeared quite so assured. In 1958, Europe's currencies returned to convertibility. In subsequent years the former eagerness of European governments to obtain dollar reserves was transformed into what seemed an equally fervent desire to avoid excess dollar accumulations. Before 1958, less than 10 percent of America's deficits had been financed by calls on the gold stock in Fort Knox (the rest being liability financed). During the next decade, almost two-thirds of America's cumulative deficit was transferred in the form of gold. Almost all of this went to governments on the continent of Europe.

It was clear that the structure of Bretton Woods was coming under increasing strain. Defects were becoming evident both in the mechanism of liquidity-creation and in the mechanism of payments adjustment.

Credit for first drawing attention to the defects in the liquidity creation mechanism of Bretton Woods is usually given to Robert Triffin for his influential book *Gold and the dollar Crisis*.¹⁸ The negotiators at Bretton Woods, Triffin argued, had been too complacent about the gold-exchange standard. The problem was not simply one of management. Rather, it was one of structure—an inherent defect in the very concept of a gold-exchange standard. A gold-exchange standard is built on the illusion of convertibility of its fiduciary element into gold at a fixed price. The Bretton Woods system, though, was relying on deficits in the U.S. balance of payments to avert a world liquidity shortage. Already, America's "overhang" of overseas liabilities to private and official foreigners was growing larger than its gold stock at home. The progressive deterioration of the U.S. net reserve position, therefore, was bound in time to undermine global confidence in the dollar's continued convertibility. In effect, governments were caught on the horns of a dilemma. To forestall speculation against the dollar, U.S. deficits would have to cease. But this would confront governments with the liquidity problem. To forestall the liquidity problem, U.S. deficits would have to continue. But this would

confront governments with the confidence problem. Governments could not have their cake and eat it too.

Not that governments were unwilling to try. On the contrary, during the early 1960s a variety of ad hoc measures were initiated in an effort to contain speculative pressures that were mounting against the dollar. These included a network of reciprocal short-term credit facilities (“swaps”) between the Federal Reserve and other central banks, as well as enlargement of the potential lending authority of the IMF (through the “General Arrangements to Borrow”). Both were intended to facilitate recycling of funds in the event of speculative currency shifts by private investors. They also included creation of a “gold pool” of the major financial powers to stabilize the price of gold in private markets. Later, in 1968, the gold pool was replaced by a two-tier gold-price system—one price for the private market, determined by supply and demand, and another price for central banks, to remain at the previous fixed level of \$35 per ounce. These several measures were moderately successful in helping governments cope with the threat of private speculation against the dollar—the private confidence problem. The official confidence problem, however, remained as acute a danger as ever.

Meanwhile, in the mid-1960s, negotiations were begun whose aim was to establish a substitute source of liquidity’ growth, in order to reduce reliance on dollar deficits in the future. These negotiations were conducted among ten industrial countries - the so-called Group of Ten (G-10) - comprising Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, the United Kingdom, and the United States. What came out of the G - 10 negotiations was the agreement to create Special Drawing Rights, an entirely new type of world fiduciary reserve asset. The SDR agreement was confirmed by the full membership of the International Monetary Fund in 1968 and activated in 1969. Between 1970 and 1972 some 9.5 billion SDR units were allocated to members of the Fund. Governments were confident that with SDRs “in place,” any future threat of world liquidity shortage could be successfully averted. On the other hand, they were totally unprepared for the opposite threat - a reserve surfeit - which in fact is what eventually emerged.

Any number of authors could be credited for drawing attention to the defects in the payments adjustment mechanism of Bretton Woods. Virtually from the time the Charter was first negotiated, observers began pointing to the ambiguity surrounding the notion of fundamental disequilibrium. How could governments be expected to alter their par values if they could not tell when a fundamental disequilibrium existed? And if they were inhibited from altering their par values, then how would international payments equilibrium be maintained? I have already noted that the adjustment mechanism was biased in principle against frequent changes of exchange rates. In practice during the postwar period it became biased even against infrequent changes of exchange rates. At least among the advanced industrial nations, the world seemed to have returned to the rigidities of the 1920s. Governments went to enormous lengths to avoid the “defeat” of an altered par value. (A particularly sad example of this was the long struggle of the British government to avoid devaluation of the pound—a struggle that ended when sterling was devalued by 14.3 percent in 1967.) The resulting stickiness of the adjustment process not only aggravated fears of a potential world liquidity shortage. It also created irresistible incentives for speculative currency shifts by private individuals and institutions, greatly adding to the confidence problem as well.

Speculative currency shifts were facilitated at the time by the growing integration of money and capital markets in all of the advanced industrial nations. Large-scale capital movements had not originally been envisaged by the negotiators at Bretton Woods; as I have indicated, governments actually were encouraged to *control* capital movements for the purpose of maintaining payments equilibrium. In reality, however, capital movements turned out to be promoted rather than retarded by the design of the Bretton Woods system—in particular, by the integrative power of the par-value regime, and by the return to currency convertibility in Europe in 1958. (Japan did not pledge itself to Article VIII of

the IMF Charter until 1964.) After 1958, capital mobility accelerated *paripassu* with the growth of the Eurocurrency market—that well-known market for currencies deposited in banks located outside of the country of issue. From its origin in the mid-1950s, the Eurocurrency market rapidly expanded into a broad, full-fledged international financial market; subject to just a minimum of governmental guidance, supervision, and regulation, it became during the 1960s the principal vehicle for private speculation against official exchange parities. Increasingly, governments found it difficult to “defend” unadjusted par values in the face of the high degree of international capital mobility that had been generated.

The most serious adjustment problem during this period was, of course, the dollar glut—more accurately, the persistent payments imbalance between the United States and the surplus countries of Europe and Japan. On each side, complaints were heard about the policies of the other. America felt that its erstwhile European and Japanese allies could do more to eliminate the international payments disequilibrium by inflating or revaluing their currencies; the Europeans and Japanese argued that it was the responsibility of the United States to take the first steps to reduce its persistent deficit. Each felt discriminated against by the other. The surplus countries felt that America’s privilege of liability-financing deficits, growing out of the dollar’s reserve-currency role, created an asymmetry in the monetary order favorable to the United States. None of them, after all, had such a degree of policy autonomy. America, on the other hand, felt that the use of the dollar by other governments as their principal intervention medium to support par values—the intervention-currency role of the dollar—created an asymmetry in the monetary order more favorable to Europe and Japan. Many sources argued that the dollar was overvalued. Yet how could its value in terms of foreign currencies be changed unilaterally unless all other countries agreed to intervene appropriately in the exchange market? The United States felt it had no effective control over its own exchange rate (no exchange-rate autonomy) and therefore did not feel it could easily devalue to rid itself of its deficit.

In fact the debate over asymmetries masked a deeper political conflict. The postwar bargain was coming unstuck. In the United States, concern was growing about the competitive threat from the European Common Market and Japan to American commercial interests. The period of postwar recovery was over: Europe and Japan had become reinvigorated giants, not only willing but able to compete aggressively with America in markets at home and abroad. The cost of subordinating U.S. economic interests to the presumed political advantage of now strengthened allies was becoming ever more intolerable. Conversely, concern was growing in Europe and Japan about America’s use of its privilege of liability-financing to pursue policies abroad which many considered abhorrent (one example was the U.S. involvement in Vietnam), the “exorbitant privilege,” as Charles de Gaulle called it. The Europeans and Japanese had just one major weapon they could use to restrict America’s policy autonomy—their right to demand conversion of accumulated dollar balances into gold. Robert Mundell has written that “the sole function of gold convertibility in the Bretton Woods arrangement was to discipline the U.S.”¹⁹ But by the mid-1960s this was a discipline that most major financial powers were growing somewhat reluctant to use. America’s overhang of liabilities was by now far larger than its gold stock. A concerted conversion campaign could have threatened to topple the whole of the Bretton Woods edifice. Governments—with one major exception—did not consider it in their interest to exacerbate the official confidence problem and provoke a systemic crisis. The one major exception was France, which in 1965, in a move strikingly reminiscent of its behavior toward sterling after 1928, began a rapid conversion of its outstanding dollar balances into gold, explicitly for the purpose of exerting pressure on the United States. France alone, however, was unable to change America’s policies significantly.

At bottom, the Bretton Woods system rested on one simple assumption—that economic policy in the United States would be stabilizing. Like Britain in the nineteenth century⁷, America had the power to guide the world’s monetary policy. The absence of an

effective external discipline on U.S. policy autonomy could not threaten the system so long as this assumption held. And indeed, before 1965, the assumption did seem quite justified. America clearly had the best long-term record of price stability of any industrial country; even for some time after 1958 the United States could not justly be accused of “exporting” inflation, however much some governments were complaining about a dollar glut. After 1965, however, the Situation reversed itself, as a direct consequence of the escalation of hostilities in Vietnam. America’s economy began to overheat, and inflation began to gain momentum. The Bretton Woods system was tailor-made to promote the transmission of this inflation abroad. With exchange rates pegged, tradable-goods price increases in the largest of all trading nations were immediately radiated outward to the rest of the world economy. And with governments committed to defending their pegged rates by buying the surfeit of dollars in the exchange market, a huge reserve base was created for monetary’ expansion in these other countries as well. Now the United States could justifiably be accused of exporting inflation overseas.

The gathering world inflation after 1965 exposed all of the latent defects of Bretton Woods. American policy was no longer stabilizing, yet other governments were reluctant to use the one power of discipline they had. (Indeed, after the creation of the two-tier gold-price system in 1968, the U.S. government made it quite plain that if a serious depletion of its gold stock were threatened, it would be prepared to close the window and refuse further sales.) The adjustment mechanism was incapable of coping with the widening deficit in the U.S. balance of payments (which soared to \$9.8 billion in 1970 and an incredible \$29.8 billion in 1971), and the confidence problem was worsening as private speculators were encouraged to bet on devaluation of the dollar or revaluations of the currencies of Europe and Japan. Ultimately, it was the United States that brought the drama to its denouement. Concerned about the rapidly deteriorating U.S. trade balance, as well as about rising protectionist sentiment in the Congress, President Richard Nixon was determined to force the Europeans and Japanese to accept an adjustment of international exchange-rate relationships that would correct the overvaluation of the dollar. Feeling that he lacked effective control over the dollar exchange rate under the prevailing rules of the game, the President decided that the rules themselves would have to be changed. Thus, on August 15, 1971, the convertibility of the dollar into gold was suspended, in effect freeing the dollar to find its own level in the exchange market. With that decision, the Bretton Woods system passed into history.

NOTES

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4. Currency Resolution of the Genoa Conference. as quoted in League of Nations, *International Currency Experience (1944)*, p.28.
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