THE FIFTH HENRY THORNTON LECTURE

Keynes on Monetary Reform and International Economic Order

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KEYNES ON MONETARY REFORM
AND INTERNATIONAL
ECONOMIC ORDER

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Allan Meltzer's Henry Thornton Lecture – the fifth in the series – is devoted to the views of Keynes on monetary reform and the international economic order. Keynes did not live to see and help to shape the post-Bretton Woods world, but his ideas have influenced economics, politics and business to this day. Allan Meltzer notes that Keynes, in his professional life spanning two world wars, changed his mind in three important ways. First, he came to view institutions not as neutral mechanisms delivering desired objectives but as constraints which determine whether objectives can be realised. Second, he moved from opposition to the gold standard and floating exchange rates towards advocating a fixed but adjustable exchange rate system. Third he turned from liberal to restrictionist.

On other significant issues Keynes did not go as far as some of his followers. He never believed that money does not matter. Whereas his theoretical preoccupations in the latter part of his life were with the real economy and the trade cycle, his applied work was primarily on shaping the international monetary system. He viewed monetary control as a necessary condition for price stability. Monetary control together with periods of higher unemployment were sufficient conditions for price stability but costlier compared with the alternative of exchange rate and capital controls. He did not favour “Keynsian” inflationary policies to reduce unemployment and was in favour of rules and against fine-tuning in international monetary affairs. In domestic monetary policy he encouraged discretion only within the limits of the international monetary rules. He believed that no system could simultaneously achieve internal and external stability, high employment and freedom. “He chose to sacrifice freedom.” He advocated exchange control (on capital movements, not on goods movements) and regulations of domestic and foreign investment.

Allan Meltzer believes that freedom need not be sacrificed. He retains Keynes' basic insight that international monetary stability can be achieved if countries commit themselves to a consistent set of policies. This could be accomplished by governments' pre-commitment to a predictable course. Meltzer's solution is to combine Keynes' suggestion from the Tract, to impose discipline on domestic monetary expansion, with Friedman's monetary rule operating on the monetary base. Such a combination would no longer require capital restrictions and would lead to reduction in exchange rate fluctuations. This view implicitly assumes that the benefits from increased international trade and domestic output outweigh the costs of unemployment from monetary restraint. Would Keynes have accepted this proposition today? For the short run?

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Keynes on Monetary Reform and International Economic Order

by Allan H. Meltzer

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In the course of his active and productive professional career, Keynes had many opportunities to consider both the theory and practice of international trade and exchange. His first major publication, *Indian Currency and Finance*, analyses and describes the currency problems of an open, developing country maintaining a gold exchange standard. His last major professional activity, the planning for postwar reconstruction and development, established the initial postwar international economic order represented by the Bretton Woods agreement and the General Agreement on Tariffs and Trade.

The three decades that span Keynes' professional career as an economist were years of frequent international monetary disturbance and experimentation. Keynes participated as theorist, critic, policy adviser and prominent citizen in discussions of the monetary reconstruction that followed the two major wars, the problem of German reparations, Britain's return to the gold standard in 1925 at the traditional parity, the persistent high rate of unemployment in Britain during the twenties, the world depression of the thirties and the financing of Britain's contribution to World War II.

Keynes was the very opposite of the archetypal theorist who sees only that part of reality that fits his model. He participated actively in politics, business and public discussion. He wrote letters and memos to officials, letters to the editor, and columns in newspapers and journals of opinion. By these and other means, he proposed solutions, debated issues, criticized alternatives and changed many views, including his own, about monetary policy and monetary arrangements. Because his views came to dominate the economics profession and policymaking in many countries, Keynes' interpretations of his experience had a durable influence on postwar economic policy throughout the world.

Three principal changes of opinion stand out from the mass of detail. First, Keynes came to believe that institutional arrangements are not simply a means by which societies allocate resources, achieve full employment, price stability or some set of micro-and macro-economic objectives. Institutional arrangements constrict or expand the set of feasible outcomes and, in this way, condition and perhaps determine what a nation or the world economy, can achieve. Second, Keynes opposed the gold standard with its commitment to permanently fixed exchange rates in the twenties, but he also opposed freely fluctuating rates. Later he favoured fixed exchange rates that could be adjusted under international rules. Third, in the early twenties Keynes' views are more liberal than interventionist. He opposed trade restrictions, opposed a return to the pre-1914 gold standard and favoured a managed monetary system operating under rules that would achieve price stability. He became a restrictionist who favoured a permanent system of exchange controls, import licences, quotas and schemes for stabilizing

commodity prices. This evolution in policy views parallels the evolution of Keynes' theory from the *Tract on Monetary Reform* through *A Treatise on Money* to the *General Theory*.

It is paradoxical that Keynes became identified with the proposition that money does not matter. Throughout his life, Keynes gave first importance to monetary arrangements and the monetary system. He saw an opportunity to reduce the social cost of trade and exchange by reducing fluctuations originating in the monetary system. At first, he thought monetary reform would reduce uncertainty by increasing price stability. As his ideas evolved, he became convinced that by increasing price stability society can reduce the variability of investment and real income. This view appears in the *Tract*, but it becomes a dominant theme in the *Treatise on Money* where Keynes' principal concern is with policies to maintain price stability as a means of achieving economic stability. His belief that variability of investment and income affects the average level of aggregate incomes emerges only in the *General Theory* and the letters and papers that followed. Once he had taken this step, however, Keynes believed he had an economic rationale for the illiberal policies he favoured – state intervention to direct investment and to control capital movements.

Keynes' discussions of monetary arrangements are of interest for reasons that go beyond the specific recommendations he made or his reasons for making them. First, his theoretical work and his proposals for an International Clearing Union led him to consider the principal functions that a monetary system performs and its potential for increasing the social productivity of exchange arrangements (money). He understood that the postwar monetary system could be either risk absorbing or risk augmenting, and he believed that the postwar British standard of living depended on the outcome. Second, in the course of his writings, he analysed not only the reasons for choosing an internal or an external standard, but he also considered various ways of achieving what he, at times, called "ideal" combinations of the two. Third, Keynes discusses some specific issues that are relevant for the contemporary world economy. Among these issues are persistent high rates of unemployment in many countries, the transfer of resources from debtor to creditor countries, and the restriction on the domestic policies of debtors and creditors that the transfers impose. For Keynes, the latter problem arose in the context of Germany's reparations in the twenties, but many similar issues arose in the seventies and the eighties with the transfer of resources to OPEC and the payment of interest and principal on the debts incurred by developing countries. Fourth, Keynes' proposals for the postwar era gave him an opportunity to apply to the world economy any applicable principles developed in his *General Theory*. From his choices we can infer what Keynes would have preserved if he had extended his *General Theory* to an open economy with fixed exchange rates.

In the remaining sections, I follow mainly an evolutionary course, tracing the development of Keynes' treatment of international monetary arrangements from the *Tract* to the Clearing Union. The relation of the proposed Clearing Union to the system that emerged at Bretton Woods and after is a tale that has been told by others, so I do not repeat it. Although I refer to his views about trade and commercial policy at several points, space does not permit a full discussion of this topic. My main concern is with the development of Keynes' ideas and their relation to current policy issues. In the conclusion, I suggest that many of the problems he attempted to solve have returned in modified form, and I propose a remedy.

The Tract

A Tract on Monetary Reform (JMK 4) raises issues of social choice that concerned Keynes for the rest of his life, and properly so, because the issues are of highest importance and are not easily resolved. The basic choices are between fixed and fluctuating exchange rates and between internal price stability and external stability of the exchange rate.

Viewed in one way, the choice is between a monopoly central bank that is restricted to control the money stock so as to achieve domestic price stability and a fixed price or exchange rate sustained by a government guarantee of convertibility into such units as gold, commodity bundles or other currencies. Economic theory generally eschews price fixing arrangements and supports the case for monopoly only in particular circumstances that must be established. This suggests why the choice between monetary and exchange rate control has not been resolved by applying general principles of economic analysis.

In the *Tract*, Keynes has no doubt that the proper objective is internal price stability. The problem is not what to choose but whether the objective can be achieved.

“[T]here does seem to be in almost every case a presumption in favour of the stability of prices, if only it can be achieved. Stability of exchange is in the nature of a convenience which adds to the efficiency and prosperity of those who are engaged in foreign trade. Stability of prices, on the other hand, is profoundly important...” (JMK 4, p. 126)

The importance of price stability is discussed at length, but the main point is made early in the book and repeated frequently. Price stability encourages saving and, thus, increases investment (JMK 4, p. 16). “The individualistic capitalism of today, precisely because it entrusts saving to the individual investor and production to the individual employer, *presumes* a stable measuring-rod of value, and cannot be efficient – perhaps cannot survive – without one.” (Ibid., p. 36. *Italics in the original.*)¹ “The provision of adequate facilities for the carrying of this risk [relative and absolute price changes] is one of the greatest of the problems of modern economic life...” (Ibid., p. 33).

The core of his argument is that price stability shifts resources from current to future consumption, while inflation breaks down habits of thrift. Keynes refers to the experience in Germany to make his argument.² Price instability reduces investment by increasing risk (p. 32), induces fluctuations in relative prices and thus makes trade, particularly international trade, less attractive (p. 32) and therefore smaller.³

¹ “[I]nflation is unjust and deflation is inexpedient.” (Idem.) Deflation is worse, Keynes thought, because it provokes unemployment via the lag of money wages and, in his view, it is worse to increase unemployment than to disappoint rentiers.

² The German inflation brought Keynes an understanding of the inflation tax on cash balances. During periods of inflation, the government relies increasingly on revenues from inflation, but this leads to abandonment of legal tender money so the “inflationary tax” ceases to be productive. (JMK, 4, p. 52) Keynes’ comments on deficit finance are distinctly non-“Keynesian”. “What the government spends, the public pays for. There is no such thing as an uncovered deficit.” (Ibid., pp. 52-3).

³ Part of the argument (p. 347) contains an early statement of the role of expectations in the demand for investment that was developed more fully in the *General Theory*. The expectations in the *Tract* are generated by fear of falling prices. This lowers investment and increases unemployment.

A similar point is made in the opening paragraphs of the preface. There, Keynes argues that the cost of risk bearing is part of the cost of production. It is the cost that can be most easily reduced by institutional change. "Currency reforms, which led to the adoption by this country and the world at large of sound monetary principles, would diminish the wastes of *risk*, which consume at present too much of our estate." (JMK, 4, XIV. Italics in the original)

What are the "sound monetary principles"? Keynes' answer is directed at British policy and assumes, without being explicit, that the dollar remains on the gold exchange standard at a fixed parity. He rejects both freely fluctuating exchange rates and a return to the gold standard. And he rejects the argument that exchange rates will remain stable if policies are stabilizing. While it is true that "budgetary deficits covered by a progressive inflation of the currency render the stabilization of a country's exchange impossible"... (4, p. 88), the converse does not follow, at least not in any precise way. The fact that a country's budget, currency, foreign trade and its internal and external price levels are properly adjusted may assure that the exchange rate changes little from year to year, but it does not maintain stability within the year.

Freely fluctuating exchange rates increase risk and the cost of risk bearing above the attainable minimum. The *Tract* discusses some reasons why the social cost of risk bearing increases under fluctuating exchange rates even when policies are stabilizing. Much of his discussion concerns seasonal movements. Keynes presents data to show that speculators do not remove all seasonal influences from exchange rates. He concludes:⁴

"If, therefore, the exchanges are not stabilised by policy, they will never come to an equilibrium of themselves. As time goes on an experience accumulates, the oscillations may be smaller than at present. Speculators may come in a little sooner, and importers may make greater efforts to spread their requirements more evenly over the year. But even so, there must be a substantial difference of rates between the busy season and the slack season, until the business world knows for certain at what level the exchanges in question are going to settle down. Thus a seasonal fluctuation of the exchanges (including the sterling-dollar exchange) is inevitable, even in the absence of any decided long-period tendency of an exchange to rise or to fall, unless the central authority, by a guarantee of convertibility or otherwise, takes special steps to provide against it." (JMK, 4, p. 93)

The argument is of interest for three reasons. First, it appears in a book that contains one of the earliest discussions of forward exchange markets, yet it makes no reference to the use of the forward market to reduce the risk of fluctuations around a stable but fluctuating exchange rate. Keynes makes no effort to compare the costs of private hedging in the forward market with the social costs of smoothing under fixed rates maintained by a central bank. Second, Keynes argues in the Preface to the French Edition of the *Tract* that speculation is stabilizing, not destabilizing. "[T]he successful speculator makes his profit by anticipating, not by modifying, existing economic tendencies"... "[S]uperstitions about speculation can only exist in an atmosphere of ignorance

⁴The context suggests that "never come to an equilibrium" refers to the oscillations around an equilibrium value.

concerning the suitable influences that fix the value of the exchanges.” (JMK 4, p. xvii) Third, and most important for his later work, Keynes considers the cost of risk bearing as a main element affecting the choice of a monetary standard. He accepts the quantity theory and purchasing power parity (Ibid., p. 86) as theories of the level of prices and exchange rates, but he regards these theories as incomplete. They provide no explanation of variability and give no hint about how much variability can be reduced.

Keynes’ main criticism of fluctuating exchange rates extends the argument about seasonal fluctuations. “The fault of the postwar regime... is that it is too rapid in its effect and over-sensitive, with the result that it may act violently for merely transitory causes.” (JMK, 4, p. 129) The familiar theme of the later Keynes – that speculators cannot be relied upon to make enough correct inferences to stabilize markets at minimum cost – is already prominent in the *Tract*, but the conflict with his advice to the French is not resolved.

Keynes also rejected a return to the prewar gold standards on the grounds that the gold standard requires adjustment of the internal price level to external influences. The adjustment is “too slow and insensitive in its mode of operation.” (4, p. 129) Further, “the adjustment even before the war might be imperfect;” (Ibid., pp. 129-30). Permanent changes are at times treated as transitory, permitting a country to borrow “for a considerable time at the risk of ultimate default.” (Ibid., p. 130) So this system, too, fails to minimize risk and the cost of risk bearing.

A second argument against a return to gold is that the value of gold is uncertain. The prewar system no longer exists. The price of gold depends on the policy of the United States. The United States must be “foolish enough to go on accepting gold which it does not want, and wise enough, having accepted it, to maintain it at a fixed value.” (Ibid., p. 135) The argument that the gold standard provides stability of international values is based on pre-war experience which cannot be repeated. Further, central banks do not wish to repeat it. They are more interested in maintaining the “stability of business, prices and employment”. (p. 138)

Keynes proposed a managed standard with monetary control by a central bank, but he opposed unlimited discretion. It was not ideal, he thought, “to hand over the management to the possible weakness or ignorance of boards and governments.” (p. 136) He could find no better system in a world of paper currency and bank credit than a managed system constrained to achieve stability of domestic prices. If the Federal Reserve acted to stabilize domestic prices in the U.S., the pound-dollar exchange rate would remain relatively stable. Keynes hoped that this could be achieved, but he was clear that, if a choice was to be made, he favoured using monetary policy to maintain stable domestic prices and opposed a fixed exchange rate.

How could the price level be held within a narrow band? Keynes rejected Irving Fisher’s compensated dollar as “too cut and dried” (4, p. 148) and chose to rely on observed price changes as the principal criterion guiding monetary policy. He recommended that the central bank use data on employment, production, foreign trade, interest rates and other variables to supplement price data, but he did not wish to rely either on their unrestricted interpretation of these data or on market forces. He proposed that the Bank of England obtain some of the benefits of the pre-1914 gold standard by announcing

buying and selling prices for gold each week, along with the announcement of Bank rate. The buying and selling prices should be changed periodically on the decision of the central bank. The spread between the buying and selling price would be as much as one percent, wider than under the prewar gold standard but narrower than his later proposal in the *Treatise*. Further, Keynes proposed that the Bank announce buying and selling prices for forward exchange.

To manage the system effectively, the Bank of England had to recognize whether gold movements represented a permanent change in the internal exchange rate of gold for commodities (domestic prices), or in the external rate of gold for foreign currencies, or a temporary, seasonal or random movement. Internal changes required a change in the gold price, external changes a change in Bank rate. Temporary changes could be ignored. Keynes proposed that changes in the buying and selling price for forward exchange be used to hold the pound at a discount or premium and, thus, draw funds to or from foreign markets. He does not discuss how the central bank can set the gold price, the forward exchange rate and the discount rate simultaneously. He presumes, without any discussion, that the three prices will be compatible and will be set so as to increase stability of both the price level and exchange rates. He recognizes that the managed system will work better if the United States seeks to achieve domestic price stability and if countries in North America peg to the dollar while countries in the British Empire, other than Canada, peg their exchange rates to sterling.

Although the monetary proposals are not fully developed, the *Tract* contains many ideas that reappear in Keynes' later work and in his proposals for postwar reform. Keynes always tried to avoid the extremes of an unmanaged gold or commodity standard and freely fluctuating exchange rates. He never altered his opposition to inflation or deflation, but he later modified his emphasis on price stability by broadening the goals of social policy to include maximum feasible employment consistent with long-term price stability. The *Tract* contains many of his later ideas about monetary arrangements, but they are not developed into the full scheme that they later became.

The Treatise

Keynes' hope that the British government would not return to the traditional fixed gold parity proved incorrect, and his efforts to prevent the return failed. He continued to view the return as a mistake and described the losses of efficiency and output resulting from the return as "second only to those of a great war" (5, p. xx). These losses arose, in Keynes' view, from the conflict between the external standard and the requirements of internal stability at full employment. The former was set by the gold parity, the latter by the level of money wages.

In the *Tract*, Keynes emphasizes fluctuations and instability, but wages are not given a central role. The *Treatise* is very different. Wage levels, in the *Treatise* (5, pp. 150-151), are determined by a combination of efficiency and effort. Efficiency wages are payments for piecework; hourly wages are payments for effort. Wage *changes* result from autonomous behaviour of workers or their unions, or they are induced by changes in monetary policy. A country may inherit a wage level that is incompatible with its monetary position. When this occurs, or when there are autonomous wage changes,

monetary policy can achieve internal price stability only by inducing compensating changes. To reduce wages that are too high for internal price stability, Bank rate must rise. The rise in Bank rate sets off a process that lowers investment relative to saving and reduces output and employment⁵ until wages fall to the level compatible with the exchange rate. Unemployment increases during the adjustment. At one point, (5, p. 264) Keynes describes the resulting unemployment as involuntary, but here involuntary unemployment is clearly cyclical and should not be confused with the involuntary unemployment of the *General Theory*.

Keynes offers a second cause of fluctuations that reappears in a different form in the *General Theory*. The bulls and bears are active in the *Treatise*, and their activity affects the demand for money. Since the *Treatise* is Keynes' attempt to develop a disequilibrium theory of fluctuations based on the quantity theory, the main effect of bull and bear speculators is on the velocity of circulation. The details of the argument are not worth repeating. The essential point is that speculators on the stock exchange, driven by expectations and mob psychology, cause short-term changes in the relative prices of new investment to output and change the demand for money.⁶ (5, pp. 224-227; 6, pp. 323-4). Keynes recommends that the central bank respond to these fluctuations by changing the rate of interest until it exactly offsets the bullish settlement. At times, the central bank must act boldly to saturate the demand for savings deposits or to exhaust the supply. (6, p. 332) He recognizes, in his phrase, that "exact balance may sometimes be... beyond the wits of man" (5, p. 227), but he never considers the possibility that the central bank's efforts to offset shifts in velocity can introduce more variability into prices and incomes than it removes.

The *Treatise* is Keynes' attempt to show that the price level depends on factors other than the quantity of money. He does not dispute, but instead affirms, that the traditional quantity theory is formally correct. (5, p. 207) The problem is that it is not useful for the issues he wishes to address. These are the dynamics of adjustment from one equilibrium to another and the changes in the relative prices of investment, labour and output that drive the adjustment. (5, p. 120) Keynes recognizes that the so-called fundamental equations of the *Treatise* are identities, and he makes no contrary claim. He uses the equations to organize the discussion and to separate monetary and real factors affecting the price level.

Keynes offers a second criticism of the traditional quantity theory. (5, p. 120) The price level in that theory is the price at which money balances are willingly held. He regards this price as less relevant for managing monetary policy than either of two other prices or standards. One is the internal standard, which is now called the labour standard. It is a measure of the earnings or efficiency wages of labour. The other is the purchasing power standard, the price of the goods and services traded internationally. When relative prices adjust to restore full equilibrium, all the measures or standards are compatible.

⁵Keynes offers several versions of the dynamic process in closed and open economies. See *inter alia*, (JMK 5, pp. 186-188, 197, or 236-7).

⁶Keynes description of the speculators (5, p. 229) is a less vivid version of the description that reappears in Chapter 12 of the *General Theory*. His discussion of monetary policy in a slump anticipates the liquidity trap of the *General Theory*. (6, pp. 334-5)

But Keynes' interest is in the adjustment and the use of monetary policy to damp fluctuations in investment, income and employment arising from sluggish adjustment of real wages or other relative prices.

The idea that wages adjust more slowly than prices antedates Keynes by more than a century. Thornton (1802) is particularly clear. The novel elements in the *Treatise* arise from two sources. One is Keynes' effort to design policies that minimize the social cost of adjustment when wages adjust more slowly than prices and the values of financial assets. The other is his recognition that the costs or benefits of alternative arrangements depend on the type of adjustment they impose on an open economy. (See 5, pp. 293, 302-305, 314)

The *Treatise* compares several monetary arrangements including the gold standard, the gold exchange standard, fluctuating exchange rates and a world central bank. Keynes restates with greater clarity some main conclusions of the *Tract*. His reasons for choosing a managed exchange rate in lieu of either rigidly fixed or freely fluctuating exchange rates becomes clearer. A fluctuating exchange rate, if properly managed to achieve long run stability of money values, gives the central bank an opportunity to vary the exchange rate and the rate of interest so as to reduce fluctuations in employment.⁷ By

“applying appropriate doses of each at the right moment, there is much less risk of the loss of wealth and output due to the prevalence of general unemployment. For direct changes in the price of foreign-trade goods can be largely substituted for unemployment as the first link in the causal chain whereby external equilibrium is preserved and restored. Its disadvantage is to be found in the diminished mobility that it means (if that is a disadvantage) for foreign lending.

It is evident that no general answer can be given to the question where the balance of advantage lies. It depends partly on the relative importance of foreign-trade industries in our country's national economy. But not entirely. For it also depends on whether the potential fluctuations in the volume of foreign lending, in the absence of the artificial check of sharp changes in the local rates of interest, are likely to be large relatively to those corresponding fluctuations in the amount of the foreign balance which can be brought about quickly and with a moderate change in the terms of trade. The answer to the last point is not unaffected by the tariff policy of the rest of the world – for a high degree of sensitiveness in the rate of foreign lending to small changes may be inconvenient, and even dangerous, if it is not accompanied by an equally high degree of sensitiveness in the response of foreign trade to small changes.” (JMK, 5, p. 326)

⁷In the *General Theory*, Keynes amplifies the argument as an “element of scientific truth in mercantilist doctrine.” (1936, p. 335)

“In conditions in which the quantity of aggregate investment is determined by the profit motive alone, the opportunities for home investment will be governed, in the long run, by the domestic rate of interest; whilst the volume of foreign investment is necessarily determined by the size of the favourable balance of trade. Thus, in a society in which there is no question of direct investment under the aegis of public authority, the economic objects, with which it is reasonable for the government to be preoccupied, are the domestic rate of interest and the balance of foreign trade.” (Idem.)

Keynes shifted from price stability as a goal of the *Tract* to the more ambiguous “stability of money values” in the *Treatise*. This change reflects his lengthy discussions in the *Treatise* of the ambiguity of index numbers and the proper measure of price stability, discussed above. His conclusions reflect also his more careful analysis of the relation between trade and capital accounts growing out of his opposition to Britain’s return to gold in 1925 and supplemented, perhaps, by the effects of rising world tariffs following the passage of the Hawley-Smoot tariff in the United States.

Keynes recognizes that tariff policies in the rest of the world change the price elasticity of exports and, thus, alter the responses a country can expect from policies to maintain internal stability. But he does not extend the argument to changes in the exchange rate. I find nothing to suggest that Keynes recognised the possibility of retaliation, or competitive devaluation, at the time. Here, and more explicitly in his discussion of mercantilism (1936, p. 335), he considers the policies of a single country. The only concession to the *Treatise* is an occasional assumption that countries do not act perversely but instead act according to what Roy Harrod has called “the presuppositions of Harvey Road.” (Harrod, 1951, pp. 192-3)

On the problems of the gold exchange standard, Keynes was clearer and more perceptive. He believed that the proponents of a return to gold neglected the change in the position of Britain after World War I. Instead of one major financial centre, London, centralizing the world’s reserves, the twenties saw the development of New York and Paris as alternative centres. Further, the Federal Reserve System held a much larger stock of gold, so it was in a stronger position to maintain internal price stability while ignoring seasonal and cyclical gold flows. He saw little conflict between the goals of internal and external stability for the U.S. at that time.

The postwar British position was very different from either its own prewar position or the position of the United States. (6, pp. 274-76) The existence of competitive financial centres meant that small changes in interest rates induced large short-term capital movements. A relatively small stock of gold, after allowing for the reserves of the Issue Department of the Bank of England, required the Bank to respond to gold outflows by raising Bank rate. Indirectly, the rise in Bank rate lowered investment relative to saving and reduced real incomes. Further, Britain had returned to the gold standard at a price that placed British costs (incomes) out of equilibrium with the levels of cost (incomes) in other countries on the gold standard. The result was sustained unemployment in the export industries. Attempts to increase investment by lowering interest rates produced an outflow of gold more quickly than a rise in domestic investment. The Bank was forced to respond to the outflow of gold by raising the rate of interest, so the effort at expansion was short-lived.⁸

Keynes’ argument, and much of his criticism of the dynamics of the quantity theory in the *Treatise*, derives from a recognition that asset market adjust more slowly than the output market. The slower adjustment of output reflects the more gradual adjustment of costs of production, particularly wages. Differences in speeds of adjustment, though

⁸Here, too, we find a suggestion that Keynes developed more fully in the *General Theory* – the relevant rate for investment is the long-term rate. This rate responds very little to changes in Bank rate that are perceived to be transitory.

ignored by the quantity theory, are critical for policy. To prevent a loss of gold, the central bank must stand ready to take action that increases unemployment. To prevent the price level effects of an inflow of gold, the bank must lower Bank rate and encourage domestic expansion. In long run adjustment, the economy achieves the position implied by the traditional quantity theory but, along the way, these policy actions introduce variability that, Keynes believed, could be reduced by proper policies.

Keynes considered a number of solutions but recommended two types of restrictions on foreign lending. First, he wanted the Bank of England to have the power to disallow all dealing in fixed income foreign securities and favoured a tax on income from outstanding securities, held in Britain, that did not have such approval. (6, p. 281) Second, to reduce short-term capital movements, he wanted the Bank to have power to change interest rates on foreign loans without an equivalent change in rates charged domestic borrowers. (6, p. 285) Keynes recognized the difficulty in implementing an effective policy of this kind. "Credit is like water," he wrote,... "it may be used for a multiplicity of purposes. ...and will remorselessly seek its own level over the whole field unless parts of the field are rendered uncompromisingly watertight, which in the case of credit is scarcely possible." (Idem.)

To supplement the two proposed forms of intervention, he repeated, in modified form, his earlier recommendation of wider gold points. He now favoured a band of 2%, and he wanted the central bank to vary the difference between buying and selling prices as a means of attracting or discouraging gold flows. (Ibid., pp. 290-1). He expected that central banks would be able to change the premium or discount on the forward market and, in this way, widen or narrow the spread between domestic and foreign interest rates. To help them carry out the policy, he urged the central bank to vary the forward market rates for sterling weekly.

Although he recommended this domestically managed system as an improvement on the prewar gold standard, he did not regard it as an ideal. He preferred a world central bank and, in the last chapter of the *Treatise*, he offered some rules and procedures for a bank of this kind. These recommendations are not identical to his plan for an International Clearing Union, but there are many similarities.

There are, in fact, two plans in the *Treatise*, a minimum and a maximum plan. Both represent Keynes' efforts to achieve two objectives of monetary management: the long-period objective of price stability (or gradual price increase) (pp. 352-3) and the avoidance of short-period fluctuations around the trend. Keynes argues (6, p. 349) that the economy can be made to work more efficiently if short-term fluctuations can be avoided, so the "expedient" (Idem.) choice of the long-period trend of prices is the one that is least likely to require changes that disturb the equality between saving and investment.⁹

Gold has a limited role in Keynes' proposal; it remains as a reserve for the world central bank. The price of gold is fixed, but not constant. Keynes reverses his position in the

⁹This argument is a step toward the argument Keynes makes in the *General Theory*. In both, change in long-term trends or expectations causes short-period fluctuations in investment. In the *General Theory*, fluctuations reduce the average rate of investment and the size of the capital stock and, thus, change and long-period trend. In the *Treatise*, the fluctuations occur around the trend but do not alter the trend.

Tract (4, p. 148) and recommends a tabular standard to determine the price of gold.¹⁰ The commodities in his proposed basket are 62 internationally traded commodities, mainly raw materials, food and minerals. A principal advantage of this basket, according to Keynes, is that the prices change quickly in response to changes in investment. (6, pp. 353-4) Action by the central bank to maintain the value of gold, relative to the commodity bundle, may also encourage a quick response to the business fluctuation or trade cycle induced by the change in investment.

Keynes envisages an activist world bank. His “maximum” plan (6, pp. 358-60) is for a supernational bank with central banks as members. Members deposit gold and receive supernational bank money (SBM). They can borrow from the supernational bank for three month periods at a discount rate set by the bank. The size of discounts to any member is equal to a three year average of the member’s deposits, but this rule can be changed at the discretion of the supernational bank. The bank can also undertake open market operations, subject to some restrictions.

Each member central bank can hold reserves in gold or SBM. Members are required to accept SBM on the same terms as gold, and Keynes expresses his wish that all national moneys would be exchangeable only for SBM.

The supernational bank is not a panacea. Keynes wondered whether any system based on fixed exchange rates can reduce fluctuations in a world with fixed money wages and tariffs.

“What, then, is the reason for hesitating before we commit ourselves to such a system? Primarily a doubt whether it is wise to have a much wider ambit than our banking system, our tariff system and our wage system. Can we afford to allow a disproportionate degree of mobility to a single element in an economic system which we leave extremely rigid in several other respects” (6, p. 299)

The main task of the supernational bank was to prevent the fluctuations caused by rapid adjustment of the capital account and slow adjustment of the trade account.

“If English investors not liking the outlook at home, fearing labour disputes or nervous about a change of government, begin to buy more American securities than before, why should it be supposed that this will be naturally balanced by increased British exports? For, of course, it will not. It will, in the first instance, set up a serious instability of the domestic credit system – the ultimate working out of which it is difficult or impossible to predict. ...If it were as easy to put wages up and down as it is to put bank rate up and down, well and good. But this is not the actual situation. A change in international financial conditions or in the wind and weather of speculative sentiment may alter the volume of foreign lending, if nothing is done to counteract it, by tens of millions in a few weeks. Yet there is no possibility of altering the balance of imports and exports to correspond.” (6, p. 300)

¹⁰In the *Tract*, Keynes considered the tabular standard as a means of changing the gold price but rejected the standard because it did not damp short-period oscillations. His choice of international commodity prices as the standard implied, in his analysis, that domestic prices and real wages would fluctuate around the international standard.

Here Keynes moves towards the view of speculation as a source of instability that became a central theme of the *General Theory*. He then considers and rejects state control of investment, an idea to which he returned with greater favour, in the *General Theory*. His argument again reveals suppositions about the type of policies likely to be followed by a government bureaucracy which are inconsistent with his criticisms of their policies. Keynes was, at times, unsparing in his criticisms of the governments, bankers and central bankers who favoured the return to the prewar gold price or demanded reparations at the Versailles conference. Yet, Keynes imagined that during a slump the need might arise for “socialistic action by which some official body steps into the shoes which the feet of the entrepreneurs are too cold to occupy.” (6, p. 335)¹¹

In the *Treatise*, Keynes has in mind a general equilibrium explanation of the price level in a single country. Given expectations, efficiency and habits of thrift, the economy determines values for investment, money, income, prices and the division of the money stock between the more active circulation and savings deposits. The banking system can affect the supply of savings deposits and, thus, influence short-term movements of the velocity of circulation and investment. It cannot achieve (full) equilibrium values instantaneously. (6, pp. 309-10)

Keynes’ summary gives three reasons. First, there are unanticipated non-monetary disturbances. Second, there are changes in relative prices, at times violent changes. Third, there are monetary disturbances arising from the behaviour of foreign central banks. (Ibid, p. 310) The policies in the *Treatise* attempt to dampen the effect of domestic and foreign monetary disturbances on relative prices, investment and employment. He believed that, if this could be done, prices and exchange rates would be more stable, and the trade cycle would be reduced or eliminated.

The General Theory

The *General Theory* discusses a closed economy, so most of the issues about monetary reform and the international monetary system do not arise. The principal exception is Keynes’ discussion of mercantilism. There, Keynes suggests the reasons that led him to reject *laissez faire* and to favour a managed monetary system.

The context is a single country operating in a world without an international central bank or monetary authority. The main issue is whether a country’s trade balance is self adjusting or whether intervention by the central bank can produce a gain to the country that more than compensates for any loss arising from restrictions on comparative advantage (international division of labour). (1936, pp. 333-4)

Keynes’ argument turns on the “insufficiency of inducement to new investment.” (Ibid., p. 335). In the absence of direct investment by government, investment – domestic and

¹¹The “euthanasia of the rentier” in the *General Theory* also has an antecedent in the *Treatise*. One reason Keynes favours a tabular standard based on commodity prices instead of the price of labour services is that he expected such prices to fall relative to wages over time. He hoped this would permit a decline in the human effort required to pay interest on the debt. “[T]he dead hand should not be allowed to grasp the fruits of improvements made long after the live body which once directed it has passed away.” (6, p. 353) Keynes recognizes, however, that the loss of real value may be anticipated and included in the interest rate.

foreign (including accumulation of foreign exchange) – depends on the rate of interest and the trade balance. The rate of interest in an open economy depends on the stock of precious metals in wage units, so the balance of trade has both a direct and indirect effect on investment and domestic employment.

Keynes did not claim to have made a valid case for import restrictions in general or even in particular circumstances. On the contrary, he describes trade restrictions as “a treacherous instrument even for the attainment of its ostensible object, since private interest, administrative incompetence and the intrinsic difficulty of the task may divert it into producing results directly opposite to those intended.” (1936, p. 339) He introduces qualifications when making his argument and discusses retaliation. His claim is only that he has shown “the inadequacy of the *theoretical* foundations of the *laissez-faire* doctrine.” (*Idem.* Italics in the original) He then draws a main conclusion: “[T]he technique of bank rate coupled with rigid parity of the foreign exchanges” rules out the possibility of maintaining a domestic rate of interest consistent with full employment (*Idem.*).

A few pages later, he explained that the problem could be reduced – and “the *optimum* level of domestic employment” achieved – without relying on trade restrictions (1936, p. 349. Italics added) The way to do so was to manage the rate of interest, without concern for international effects, and to institute a national investment program. “[T]he simultaneous pursuit of these policies by all countries together... is capable of restoring economic health and strength internationally.” (*Idem.*)

These passages suggest how much of the *Treatise* remained in Keynes’ thoughts. His commitment to a managed system and his belief that all countries would gain from the establishment of an international monetary authority remain intact. He believed that neither rigidly fixed or freely fluctuating exchange rates was ideal. Both impose excessive fluctuations on domestic economies, fluctuations and risks that are avoidable.

In the *Treatise*, Keynes argued that price fluctuations under the gold standard imposed an excess burden on the economy. The emphasis there is on fluctuations in employment. In the *General Theory*, Keynes extends the argument by claiming that if the fluctuations in employment and investment are damped, the rate of interest can be reduced and the level of income raised permanently. Indeed, he follows his discussion of mercantilism by repeating that “the rate of interest is not self-adjusting at a level best suited to the social advantage.” (p. 350)

The *General Theory* is silent elsewhere on the benefits attainable from a reconstituted, international monetary system. The “beggar thy neighbour” policies of the time must have made such speculations seem even more impractical than at the time of the *Treatise*. Yet, within five years, Keynes began the work that was to become a basis for postwar international monetary arrangements.

The Currency Union and Bretton Woods

Planning for postwar monetary arrangements began as an effort to counter German plans for a “new order” in Europe. The Ministry of Information, in November 1940, sent Keynes some notes on postwar British economic policy and asked him to prepare a statement and broadcast to the continent. The notes called for a return to the gold standard and were highly critical of the German proposals.¹²

Keynes replied, “I am not the man to preach the beauties of the prewar gold standard.” (JMK 25, p. 2) He was more favourable toward the principals on which the Germans based their proposals than toward a return to the interwar system. He described the latter as a system based on gold, high tariffs and unemployment. (Ibid., p. 1)

New institutional arrangements were required, as the German proposals recognized. (p. 2) The flaws in the German proposals arose from misapplication of the principles, not from the principles themselves. Keynes was sceptical about the Germans’ intentions and their ability to develop a successful multilateral clearing arrangement. He expected the Germans to use the arrangement as exploitatively as Schacht had used the interwar clearing arrangements. Britain would be more open in its dealings and, backed by the raw material production of the Empire, in a better position to offer a multilateral clearing arrangement. (Ibid., pp. 8, 12)

Keynes proposed that Britain offer to “open all markets to every country... and give equal access for each to every source of raw material which we can control or influence, on the basis of exchanging goods for goods.” (p. 12) Gold would remain as a central reserve, available for settlement, but capital movements would be restricted by a permanent system of exchange controls. The exchange of “goods for goods” did not mean a return to barter. Keynes wanted multilateral clearing of trade balances, with fixed exchange rates.¹³ Countries within the bloc could use their balances to purchase from any other country within the bloc. If countries ran persistent deficits, Keynes would require that the balance be spent in the home country rather than encourage devaluation to adjust trade balances.

Control of capital movements gave Britain the freedom to regulate interest rates without regard to foreign balances. The proposals are consistent with, and perhaps are based on, Keynes’ conclusions in the chapter on mercantilism (1936, Chapter 23) and his earlier writing. Keynes recommends exchange controls in the *Treatise*, and he repeats the proposal in each restatement of his postwar plan. There seems no reason to doubt that the recommendation represents his maintained belief.

A main difficulty in interpreting Keynes’ views is separating Keynes’ beliefs from his judgements about the postwar economic position of Britain and the policies of the United States. He was convinced that, at the end of the war, Britain would be in a weak position

¹²The request was soon followed by a similar request from the British Ambassador to the U.S.

¹³The method of [exchange] depreciation is a bad method which one is driven to adopt failing something better. ...If the U.S.A. inflates more than we do, we might even *appreciate* sterling.” (p. 17. Italics in the original.)

relative to the U.S. and the Commonwealth. There would be large blocked balances from the sterling area on deposit in London. The balances represented a potential capital outflow if Britain removed exchange controls. A weakened economy with relatively large demands for food imports and an industrial structure, damaged by war, would be stretched to provide exports at a level that maintained the standard of living. A current account balance sufficient to reduce the blocked balances accumulated under wartime exchange controls seemed improbable. If the United States remained in a net creditor position with high tariffs, the contractive influence of U.S. policy on the rest of the world would hamper world recovery in a fixed exchange rate system and make the task harder.¹⁴ At the time, 1940, he was pessimistic about U.S. tariff policy.

Even when Keynes describes a proposal as “ideal”, his statement may reflect a mixture of his preferences with expectations about the position of the economy after the war and his beliefs about what was attainable. His earlier writings provide some basis for separating preferences and constraints but cannot be fully reliable. Keynes was not directly involved in planning official policy at the time of the *Tract*, the *Treatise* or the *General Theory*, but he was always interested in current practices and problems and was certainly aware of his influence on public discussion and official policy.

The proposals for exchange controls are intended to remove the principal deficiency of the interwar gold standard. Opposition to this system appears in his major books and many of his pamphlets, public statements and memos. Opposition to the gold standard was based on his observation that long-term interest rates in Britain rose during periods of economic expansion. (JMK 19, p. 314) He attributed the rise to the gold standard, or more generally to a fixed exchange rate. The problem, as he saw it, was that during expansions in Britain the capital account adjusted more quickly than the output market and trade in goods and services. Net foreign lending expanded faster than the trade balance, so gold flowed out. Banks then sold bonds to make loans, raising long-term rates. (Idem.) This brought the expansion to an end and began the contraction.

In the *Tract* and the *Treatise*, Keynes proposed to delay the gold outflow by widening the gold points and by central bank operations in the forward exchange market. Although the *General Theory* has few references to the problems of an open economy, Keynes recognizes that persistent patterns of this kind influence expectations. Businessmen come to expect the cyclical patterns implied by the interwar gold standard. The perceived risk of fluctuations in capital values is impounded in risk premiums, raising interest rates and reducing investment. Keynes’ plans for postwar adjustment eliminated this problem by maintaining tight control of capital movements.¹⁵

Keynes had other objections to a gold standard with full convertibility and fixed exchange rates. He noted that these objections provided “a clue to the nature of any alternative

¹⁴Neither Keynes nor other officials proposed or, judging from Keynes’ papers, discussed fluctuating exchange rates. The choice was between proposals like Keynes and the more autarchic system favoured by T. Balogh and Joan Robinson.

¹⁵In earlier comments on the *General Theory*, I expressed puzzlement at Keynes’ proposal to drive the real rate of interest to zero within a generation. Meltzer (1981, pp. 62-3). Unless all countries pursued similar policies, or investors correctly perceived the decline as a reduction of risk premiums, Keynes’ proposal would, I said, produce a large capital outflow. The wartime memos give his response. Keynes would have imposed a permanent system of exchange controls on capital movements.

which is to be successful.” (25, p. 27) A main objection is that the burden of adjustment is much heavier for the debtor than for the creditor country. There is usually one debtor, but there are many creditors, so the burdens of disequilibrium are not distributed equally. Adjustment by the debtor requires wage reduction and unemployment, while the inflow of gold can be offset or sterilized, as the United States had done in the thirties. Further, agricultural exporters must suffer large changes in the terms of trade if, as Keynes presumed, the demand for primary products is inelastic (25, pp. 27-29).

Keynes’ first detailed proposal for an International Currency Union, which he called “an ideal scheme” (p. 32) was offered in September 1941 after a visit to the United States. The U.S. offered to forego any postwar payment for wartime provisions under the arrangement known as Lend-Lease, if the British agreed to eliminate trade “discrimination”. The latter term was not well defined. Secretary Cordell Hull probably intended an extension of the “most favoured nation” principle that had been the basis of his prewar trade policy. The British read the term as an attack on Empire preference, the basis of their prewar policy and a cause of friction between the two countries. Keynes objected that the U.S. proposal did not offer as much postwar cooperation on monetary arrangements as his talk with President Roosevelt had suggested. Harrod (1951, p. 512). This objection was removed, however, when the U.S. proposal was expanded to include postwar cooperation in both trade and payments. Keynes’ proposal for a currency union became the basis from which Britain negotiated with the U.S. on the terms of postwar cooperation.

The September 1941 draft (25 pp. 33-40) contains the main provisions used in the British government proposals of April 1943. (25, pp. 23-35). Many details changed; the proposal for adjustment became less specific; but the substance of the proposals adopted as a British White Paper is not very different from Keynes’ first effort, as Keynes and others recognized at the time. (25, p. 143; pp. 236-7). The proposal is Keynes’ mature view of the system he regarded as a workable, and possibly an ideal, monetary arrangement.

There are four main topics in the proposals for a clearing union or world central bank.¹⁶ These are (1) the arrangements for producing and controlling the stock of international money, (2) arrangements for controlling the demand for money, (3) mechanisms for monetary adjustment, and (4) the effect of these proposals on internal and external stability. Keynes also discusses other economic issues, including tariffs, commercial policy, capital movements, commodity price stabilization, taxes and reparations payments. These issues are not central to the design of a monetary arrangement, so I do not discuss any of them in depth. Of course, several of these issues influence the effectiveness and durability of any arrangement that is used.

The Monetary System and the Money Stock

Keynes revived his proposal for a world central bank, now called the Clearing Bank to reflect the importance placed on the principle of multilateral clearing. The Clearing Bank’s assets were its reserves and loans to member central banks, its liabilities the

¹⁶The size of quotas, voting rights and other political and administrative details were important in the discussions and negotiation and in the working of the system, but they are not important for understanding Keynes’ views of the monetary system, so I omit them.

deposits of central banks. Gold served as a reserve for the Clearing Bank and could be coined or used by central banks to settle balances with other central banks. Once gold was paid to the Clearing Bank, it could not be repurchased by either central banks or the public. Gold could be withdrawn only if it was distributed to the members (in proportion to the balances) at the discretion of the Clearing Bank's directors. (25, pp. 85-86)

The bank had the right to issue its own liabilities, called *bancor*, for central banks to use in making payments to other central banks. *Bancor* was defined in relation to gold but could not be sold for gold. It was not redeemable. Keynes expected gold to increase confidence in the bank, but he does not give an economic rationale or any explanation of the role of gold. Gold was not used to limit the stock of *bancor*.¹⁷

The supply of *bancor* was made completely elastic up to a maximum for each country. (25, p. 140, p. 271) The Clearing Bank was permitted to expand *bancor* secularly in relation to a five (later a three) year moving average of world trade (25, pp. 35, 118). The short-term supply was determined by the rules under which member central banks were permitted to borrow from the Clearing Bank. Expansion of *bancor*, through overdrafts set in relation to each country's quota, (subscription to the bank) was a right of membership and could not be restricted.¹⁸ Keynes' early versions offered very specific proposals for regulating the behaviour of debtors and creditors. He removed many of the details in response to criticism, but he never proposed a reserve requirement to fix the supply of *bancor* in relation to gold. The limitation on supply came from the rules setting a country's maximum indebtedness in relation to its quota. Keynes had argued in the twenties against rigid restrictions on the stock of money under the gold standard. He intended to avoid a repetition of the prewar experience, so he was more concerned about keeping *bancor* in circulation and maintaining opportunities for expansion than in limiting the outstanding stock.

The Demand for Bancor

A main purpose of Keynes' proposal was to avoid the accumulation of inactive balances held in an individual country's reserves. Gold could not be demanded in exchange for *bancor*. *Bancor* served as a means of payment but not as a store of value. To assure that countries would not accumulate inactive *bancor* balances, Keynes wrote detailed rules requiring countries with large credit balances to revalue (25, p. 36),¹⁹ to give to

¹⁷*Bancor* is not mentioned until the third draft, dated December 1941. In the second draft, the monetary unit is called *grammor*. There is no monetary unit in the first draft proposal or in the proposal for the International Monetary Fund agreed to with the United States.

¹⁸John Williamson (1983) estimates that, in 1945, the aggregate value of the overdrafts was \$26 billion and the potential U.S. liability \$23 billion. The latter is more than 50% of the U.S. monetary base at the time. In 1983 dollars, the aggregate value of the overdrafts of 1945 is \$150 billion.

¹⁹The proposed rule was not symmetric. The Clearing Bank had the right to demand devaluation when a country's debts remained at 50% of its quota for a year, but a country was required to revalue if in surplus to the same extent. The rules for evaluation and devaluation appear to be the origin of the idea that devaluation should be permitted in the event of "fundamental disequilibrium" in the Articles of Agreement of the International Monetary Fund.

the Clearing Bank (without compensation) the part of its balance defined as excess (p. 32) or, later to *pay* interest on its excess holdings (p. 79). These proposals did not survive in negotiations with the U.S., but the U.S. offered a so-called "scarce currency" clause as a substitute. This clause permitted restrictions on imports and other types of trade discrimination against a country with a credit balance so large that its currency was no longer available in exchange at the Clearing Bank.

Keynes had no doubt about the importance of requiring adjustment by creditor countries as well as debtors. Accumulation of gold stocks by the United States, France and others had made the interwar gold standard a deflationary system. Keynes' theory of money incorporates this idea. In the *General Theory*, people respond to uncertainty by holding precautionary balances. The resulting increase in demand for real balances raises real interest rates, lowers real income and employment. A well-functioning system can limit or reduce uncertainty about future monetary policy and, in this way, reduce fluctuations in the demand for precautionary balances. By removing this source of uncertainty, Keynes expected to increase trade. (25, p. 75)

Monetary Adjustment

Imbalances in trade between countries create excess supplies or demands for currencies. Unless all currencies are freely convertible, the imbalances restrict trade. Keynes did not favour a return to some type of gold standard with convertibility, and he regarded a return to the gold standard as undesirable and unlikely in the immediate postwar. The only alternatives he discussed were autarky, bilateral exchange with state trading, and a return to the interwar system of currency blocs. These alternatives were distinctly inferior in his view (25, p. 82, 154) to a system of multilateral clearing with most countries as participants. He told the House of Lords:

"The principal object can be explained in a single sentence: to provide that money earned in one country can be spent on purchasing the products of any other country. In jargon, a system of multilateral clearing. In English, a universal currency valid for trade transactions in all the world. Everything else in the plan is ancillary to that." (25, p. 270)²⁰

Even in a multilateral system, countries can accumulate debts beyond their capacity to export. The functioning of the clearing arrangement required some means of adjusting the position of persistent debtors and creditors. The draft proposal gave the Clearing Bank authority to adjust the exchange values of member countries against *bancor* and, thus, against other currencies. In addition, countries had the right to change par values up to 5% when their credits or debts remained at 25% of the country's quota for a year.

Changes in par value were to be the principal means of adjustment. After an initial period, members relinquished the right to use tariffs, (in excess of 25% of value), import

²⁰See, also, Keynes' letter to Montagu Norman (25, pp. 98-9). Later, he emphasized the creation of a medium of exchange or transaction money. (25, p. 285)

quotas, export subsidies or barter agreements.²¹ The only exception Keynes permitted was the temporary use of protectionist measures by a country with a large, persistent, current account deficit. (25, pp. 50-51)

Internal and External Stability

The Clearing Union was Keynes' last effort to propose a solution to the problems of internal and external stability. External stability was to be maintained by the system of fixed exchange rates with multilateral clearing of trade balances. Internal stability received less attention, but there is no mistaking that a main purpose of the program is to reduce fluctuations and raise aggregate employment without producing inflation.

Keynes speculated, at times, that his proposed international monetary system had an inflationary bias. (26, p. 33) In response to a comment to that effect from Jacob Viner, he wrote that he would not be surprised if the actual danger turned out to be an excess supply of international money. (25, p. 324) There is no indication that he favoured worldwide inflationary policies, and many statements of opposition (25, p. 104, 168-9; 26, p. 16, 37, 73), but he made no effort to avoid or reduce the inflationary bias. Perhaps the main reason is that he did not expect the U.S. to accept any proposal as expansive as his. The U.S. proposal was, indeed, more cautious, and Keynes' efforts were directed at expanding the size of quotas and borrowing rights.

The problem of price stability in a single country received more attention. Much earlier, Keynes had rejected his conclusion from the *Tract* that internal stability was achieved by stabilizing the price level, but he continued to oppose inflation in the *Treatise* and the *General Theory*. His only specific proposals to avoid inflation are management of the interest rate and an extension of wartime controls and rationing in the early postwar period. (25, p. 105)

Keynes' favoured devaluation only if efficiency wages increase relative to wages abroad. He was sceptical of the alleged advantages of devaluation in other cases, and he recognized that the "advantage... has been greatly diminished by the growing practice of linking money wage rates to the cost of living" (25, p. 107). In correspondence with Viner and others, he repeated his opposition to exchange rate changes during the transition (p. 102) and in general (p. 323). He preferred to "aim at as great stability as possible..." (p. 323). Again, the only exception "is the movement of efficiency wages in one country out of step with... others. One should generally speaking aim at stability." (p. 323)²² Later, he extended the criterion for devaluation to include money costs of production, a somewhat broader measure. (25, p. 339) The U.S. objected that Keynes

²¹Keynes' plan permitted subsidies to domestic industry if offset by a countervailing levy on exports to bring the price to the world market price, but he does not mention imports.

²²Viner replied that he favoured greater flexibility during the adjustment period at the end of the war and less flexibility thereafter. He warned that the wage criterion "accepts the business agent of the powerful trade unions as the ultimate and unlimited sovereign over monetary policy." (25, p. 329) Viner did not suggest an alternative. Hicks (1955) describes this system as a wage standard. James Meade favoured using a country's reserve position as a criterion for devaluation.

made no adjustment for non-traded goods and technical progress (p. 340) but did not press for specific criteria in the agreement.

Keynes predicted that the postwar years would see “keen political discussions affecting the position of the wealthier classes and the treatment of private property.” (25, p. 149) He expected these discussions to increase instability and induce capital flight, but he opposed any provision that would permit capital flight for political reasons or to avoid taxation. (p. 212)

The objective of the proposed system of capital controls, fixed but adjustable exchange rates and multilateral clearing was to damp the trade cycle, smooth exchange rates and expand trade. (pp. 149, 155) The increased stability and expanded trade was the means of maintaining a higher level of effective demand, without inflation, and moving the economies of individual countries closer to the point at which the “demand for exports will always be equal to the supply, and gluts will not occur.” (p. 155)

Conclusion

The *General Theory* offers a real theory of unemployment and sketches a real theory of the trade cycle. There, Keynes is sceptical about reducing persistent unemployment by expanding money. Yet, most of his efforts at postwar planning were devoted to planning the operation of the monetary system. Although he participated in the discussions of commercial policy and domestic policy, his main efforts were devoted to postwar monetary arrangements.

How can we reconcile this overriding concern about monetary arrangements with Keynes’ expressed belief that the trade cycle and “involuntary” unemployment are real phenomena? One of Keynes’ clearest statements is in a reply to a paper by Hayek advocating a commodity standard instead of Keynes’ Clearing Union. Keynes offered two reasons.

The first is the claim that the “ ‘appropriate’ quantity of money is a *necessary* condition of stable prices”. (26, p. 31) The second argument is based on the sufficient condition for price stability from the *Treatise* – “the relation of money wages and other costs to efficiency”. (Idem.) Gold or commodity standards can only maintain stable costs by creating unemployment. Keynes continued:

“The primary aim of an international currency scheme should be, therefore, to prevent not only those evils which result from a chronic shortage of international money due to the draining of gold into creditor countries but also those which follow from countries failing to maintain stability of domestic efficiency costs and moving out of step with one another in their national wage policies without having at their disposal any means of orderly adjustment. And if orderly adjustment is allowed, that is another way of saying that countries may be allowed by the scheme, which is not the case with the gold standard, to pursue, if they choose, different wage policies and, therefore, different price policies.

“Thus the more difficult task of an international currency scheme, which will only be fully solved with the aid of experience, is to deal with the problem of members getting out of step in their domestic wage and credit policies. To meet this it can be provided that countries seriously out of step (whether too fast or too slow) may be asked in the first instance to reconsider their policies. But, if necessary (and it will be necessary, if efficiency wage rates move at materially different rates), exchange rates will have to be altered so as to reconcile a particular national policy to the average pace. If the initial exchange rates are fixed correctly, this is likely to be the only important disequilibrium for which a change in exchange rates is the appropriate remedy...

“It is wiser to regard stability (or otherwise) of internal prices as a matter of internal policy or politics. Commodity standards which try to impose this from without will break down just as surely as the rigid gold standard.” (6, pp. 32-33)

Keynes' response is related to the position he had developed earlier. Internal price stability is a desirable goal of monetary arrangements (a position Keynes had taken in the *Tract*) but, as argued in the *Treatise*, it cannot be achieved by monetary means unless countries are willing to, at times, accept levels of unemployment and fluctuations in output that Keynes believed were avoidable. In his postwar plan, he abandoned the position he had taken in the *Treatise*, where he favoured a tabular standard based on internationally traded goods, and again preferred stability of the domestic price level. (26, p. 37) He treated price levels as directly related to money wage levels and, in practice, more important for domestic stability.

Keynes did not introduce the type of wage standard later suggested by Hicks (1955). Short-term stability, in Keynes' view, required devaluation if efficiency wages rose relative to wages abroad. The problem of restraining wages was difficult and would be “hopelessly prejudiced if the trade unions believe that it is an international monetary convention which is at the bottom of the trouble.” (26, p. 36; see also pp. 39-40) Still, he did not favour so-called Keynesian policies to reduce unemployment by inflating the economy. His Phillips Curve has a negative tilt. He wrote: “If money wages rise faster than efficiency, this aggravates the difficulty of maintaining full employment and, so far from being a condition of full employment, it is one of the main obstacles which a full employment policy has to overcome.” (26, p. 37)

On the choice between pre-commitment and unlimited discretion, Keynes is mainly on the side of pre-commitment or rules against activist “fine tuning” in international monetary affairs.

“In only one important respect must an international bank differ from the model suitable to a national bank with a closed system, namely that more must be settled by the rules and by general principles agreed beforehand and less by day-to-day discretion.” (25, p. 73; pp. 116-17)

The rules of international monetary management embodied the principles which Keynes expected to reduce variability and instability and, as a consequence, raise investment, world output, employment and standards of living. Three of these principles were main features of Keynes' International Clearing Union: (1) Countries with temporary deficits

did not have to contract output and employment to maintain price and exchange rate stability. Instead, they were permitted to borrow under rules fixed in advance of the event. (2) If adjustment of exchange rates was required, the burden of adjustment was shared between debtor and creditor countries, in accordance with rules for adjustment. (3) The system was multilateral. Countries did not have to devalue or adjust because the pattern of trade left them with debts inside one currency bloc and credits in another.²³

Keynes expected his proposal to economize on gold and foreign exchange holdings of central banks and to increase the stability of the domestic and world economy. Increased stability would lower the public's demand for precautionary money balances. As wealth shifted from gold, foreign exchange and money balances to real capital, real interest rates would fall and income would rise.

Domestic central banks were encouraged to use discretion in setting policy, but freedom of action was limited by the rules of the international monetary system and the requirements or restrictions imposed on creditors and debtors. Keynes claimed three advantages of the proposed international rules for domestic policy: (1) the external value of the currency conformed to its internal value, opposite to the gold standard; (2) interest rates could be reduced during recessions without fear of international capital movements; (3) the use of Bank rate to induce monetary contraction, unemployment and deflation was no longer required. (26, p. 16)

Much has been written about Keynes dissatisfaction with the Bretton Woods Agreement and particularly about his disappointments at the first meeting of the member countries in Savannah, Georgia. There is nothing in his papers suggesting that his dissatisfaction persisted. He had always expected that American proposals would dominate the final agreement. As early as April 1943, he commented that we shall "very likely accept their dress in the long run". (25, p. 268) He saw no reason for hasty compromises. An early agreement might cause the Americans to "run away from their own plan." He gave up his plan for an international medium of exchange, *bancor*, early in 1944 on the recommendation of many British negotiators, to avoid Congressional disapproval, (25, pp. 405-6). By March 1943, he knew that Harry Dexter White's (American) plan permitted some free markets in foreign exchange and did not envisage creating a bank or a medium of exchange. (25, pp. 220-25) Yet, a year later, he described the system as a new model of domestic policy and an international framework for full employment. (26, p. 19)

The issues at Savannah were mainly organizational and political. Keynes opposed the creation of a large, permanent bureaucracy and the plan to pay attractive salaries. He believed that the location of the headquarters in Washington, instead of New York, exposed the new organization to the pressures of domestic, U.S. politics. He did not respect Fred Vinson, the new Secretary of the U.S. Treasury. (26, p. 217) He was disappointed to learn that the U.S. would not propose Harry White, who shared many of Keynes' views, as first Managing Director. He feared that the institution would be "run by gigantic American staffs, with the rest of us on the sidelines." (26, p. 217)

²³Keynes regretted the loss of a medium of exchange in the Bretton Woods agreement, but he was pleased that he had been able to retain several of his principles. See (26, pp. 10-14)

But, he had always defended the plan that emerged from negotiations as the best available alternative, not as an ideal. Nothing that occurred at Savannah appears to have changed that view. (26, pp. 220-34)

The alternatives Keynes envisioned were either resort to bilateral trade agreements with strict controls on trade and exchange or a return to the interwar system of currency blocs, devaluations and trade discrimination. He rejected the former completely on several occasions including a strong letter to the Times, written in response to Thomas Balogh.²⁴ Keynes had not admired the interwar system and blamed the system for the high rates of unemployment in the twenties and thirties. A return to that system with Britain in a weaker position relative to the sterling bloc had no appeal. The new system, even if it was not Keynes' ideal, was in his words, "an international framework for the new ideas and the new techniques associated with the policy of full employment..." (26, p. 19)

During the twenties, Keynes became convinced that no system was capable of achieving internal and external stability, high employment and freedom. He chose to sacrifice freedom. His wartime proposals for international exchange arrangements always included statements favouring exchange controls. The issue was not a main point in negotiation with the U.S., not only because he regarded White's proposals for controls as more strict than his own, but also because countries were free to adopt the restrictions they wished. (25, p. 325)

The flavour of Keynes' views is given by his (repeated) statement that he did not think it would be necessary to use postal censorship after the war to enforce exchange controls. (25, p. 130, p. 325) He favoured a permanent system of controls on all transactions into and out of the country. Open licenses would be issued for current trade, but remittance of interest and amortization would be limited, and purely private enterprise dealings in exchange would be prohibited. (25, pp. 52, 212-13; 26, p. 131) Although he was certainly aware of the interwar experience of refugees, he did not permit "the flight of funds for political reasons or to evade domestic taxation or in anticipation of the owner turning refugee." (25, p. 53)²⁵

²⁴Keynes' letter dated May 18, 1944, refers to Balogh as a disciple of Dr. Schacht. See (26, pp. 8-9) He was more polite, but no less firm, with Joan Robinson. (Ibid., pp. 132-3).

²⁵Exchange controls proved easier to recommend than to design. As late as August 1944, after the Bretton Woods agreement, Keynes and Dennis Robertson differed about the interpretation of the agreement. Both had participated actively in the conference, but they drew different interpretations of the obligation to sell foreign exchange to a holder of sterling who had received a payment on current account. The specific clause, Article 8 Section 2, said in part "no member shall... impose restrictions on the making of payments and transfers for current international transactions." Robertson read this right as unrestricted as to the use of the proceeds and restricted only as to the currency that a central bank was obliged to offer. He interpreted the clause as requiring payment in the exporter's currency. Keynes read the section very differently. For him, there was no obligation to pay the exporter in his own currency. Doing so made "nonsense" of the exchange control provisions. The discussion of this section continued. Keynes eventually recognized an ambiguity, if not a mistake. (26, pp. 114-15, 118-19, 124-27, 134-38) He wrote to White to explain the problem. According to Keynes' report, White expressed sympathy for Keynes' position but refused to accept Keynes' interpretation or to amend the agreement. (26, pp. 148-49) After much more discussion and exchanges of letters (26, pp. 156-182), the British obtained an interpretation for Secretary Morgenthau. Keynes was not satisfied, but the issue was not pursued. (26, pp. 183-85)

In the *Tract*, Keynes recognized that internal and external stability could be achieved without a loss of freedom. If each country used monetary policy to achieve domestic price stability, relative price levels would be more stable. Greater stability of price levels would increase the stability of exchange rates and achieve a high degree of internal and external stability.

Keynes turned away from this proposal by the time he wrote the *Treatise*, because he became convinced that monetary control is a necessary, but not a sufficient, condition for a stable price level. With sluggish adjustment of wages, changes in money affect employment and output. Freedom (*laissez faire*) and the gold standard required each country to accept more variability in employment and prices than, Keynes believed, was required. His attention turned toward proposals for greater control and less freedom. In the *General Theory*, he favoured state direction of domestic investment as a means of reducing fluctuations in investment, output, and employment. In his plans for the postwar, he extended the control to foreign investment.²⁶

I propose a modified version of Keynes' early proposal to increase internal and external stability without sacrificing freedom. By combining a version of Milton Friedman's monetary rule and Keynes' suggestion from the *Tract*, we can impose discipline on domestic monetary expansion and reduce fluctuations in exchange rates. Capital is permitted to move freely, and no international organization is needed. The International Monetary Fund would be abolished.

Each major trading country that chooses to participate adopts a monetary rule that achieves price stability on average. The particular rule I, and others, have proposed calls on the central banks of these participating countries to set the annual rate of growth of the monetary base equal to the difference between the average growth of real output and the average rate of growth of base velocity. This rule maintains price stability on average. Price levels fluctuate, but their expected value is held within a narrow range. Meltzer (1983), Shadow Open Market Committee (1983). To allow for changes in real growth and in the rate of change of velocity, the average rates of change should be moving averages of, say, the past three or five years.²⁷

Each central bank is entirely capable of controlling the growth of the monetary base by controlling the assets on its own balance sheet or, more precisely, if the Treasury or some other agency issues monetary liabilities, on the consolidated balance sheet of the monetary authority.²⁸ Policy action is more easily observed and monitored than under a policy that directs the central bank to control prices, income, or some broader measure of money. Deviations from the policy rule are observed in a few months, at

²⁶An additional reason is that he wanted to prevent capital from moving freely to less developed countries. This increased unemployment at home and, if continued, eventually lowered real incomes to the world level. Keynes spoke favourably about world development but did not want to either lower British standards or increase unemployment.

²⁷A transition period is required to reach the implied zero rate of inflation from current levels.

²⁸The only exception to the rule is that base money can be issued to any bank willing to pay a penalty rate to sell Treasury bills or other paper eligible for discount at the central bank. This rule allows the central bank to lend freely in a crisis. The penalty rate prevents borrowing from altering the pre-committed path at other times.

most, and can be expected to affect anticipations about exchange rates and interest rates. Inflationary policies would, in this way, impose costs on the inflationary country shortly after the inflationary policy is adopted. The proposal relies on market discipline to restrict central banks and governments.

Smaller countries would have a number of options. They could adopt a policy rule similar to the rule proposed for major trading countries. If the bulk of their trade is in dollars, they can peg their currency to the dollar or to the currency of choice. As an alternative, they can peg to a basket composed of the principal currencies. Or, they can float as freely as they choose.

Keynes understood that instability is costly, and that monetary arrangements are a major source of instability. The *Tract* recognizes that risk bearing is costly and that instability can be reduced by changing institutional arrangements. At first, he thought that unstable policies and unpredictable actions increase the uncertainty premiums in interest rates and cause variability of exchange rates. Later, he argued that variability and uncertainty raise the required return to real capital, lower the rate of investment, reduce real income and employment. Increased unemployment encouraged countries to adopt trade restrictions and protection, further reducing world real income and employment and the efficiency of the world's economies.

Keynes tried to remove this burden. He understood that the way to do so was to establish credible rules calling for pre-commitment by governments to a predictable course. Although the system he helped to create was flawed and lasted little more than a decade after convertibility was restored, his insight was correct. There is a common shared gain to be achieved, if we have the wisdom and sense to replace current, unstable, discretionary arrangements with policies that sustain a high degree of internal stability and maintain freedom.

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