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*Twenty-five Years  
of Monetary Controls*

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**T**HE nineteenth century was an age of faith. It believed in its ideas, it believed in its institutions, it believed in itself. Because it was an age of faith, it was an age of miracles. Because it was an age of miracles, it was an age of pride—pride in its actual achievements and in its ultimate powers. Only here and there are there the faint overtones of doubt, as in Kipling's *Recessional* and in Henry Adams' *The Virgin and the Dynamo*.

On the whole the nineteenth century was a century of creation: the empty spaces of the earth were filled; when a great empire decayed and fell asunder, it was replaced by new and more vigorous states, and in society generally new institutions were created that served or seemed to serve human needs. Equally remarkable perhaps were the constructive achievements of science and technology, giving man the conviction that he was at last master of nature and of his own destiny.

In retrospect, at least, the literature of the early years of the current century gives an impression not so much of complacency as of fulfillment, of ultimate or penultimate realization, of arrival at or just outside a desired haven. There was something of a feeling that the giants had all been beheaded, and that the dragons had all been slain. Not since the thirteenth century had there been such ecumenical unanimity as to the ends of society or as to the means of realizing those ends. There was all but unanimous and all but universal agreement that democracy of the American or British type was the ultimate in government; that corporate capitalism was the ultimate in industrial organization; that the money economy under the form of the gold standard was the ultimate nexus of what Herbert Spencer had

called the contractual society, as distinct from the society of caste or status. It was not so much the feeling that the Promised Land had been entered as that the crossing of the Jordan presented no more than technical difficulties.

The twentieth century to date has been a period of destruction, a time of troubles, in which old orders have been swept away without clearly giving place to new. It has been a period lavish in promise and niggardly in fulfillment; of questions rather than answers; and at the present time our personal moods alternate between extravagant hope and equally extravagant despair. The trumpet sounds, but it gives forth an uncertain note. Yet we may suppose that new orders are forming, and are forming out of the old. There is very little actual discontinuity in history, though it is often difficult to see the threads by which the continuity is maintained.

When Adam Smith wrote his *Wealth of Nations*, he selected as the theme of his first chapter the Division of Labor. It is commonplace reading today, but it was novelty itself in 1776. He was prophetic in recognizing its economic significance, but even his insight did not anticipate its social consequence. He saw that this division of labor increased the economic potential; he did not foresee that it would create a new type of society. With the division of labor would come the money economy, and an enormous increase in the actual and relative number of wage earners. High and low, rich and poor, bond and free there had always been, but never before had there been an economy that expected the majority of its people to be totally dependent upon the continuity of a stream of money income.

Up to the time of Adam Smith, the vicissitudes of society had been attributable to acts of God and the King's enemies. There had been devastating wars, and there had been cycles of dearth and plenty. But with the money economy would come cycles of another sort, equally painful but more humiliating, and unmitigated by pious submissiveness to the inscrutable.

The money economy is something quite distinct from capital-

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ism. America has always been capitalistic, in the sense that the means of production have been private property. But almost to the end of the nineteenth century our economy was still characteristically agrarian; its gravest economic problems had arisen at the frontier which separated the money economy from the nonmoney economy of farm and village. By the end of the century Veblen could be using the word pecuniary to describe our society. In 1913 Wesley Mitchell published his *Business Cycles*, describing the cycle as a function of the money economy.

It is the concluding paragraphs of that work that provide the theme of this paper: "(A) double personality (is) acquired by citizens of the money economy. Money making for the individual, business prosperity for the nation, are artificial ends of endeavor imposed by pecuniary institutions. Beneath one lie the individual's impulsive activities—his maze of instinctive reactions partly synchronized into conscious wants, definite knowledge, and purposeful efforts. Beneath the other lie the vague and conflicting ideals of social welfare that members of each generation refashion after their own images. In this dim inner world lie the ultimate motives and meanings of action, and from it emerge the wavering standards by which men judge what is for them worth while. The money economy has not supplanted, but it has harnessed these forces. Upon human activity and human ideals it has stamped its own pattern. (How) it has facilitated the division of labor, (how) it has given a pecuniary twist to the desire for destruction, (how) it has shifted the basis of political power and given rise to new social classes. . . . (How) it has taught men to think in terms of its own formal logic, efficient within certain limits but arid when pushed to extremes. . . . Economic theory will not prove of much use . . . unless it grasps the relations among the pecuniary institutions civilized man is perfecting, the human nature he inherits from savage ancestors, and the new forces science lends to him."

This summary, in general terms, forecasts the course American economic concern has taken over the intervening years. This con-

cern may be summarized as follows: the money economy at its best has proved highly effective in providing economic satisfactions for its participants. For reasons inherent not in itself, but in its institutions, it has proved highly unstable. This instability has been economically costly, and at times socially intolerable. The concrete objective was to reduce the instability. Academically speaking, this suggested an increased emphasis on monetary economics. It may be noted parenthetically that no question was raised as to the general economic structure; and this premise has been retained down to the present.

It is now the intent of this paper to trace, in parallel, the sequence of legislative and administrative actions taken with reference to the control of the money economy, with some reference to the interaction of academic thought and political action. The catalogue is by no means complete, but it may be illustrative.

The most recent American experience had been the Panic of 1907. The Panic of 1907 was not an act of God or the King's enemies, as the old phrase had run. It was not part of the cycle of dearth and plenty described by Sir William Petty a century and a half earlier. It was of human causation, the consequence of a failure of human institutions, or of human error in the operation of human institutions; and these institutions were financial.

The first effort to control the business cycle took the form of a specific attack upon its most conspicuous and violent phase, namely, the financial crisis or panic. The remedy suggested, approved, and legislated was the creation of a centralized reserve banking system. In this measure, it is true, we were but adopting an established European mechanism; and since its establishment, there has been no recurrence of the type of monetary crisis that had previously been a recurring element of the American cycle.

The experience of 1919-21 illustrated the fact that the prevention of the financial crisis or panic phase did not eliminate the cycle; and three lessons were drawn from it by American economists: first, that monetary action by the Reserve banks might, could, or should be taken with reference to domestic considera-

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tions, without regard to what in European experience had been the principal guide to such action—namely, the state of the foreign exchanges; second, the apparent economic response in 1922 to the appearance of low money rates encouraged a belief in the causative power of cheap money as a force in itself; and third, the disastrous commodity price movements that characterized that particular cycle turned attention to the control of the price level as the strategic point of the general campaign of cyclical control.

In short, this experience was construed as throwing on the formal monetary machinery—the Reserve System—the responsibility not merely for preventing financial panics, but of managing the domestic money economy with reference to the moderation if not the elimination of the cycle. The experience of the United States as well as the concurrent experiences of Europe, both set forth with an amplitude of statistical detail formerly unavailable to economists, reinforced belief in the quantity theory of money and the efficacy of the discount rate as a mechanism for controlling the quantity of money, by controlling its price. The novelty of this monetary doctrine lay in its shift of emphasis from the position of the currency on the foreign exchanges to the relation of the monetary system to the domestic economy. The experience of the years 1921-29 supported these views. In that time, the price level was noticeably stable, and the fluctuations in the volume of production were small. It is true that the Reserve System resisted perennial attempts to legislate a directive requiring it to control the price level; but the belief that the cycle had been mastered by monetary technique was widely accepted both in America and abroad. Conspicuous evidence of such faith is afforded by the capitalization of common stocks in that period—a capitalization valid only on the assumption that the cycle had been either eliminated or brought under practical control. This belief was perhaps even more strongly held in Europe, which, somewhat enviously, could not fail to remark that this type of monetary control could be exercised only by a country that was



not constrained by the position of its currency on the foreign exchanges. Although we were on the gold standard, our monetary policy was administered independently of gold inflow and outflow; and, somewhat paradoxically, our experience impressed many foreign economists with the advantages of a currency that could be administered outside the restraints of that standard. It is in this period that the term 'managed currency' or the 'managed gold standard' came into use, with only a partial realization of the fact that the gold standard could be managed only by a country that was dominant on the exchanges.

It must not be supposed that this policy was as clear at the time as it is in retrospect. Indeed, there was a substantial deviation from it in 1927; but the criticism at the time—and still stronger subsequently—indicated the strength of the feeling that the primary loyalty and responsibility of the central bank lay toward the domestic economy.

Following the crash of 1929, the techniques that had seemingly been effective in 1922 were rapidly, vigorously, and confidently applied. It was asserted and believed that business was fundamentally sound, and the price level impregnable. The area of excess had been the stock market, and this had been liquidated. For the economy in general, the worst that could be expected was a brief, mild recession, due to psychological shock. Open market operations quickly retired the burdensome discounts, rates were rapidly reduced, and the public, the academic community, and the government alike expected the sequence of recovery and stability. The sequence was quite different.

It uncovered a defect in the dogma—in this instance, the doctrine of the marginal borrower. All credit theories at the time postulated the perpetual existence of the marginal borrower—the borrower who was excluded from the market as rates rose and admitted as rates fell. As there had been no expansion in bank loans or deposits for months preceding the crash, when rates had been high, few doubted the appearance of the marginal borrower as the stabilizing force when rates fell. The marginal

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borrower failed to appear and the depression ran its course, with commodity prices falling from their brief plateau nearly as far as ten years before they had dropped from their postwar peak. As in the earlier period, the price level became the focal point of thought on the cycle and its control; and the restoration of the price level became the objective of monetary action.

Both England and the United States adopted similar measures, although they were described in different phrases. England depreciated the pound in terms of gold and of several currencies that retained a fixed gold nexus. As a sequel, the fall in the British price index was arrested while the fall in so-called gold prices continued. Whereupon the United States and eventually France depreciated their currencies by revaluing gold, and thus returned sterling to something like its original exchange relation. The two sections of the Western World were so evenly balanced that each could use the other as a fulcrum. The part played by this maneuver in arresting the downward phase of prices is differently evaluated in England and in America. In England it is regarded as a major contribution to the technique of cyclical control; in America it is usually considered as a form of economic warfare, of doubtful efficacy in domestic affairs and at best merely capable of shifting economic impacts from the domestic to some foreign quarter. It is conceivable that both appraisals are correct for their respective countries.

The devaluation of the dollar did not achieve its objective of raising commodity prices although there was wide anticipation of the prospective price rise by both those who hoped for it and those who feared it. The expectation of neither was fulfilled. The objective officially remained, and the next method, while stated in somewhat novel phraseology, was more conventional. The quantity of money was to be reflated to the predepression level, and under the canons of the quantity theory this would restore the *status quo ante*, for both prices and production. In this reflation process, the state was to perform the function of the marginal borrower.

The sequel gave a limited confirmation to this thesis. The quantity of money was readily raised to or above the level of the 'twenties; there was a considerable recovery of production and some advance in prices. By early 1937 the American economy had attained what in comparison with 1932 was a considerable measure of recovery, or even prosperity, except that at its best unemployment continued at a level previously associated with the depths of cyclical depression. It appeared that while the quantity of money had been increased, its statistical average turnover remained low; or, put another way, a part of the money was alleged to have a normal velocity and a part no velocity at all. This phenomenon was described as oversaving—that is, money saving that was abstracted from consumption and not returned to the income stream of investment. Two explanations were forthcoming: the doctrine of the mature economy in this country, and in England the theory that economic equilibrium might be attained without the full use of resources. Oddly enough, the mature economy thesis never won much following in England, which was obviously the more mature; while the submerged equilibrium doctrine won little support here since the sequence quickly demonstrated that our economy was not in equilibrium. The general consequence was to shift the emphasis of economic thought to the national income, rather than to the price level or the quantity of money.

The abrupt collapse in 1937-38 was met with what had now become the standard cyclical control—lower money rates and more Government borrowing, with Government no longer as the marginal borrower, but as virtually the sole borrower, either of bank credit or of savings. The recovery had been but partial and hesitant when our economy was launched into an armament program which presently merged with the war boom.

The changes introduced during the war seem novel, and at the time they were introduced were considered temporary, especially in this country. A surprising proportion of them, however, have roots running well back into the prewar period. Many of the di-

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rect controls over the economy have been removed, others will be removed; but it is a fair guess that many will be long retained and some even reinstated. Generally speaking, those that were removed pertained to physical production and distribution; those that have been retained, related to the money economy. For example, WPB was disbanded, OPA was retained; rationing was abandoned, but the pattern of interest rates was retained. Federal wage fixing was introduced during the war, and has been so extended since that the term collective bargaining not only refers to negotiations between employer and employee, but between leaders of organized labor and the White House. In short, virtually every element of the money economy is now directly allocated to the control of some agency in Washington. The interest rate, wholesale prices, retail prices, farm prices, wages in important industries and minimum wages in general, are all areas assigned to control, although the control is of uneven effectiveness. It is now almost rare for two persons to engage in any sort of money transaction but some agency of government is an interested party.

Meanwhile, events had occurred that necessitated the abandonment of some of the earlier principles. The Federal Reserve System had been the agency of cyclical control, and its most trusted mechanism had been the discount rate. The essence of management had been the ability of the central bank to dominate the market rate of interest by its control of the quantity of money, whether its action was dictated by the exigencies of the foreign exchanges or by the indicated requirements of the domestic economy. Under the new circumstances, resulting from war finance, the magnitude of the public debt in the aggregate, the amount held in the banks, and the rate pattern on which its value rests, now largely determine the limits of Federal Reserve action. It can no longer use its control over rates and over the quantity of money for the purpose of controlling the business cycle. Both are considered primarily, one might say, solely with reference to the public debt. Concurrently, there has been a marked change in the supposed relation of the quantity of money to the level of

prices and the volume of production. The dogma of the quantity of money as the great determinant of both has given way, in some quarters, to an almost equally emphatic denial that it is related to either. The overriding fact of the public debt has thus *de facto* altered the status of the Reserve System. It has become merely one of the many agencies in Washington charged with a fragmentary responsibility for administering a sector of the money economy. It is remarkable that the only agency in Washington with any extended experience or tradition in the problems of the money economy has been relegated to what is hardly more than an advisory capacity. Or one could put this idea another way—that the public debt has come to dominate the quantity of money.

Thus a train of events, set in motion by the legislation following the Panic of 1907, comes to its logical conclusion—or rather it comes to one of several conclusions that might have been logical—almost forty years later. The Panic of 1907 made Americans acutely aware of the social catastrophes inherent in the fluctuations of the money economy, or rather in the money economy by reason of its instability. To protect themselves from these catastrophes they have created a succession of institutions charged with prescribed responsibilities toward the money economy. From the initial responsibility of no more than averting the panic or crisis phase of the cycle, these responsibilities have been enlarged until they embrace every aspect of the money economy, and find their most recent expression in legislation which proposes not only to eliminate the cycle but also to stabilize the economy at a level marked by full employment of human and material resources. Specific Government agencies armed with seemingly adequate powers are provided to stabilize the price level, the interest rate, the level of employment, and the national income—which last is the ultimate statistical expression of the money economy. The control of the money economy, at once centralized and fragmentary, is complete. After forty years of marching—much of the time in a wilderness—we stand again on the banks of the Jordan.

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For the economist it might seem as if he had rather reached the Pillars of Hercules. All the giants are dead, all the dragons are slain, all the problems solved, and all the questions answered. But part of the quotation given earlier is relevant: "money making for the individual, business prosperity for the nation, are artificial ends of endeavor imposed by pecuniary institutions. Beneath one lie the individual's impulsive activities—his maze of instinctive reactions . . . Beneath the other lie the vague and conflicting ideals of social welfare that members of each generation refashion in their own images. In this dim inner world lie the ultimate motives and meanings of action, and from it emerge the waning standards by which men judge what is for them worthwhile."

The validity of any theory depends upon its major premise. To Adam Smith the major premise was the capacity of the free market to perform the equilibrating adjustments required to make economic existence viable. This premise was from the first disputed by the vagaries of the money economy, as they affected the relationships of an intricately contractual society; and, in the end, the market was repudiated—or seems to be in process of rejection—by reason of the empirical fact that after 1914 it appeared increasingly unable to perform this function.

The major premise of contemporary monetary economics is the capacity of state control of the money system to make the equilibrating adjustments required to make economic existence viable. It was accepted as an alternative to the incapacities of the market; it proved extremely efficacious in war finance, but its application or applicability to peace over time is untested. We know now that Adam Smith ignored or underestimated the money economy as an intruder capable of disturbing and eventually destroying the equilibrating function of the market. Control of the money economy occupies in contemporary economics the same fundamental place that the market did to Adam Smith. Is it conceivable that somewhere in the dim inner world of ultimate motives and meanings of action there lurks the intruder that will

prevent state control of the money system from performing the equilibrating function? In short, the market system of Adam Smith failed because apparently it could not bear the social responsibility that was heaped on it. The weight of social responsibility now laid on state control of the money economy is infinitely heavier.

The past has a curious way of intruding into the present. The last economist to use Sir William Petty's phraseology of "cycles of dearth and plenty" was Malthus; and in the interval we were repeatedly told that the technology of man had proved superior to what earlier writers had devoutly if somewhat irreverently called acts of God. Our only problem was for the mind of man to overcome human shortcomings. Monetary economics promised one answer to this final problem. It is a bit mocking that its first test comes during a cycle of dearth, in which the money economy finds itself literally impotent. But it serves to remind us that there may still be factors in heaven and earth undreamed of in our philosophy of the money economy, and that still lie in the "maze of instinctive reactions of the individual", and "the dim inner world of social standards and motivations".

To us as individuals and as students of economics there are no pillars of Hercules. No American college has yet carved over its door the motto 'ne plus ultra'. We are still permitted to be students seeking wisdom and pursuing it, and finding it, whether in the pages of Adam Smith's *Wealth of Nations*, of Karl Marx's *Capital*, or of Lord Keynes' *Treatise on Money*. We, as students, may adopt for our own guidance the concluding passage of this year's annual report prepared by the new Director of Research of the National Bureau: to "continue to focus attention on the large issues concerning the production, exchange, and distribution of wealth, substitute as far as possible facts for speculation, remain critical of our work, strive steadily to improve it, and cooperate with others. If our zeal and industry remain strong, we shall not fail to render a definite service to our own generation and to the generations that come after us."