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THE FEDERAL RESERVE SYSTEM 1945–1949

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PREFACE

THIS book, in its original form, was written while the author was a student of Nuffield College, Oxford. I am deeply indebted to the Warden and Fellows of that college, who gave me the opportunity for research, and to the Trustees of the Houblon-Norman Fund, who made possible my visit to the U.S.A.

In the process of research the scope of this work extended far beyond the original intentions of myself or my supervisors. For condoning such extension, and for their encouragement and assistance, I have to thank in particular Sir Henry Clay and Professor J. R. Hicks.

I have to thank all those in the U.S.A. who bore my questions with such good humour and replied to them in so helpful a manner. I must thank in particular Messrs. Ralph Young (Research and Statistics Division, Board of Governors of the Federal Reserve System) and R. V. Roosa (Federal Reserve Bank of New York) for the additional help they gave me in securing numerous interviews with their colleagues both inside the Reserve System and outside it in the United States Treasury, the Council of Economic Advisers, the advisory staff to the Joint Committee on the Economic Report, the International Monetary Fund, the Federal Reserve Bank of Philadelphia, the Chase National Bank, the National City Bank of New York, the Irving Trust Company, and the Mutual Life Insurance Company of New York.

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J. S. F.

October 1952

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I

INTRODUCTORY

ADAPTATION to changing environment is said to be a necessary condition for survival. This book traces the adaptation of the Federal Reserve System to a drastic change in its environment and, hence, its reaction to a threat of extinction.

The change is best described historically. During the 1920's the Reserve System grew up to maturity and established a place for itself in the American economy. It was a youth among central banks, set up, in response to dissatisfaction with the previous state of affairs, after exhaustive inquiry into the operation of central banks elsewhere. By 1929 it had cast off most of the imitative features of its infancy and established its individuality in accordance with the particular monetary system over which it tried to rule. It had also made a notable attempt to develop a positive contribution towards economic stability in accordance with ideas current at that time throughout the western world. But those ideas were over-ambitious, over-optimistic, and derived, sometimes too crudely, from an historical period which was dying when the Reserve System was born. These ideas, including much that was good in them, were shattered by the Great Depression. Against this the monetary system of the U.S.A. could contribute no defence but, instead, contributed the catastrophe of a monetary collapse. In the reconstruction that followed, attention was directed mainly towards more direct legislative means of preventing monetary excesses. The 'flexible instruments' of monetary policy were either forgotten or hopelessly discredited, the foreseeable future requiring only a perpetual policy of 'cheap money'. Even the attempt, in 1937, to safeguard the monetary system against too easy and too large an expansion of credit, met

with great opposition and the Reserve System was widely blamed for the slump of 1938. Monetary policy was not popular, it was not academically fashionable nor, in any traditionally recognizable form, had it much contribution to make. The tradition which the Reserve System had so quickly built up was being lost. It looked as though that System was destined only to fulfil a subsidiary, if necessary, role as a purely mechanical device and a supervisory agency—a role reserved for many other central banks whose pretentions to economic power and value had similarly been shattered by the misfortunes of a changing world.

But since it was still young, one may surmise the System to have been resilient. Should the opportunity arise, one would expect the System to show signs of life. The opportunity did arise and life was shown. The 1930's proved as abnormal as the 1920's, if more instructive. The problems of the 1940's were those associated with full employment and inflationary pressures, rather than the reverse. This development was in itself a central banking opportunity but not one that necessarily required inventive adaptation. Much more important were two independent factors which together brought about a drastic change in the monetary atmosphere. These factors brought with them their own special problems and together produced a general monetary problem in the 1940's whose solution was not consistent either with 'traditional' methods or with the 'purely mechanical and supervisory' conception of central banking. These two factors were, firstly, the inflow of gold into the U.S.A. from 1934 until the American entry into the Second World War, and, secondly, the growth of the American national debt during that war. The first was largely the response of a decaying system of international payments to one of the principal features of its decay—the rise of the U.S.A. to its present economic power in the world economy. The second was the direct result of political conflict. The two are interrelated in so

far as the political conflict may be traced to economic difficulties.

The gold flow, in association with the under-employment of resources typical of the 1930's and with the government deficits associated with the New Deal, was directly responsible for establishing an extraordinarily low general level of interest rates in the U.S.A. with which was also established a peculiar, but now familiar, pattern of rates (short-term rates very low relative to long-term rates). This general level, and pattern, was inherently unstable and therefore required special measures if it was to be deliberately maintained in different circumstances. Yet the enormous expansion of the national debt, and of public liquidity, was conducted on the basis of these rates and this pattern.

The U.S.A. emerged from the war with a typically ultra-liquid monetary condition but with a structure of interest rates and security prices—upon whose stability much liquidity depended—that required constant official support for its maintenance. The Reserve System was faced, in consequence, with the problem of how to avoid aggravating the inflationary forces without at the same time letting loose the violent forces of monetary deflation. Since it was no use having a 'mechanical device' if the device was too strongly inflationary, the problem had to be solved. In so doing, the Reserve System gradually found itself developing a more positive function by adapting itself to the peculiarities of the situation. This is the process of adaptation which will be traced here. Today, the Reserve System is once more an important force in American economic policy. It no longer aspires to the spurious heights of the 1920's, but it may claim to have established a position for itself in proper relation to the variety of other devices with which most western countries now seek to keep their economies as productive and socially peaceful as possible.

Precisely because one must accentuate this 'adaptation' process, it is important not to pass judgements based on

a traditionalist view of central banking. This view is derived mainly from the experience of the Bank of England in the late Victorian and Edwardian decades. The precise workings of the British national and international monetary system during that period were not widely understood at the time, either inside or outside the banking world, and the analyses upon which viewpoints were based did not reach sophisticated respectability until that system was in decline or dead. The economic glamour of those decades, which once was powerful enough to induce desperate efforts at their restoration, has faded long since, but the tradition remains. This is partly because the institutional framework in London is still intact, and therefore the language of textbooks much the same as before, partly because the idea of 'normality' dies hard (and conservatism enhances normality with the desirable), and partly because the economic radicalism of the 30's and 40's probably overstated the degree to which 'monetary policy' was outmoded. But if one can thus account for monetary traditionalism in England, the justification is less in the U.S.A. There the tradition was largely an import and far more an expression of faith in the old-fashioned free capitalist economy than a harking back to previous times. If the Reserve System established a 'tradition' in the 1920's —as is demonstrated by the widespread feeling that the central banking of the post-war period required some excuse, some assertions as to why the 'traditional instruments of Federal Reserve Policy' could not be used—it must have been more because of resemblances between the System, as it existed in the 1920's, and some central banking prototype (i.e. the Bank of England before 1914) than because of length of service. Since the prototype must be regarded as obsolete, it is useless as a criterion for contemporary judgement. The use of such a criterion both, be it noted, by the advocates and by the opponents of this or that monetary policy, leads to misunderstandings and misjudgements which are common in recent controversies

over the wisdom or unwisdom of Federal Reserve policy. It is maintained here that the Reserve System can only be judged and understood against the background of current circumstance, within a much broader assumption than the traditional prototype permits—namely, that the System will always direct its efforts towards the prevention of instability within the credit system itself and towards the dovetailing of monetary policies with other policies designed to mitigate general economic instability. For within these broad, over-riding directives of policy, which are implicit or explicit in the Federal Reserve Act, the System *is* left free to adapt its policies and methods to changes outside its control. That it must be left free, in so far as legislative limitations are concerned, is shown by the disappearance in successive amendments to the Federal Reserve Act of certain provisions written into the original Act in deference to the then current ideas of central banking propriety, and also by various additions to the central banking powers demanded by special circumstances and unforeseen developments.

To conclude this warning against 'tradition' it is here suggested that 'monetary policy' is simply the way that central bankers discharge their broad responsibilities towards the financial stability of their country. Bedevilled by traditionalism, and perhaps also by economic theory, 'monetary policy' has often come to mean some vague but ambitious kind of policy regarding the 'rate of interest' which one could always have if one wanted but of which nowadays many people are rather shy. 'Monetary policy' used in this ambitious sense is something about which people have strong prejudices. It is something you have to be for or against, whatever the circumstances. This book is not for or against anything like that. It is a study of a problem-solving activity, that concentrates on the major questions that arose and upon the particular financial field in which they dwelt. 'Central banking' is itself not a tidy field of study, for the very reason that it is only

interesting when it *is* inventive or problem-solving. The history of a central bank is but one part of the general financial history of a country, a vast field for study. Within this vast field there may be many areas which give little trouble over long periods while all inventive attention is concentrated elsewhere. This book attempts to deal as exhaustively as possible with the major problems while leaving much else in shadow. This at times results very much in a worm's-eye view—a regrettable fact but one that is justified on grounds that it is better to get to the bottom of one problem, to see what was really happening, than to wander uneasily through everything.

As a result of this microscopic approach it is possible to see more clearly what it is that so-called 'monetary policy' can be. Submitted to careful scrutiny, the Federal Reserve System may, I believe, be judged to have conducted, in the years following the Second World War, one of the most enlightened monetary policies in history despite persistent misunderstandings and obstructions. That it may not always have known quite where it was going, or may not always have wanted to go where it did, does not alter that belief. With these preliminaries out of the way, the remainder of this chapter is a brief sign-post to what lies ahead.

This chapter and the two following comprise Part I. They show the change in environment taking place during the 1930's and during the Second World War. The immediate repercussions on Federal Reserve policy are noted, as are the legal changes of the period, the growth of new forms of credit control, and certain consequences which the major changes had upon market practices. Parts II, III, and IV cover the period July 1945 to December 1949, the end of the war to the end of the first post-war recession. Part II is devoted entirely to the early reconversion period which ends in the summer of 1946, Part III to the ensuing period of decontrolled economic expansion which continued until the middle of 1948, and Part IV to the

'turning point' and ensuing recession which was over by the end of 1949. The fact that these periods, save for the last, coincide with fiscal years is partly a fortunate accident and partly imposed on the author by statistical convenience.

Parts II and III are 'microscopic'. The various topics in central banking are divorced one from another, and from a brief general economic survey of the periods. Part II also contains a good deal of purely expository writing and a chapter on the constitutional position of the Federal Reserve System. Both Parts II and III contain separate chapters on official opinion and argument. Part IV is not so microscopic. There the various topics and the general survey are interlocked and an attempt made to relate monetary policy more closely to the changing economic situation. This change is valuable purely for academic reasons, but it also reflects a real change in the application of policy. It was in 1949 that the System really began to build on the foundations laid with great difficulty in earlier years.

It is perhaps a source of disappointment that the study is not continued up to March 1951, when monetary management in the U.S.A. entered a new and highly significant phase. But to carry the study that far would have been to extend the length of this book beyond tolerable bounds unless the whole level of detail were to be scrapped and the attempt to get to the bottom of certain problems sacrificed. The events of March 1951 are acknowledged in the conclusion and are, in any case, a very simple development from 1949. The case in favour of those events is clearly visible even though the events themselves are not.

PART I

THE BACKGROUND

1933–45

II

THE 'THIRTIES', THE INFLOW OF GOLD, AND THE PROBLEMS OF '2½ PER CENT.'

STATEMENTS that the Federal Reserve System was prevented from exercising its traditional powers, from 1945–50, owing to its willing, or unwilling, support of government security prices, are commonplace. That this support was due primarily to the insistence of the United States Treasury is also a common assertion, though not necessarily true. Any inference that the policy of support was dependent solely on considerations of debt service charges would be false—even though such considerations may, at times, have been powerful. Any decision to abandon support of government securities, or any decision deliberately to force up the yield on Treasury bonds above 2½ per cent., involved far more serious considerations than those of debt costs. These considerations have their origin in the decade preceding the Second World War. It is now necessary to make a brief survey of the developments of that decade: without such a brief survey one cannot begin to understand the problem. The initial datum, broadly described as '2½ per cent.', with which one can include a short-term rate very appreciably below 2½ per cent., was a product of the 1930's and a very unusual product at that. The question is, how did it come to be there and what was so very peculiar about it? The answer

is to be found in the first of the two processes mentioned on page 2, the gold flow.

One may refer first, in very general terms, to the banking reforms which followed the collapse of the American credit system in 1933 and culminated in the Banking Act of 1935. These reforms[1] both strengthened the resilience of the commercial banks and altered the government of the Reserve System itself. Commercial banks were given easier access to Reserve Bank credit, subjected to stiffer supervision and to tighter control of investments, and their depositors were to some extent given protection by the newly .formed Federal Deposit Insurance Corporation. Legally the Reserve System itself was changed into a far more centralized institution than had been intended in the original Federal Reserve Act. Power was legally concentrated in the Washington Board, which was renamed the 'Board of Governors of the Federal Reserve System', and in the Federal Open Market Committee. The latter had previously existed informally but was now given full legal power to direct the market operations of the whole System. On this Committee the Board has a majority. It has often been said that these changes transferred power from New York to Washington. While this is legally true, it must be remembered that all market operations are in fact conducted by the Reserve Bank of New York (the manager of the open-market account is a vice-president of the New York Bank). Moreover, the statute specifies that the President of that Bank must be a member of the Open Market Committee. It is worth noting also that in practice the President of the New York Bank has become virtually the permanent Vice-Chairman of this Committee, as well as Vice-Chairman of its Executive Sub-committee. The operating supremacy of New York remains and, that being the case, its effective weight in the formation of policy can be expected to remain very strong, particularly if the

[1] For legal survey, see *Banking Studies*, Board of Governors of the Federal Reserve System, 1940.

calibre of its chief executive is high. The President of the New York Bank (Mr. Allan Sproul throughout our period) is both the highest paid official in the System and its foremost central banker. He is a central banker by profession in a sense that the Governors are not—a state of affairs which will be demonstrated by the differences that have arisen between New York and Washington. It has also been asserted that New York itself has declined as a financial centre. This is certainly not true in so far as the market in government securities, which has come to be of paramount importance for central banking, has been built up, and remains, almost entirely in New York.

Alongside these legislative reforms, the monetary authorities further tackled the dual problem of restoring the morale of the credit system and promoting general economic recovery by maintaining a credit policy of great 'ease'. The policy of 'ease' dates, with one or two unfortunate interludes, from 1929, but was pursued much further after 1933. This policy can be described as a vigorous 'cheap-money policy' and it is to the vagaries of this that attention must be given. Before the collapse of 1933, credit policy was aimed first at eliminating the member-bank indebtedness to the System which had reached high levels in 1929, and second at reducing all rates of interest. The open-market portfolio increased by $2 billion[1] during the period for 1930–3, from $\frac{1}{2}$ to $2\frac{1}{2}$ billions. Such operations, in that they released reserves to member banks, enabled the latter to reduce their indebtedness to the Reserve System to small proportions; they also contributed to a substantial reduction in long- and short-term interest rates. By 1933, long-term Treasury bonds (partially tax-exempt) yielded about $3\frac{1}{4}$ per cent. as they had in 1927—which had seen a post-war low in the yield. High grade corporate bonds behaved similarly (yielding around $4\frac{1}{4}$ per cent.), while the loan rates of commercial

[1] For this and other figures quoted in this chapter, see Historical Supplement, *Federal Reserve Chart Book*, Mar. 1950.

banks, at between 4 and 5 per cent., were slightly below the levels typical before the 1929 restriction. In its report for 1933 the Board stated: 'Open market operations in 1933 may be described as primarily for the direct purpose of building up excess reserves of member banks with a view to further easing of the money market and to encourage the banks to adopt more liberal lending policies.' Once the crisis was passed, the question arose as to how much further were interest rates to be driven down. This question was to be answered by the emergence of a fortuitous factor. Partly in direct consequence of the devaluation of the United States dollar (commenced in the second half of 1933, made definitive in January 1934), partly in consequence of the readiness of other countries to pay in gold for their imports from the U.S.A., and partly in consequence of sustained private capital movements into the U.S.A. (repatriation of American capital or expatriation of European capital), the American monetary gold stock began to increase with great rapidity. From $4 billion at the close of 1933, the gold stock reached $8 billion by mid-1934, $16 billion in mid-1939, and rose to nearly $23 billion in 1941. Total bank deposits and currency, by comparison, were $42 billion at the end of 1933, $60 billion in mid-1939, and nearly $90 billion at the outbreak of war in December 1941. Deposits and currency more than doubled during the period 1933–41, while the gold stock was multiplied by nearly six. This gold avalanche of the late 1930's and early 1940's was primarily responsible for bringing down interest rates on high-grade debt instruments to levels that had never been seen before. After 1933 the reserve money provided by the System was overshadowed and swamped by the inflowing gold which, apart from the sterilization period of 1937–8, involved an equivalent rise in commercial-bank reserves and a multiple rise in potential credit supply. At that time there was no very great demand for credit from the private sector of the United States economy. This was due both to the

stagnatory economic conditions and to secular processes which reduced the demand for bank and stock-market finance. There was, however, one large and persistent borrower, the Federal Treasury. The American national debt reached a post-war low point in 1930, when it stood at $16·2 billion (it had reached $25·5 billion in 1919, from $1·2 in 1915); when the Roosevelt Administration took office the debt had reached $22 billion and was almost doubled during the next seven years, reaching $43 billion in June 1940 before the armaments programme had effectively got under way. This large expansion, however, did not offset the pressure exerted by the excess supply of loanable funds on the government-securities market. In spite of heavy Treasury borrowing, the yield on partially tax-exempt government bonds fell to 3 per cent. in 1934 and to nearly $2\frac{1}{2}$ per cent. in 1936. After rising to $2\frac{7}{8}$ per cent. in 1937, this yield fell below $2\frac{1}{2}$ per cent. in 1939 and 1940 sufficiently to enable a long-term fully taxable government bond to be floated at $2\frac{1}{2}$ per cent. in 1941. The yield on high-grade corporate bonds fell similarly: beneath 3 per cent. in 1939 and to about $2\frac{3}{4}$ per cent. in 1941.[1] The yield on medium-grade bonds[2], which had reached over 10 per cent. in the dark days of 1930–3, fell to $4\frac{1}{2}$ per cent. in 1935, rose to over 6 per cent. in the 1938 slump, but thereafter came slowly down to $4\frac{1}{4}$ per cent. in 1941. Commercial-bank loan rates which averaged 4 to 5 per cent. in 1933 fell to average levels below 3 per cent. by 1941. But if borrowing by the Treasury did not offset the effects of the inflows of gold and other supplies of funds, neither did it absorb the bank reserves created by that inflow. Instead, the banks bought up a certain quantity of government securities, particularly in the early deficit years, but thereafter simply preferred to hold excess reserves (which earned nothing) rather than acquire more government securities at higher and higher prices. Member-bank holdings of such securities rose from 7 to $14

[1] Moody's Aaa series.

[2] Moody's Baa series.

billion from 1933–6 but did not increase very significantly again until 1940–1 (by the end of 1941 they held just under $20 billion). Thus the Reserve System found a policy of extreme monetary ease pursued automatically and pursued far further than it could ever have seriously contemplated achieving by its own open-market operations. The System did not, it may be noted, part with any of its own securities, but allowed the gold inflow to exert its full effect. The consequences of this process are most important.

What was thought to have happened was that, especially where the commercial banks were concerned, long-term interest rates had been driven well into a region where liquidity-preferences regarding long-term bonds were highly elastic to further downward movements of yields. Not *just* into such a region but, such was the offsetting desire of the banks to earn money, *well* into it. The level of excess reserves is, of itself, no direct measure of this, owing to the fact that, after the mid-thirties, much of the Treasury's borrowing was made on the long-term market whereas the banks were, at the same time, starved of short-term assets. The Treasury's floating debt was kept small and the traditional outlet for short-term bank funds—the stock-market—was practically blocked by the depressed condition of the market and diminished by the institution of legal margin requirements. From 1933–6 the Treasury purposely tapped bank demand by issues of 3–5-year notes but thereafter relied solely on the long-term market. This being so, the banks were almost compelled to maintain large excess reserves, but nevertheless would have been content to hold less had Treasury bonds carried higher yields, short-term government securities been more plentiful, or private credit demand greater. Short-term rates were, naturally, driven almost to vanishing point. Apart from the period of credit restraint during 1937, the rate on Treasury bills was typically below $\frac{1}{4}$ per cent., 1934–8, and fell to zero[1] and below between 1939 and 1941.

[1] A negative rate on bills is explained by considerations of tax liability.

(During 1937 the bill rate rose only to $\frac{5}{8}$ per cent.)[1] Similarly the commercial paper rate fell below 1 per cent., while the rate on 3–5-year Treasury notes (partially tax-exempt) fell to 1 per cent. in 1936 and $\frac{1}{2}$ per cent. in 1940. Taxable notes were issued during the war at $1\frac{1}{2}$ per cent. (3–5 years). Once the level of interest rates at long-term has been driven well into this 'elastic' region, any policy designed to raise them out of it encounters severe practical difficulties, quite apart from the fact that the Treasury will have become accustomed to these very favourable terms and anxious to see them maintained. The formal difficulty is the probability that liquidity-preferences may have positive elasticity to upward rate movements. This means that once bond prices fall through some prevailing 'par' that is associated, in the investor's mind, with current abnormal conditions, it will be assumed by the market that rates are returning to a historic normal (say $3\frac{1}{2}$ per cent. at long-term). There will then be a panic wave of selling, in order to avoid severe book losses and, if one can sell quick enough, obtain increased earnings later. Not only the rates on government bonds, but all other rates that have been affected by the previous 'grinding down' process, will snap back to normal or above (depending on the degree of disorder and destruction of confidence). These possibilities are the more plausible in a country whose credit system and capital market are slowly recovering from a catastrophe and confronted with this peculiar market situation. If such a panic were to occur, Reserve Bank operations might be quite unable to stop it without truly heroic measures, and even if the System succeeded in steadying the market, the availability of credit might be gravely impaired. In the conditions of the 1930's a disorderly market and a reversion to old levels of interest rates could clearly not seriously be contemplated—more than anything else, a substantial depreciation in the market value of the new investments recently acquired by banks and other financial institutions

[1] Bill rates in the twenties were typically 3 to 4 per cent.

was an impossible suggestion.[1] Not only that, but the prestige of the United States Government itself, its 'credit', would be shattered. Unorthodoxies of the Roosevelt administration are reputed to have had adverse effects upon business confidence; a collapse of the very bonds which had financed the deficit was politically intolerable and morally objectionable. There were thus difficulties of management inherent in such ultra-cheap money, difficulties whose existence reinforced all other arguments against even moderately higher interest rates. It was thus that the stabilization of low interest rates, within a very minor range of movement, which is a paramount feature of the post-war years, had some of its origins in the technical market situation of the late 1930's. It is from this situation that the subsequent fears of a 'disorderly' market arose. A level of interest rates had been established which was historically abnormal and depended for its future acceptance by the market very largely upon the ability of the authorities to convince investors that the level would be maintained by official action. There were, of course, narrow limits within which other factors could influence the prices of government securities, but to an increasing extent these prices became merely what the authorities allowed them to be.

The Reserve System soon became acutely aware of this problem. During the revival of 1936–7, the Board took its much criticized actions of raising legal reserve requirements in order to eliminate most of the excess reserves that member banks had accumulated. One may digress upon the legal powers involved. Reserve requirements were originally fixed under the Federal Reserve Act as follows:

Central Reserve City banks[2]	13 per cent. against net demand deposits.
Reserve City banks	10 per cent. against net demand deposits.

[1] See also pp. 34 ff.

[2] i.e. New York City and Chicago.

Country banks	7 per cent. against net demand deposits.
All member banks	3 per cent. against time deposits.

'Net demand deposits' are gross demand deposits less cash items in process of collection and demand balances due from domestic banks. Power to increase these legal ratios was first included in a clause of the 'Thomas Amendment' (May 1933). Its use was permitted, without limit, whenever an inflationary 'emergency' was declared, and it was regarded as a safeguard against the conceivable consequences of the Roosevelt reflationary programme. The power was made permanent in the 1935 legislation, but the Board was not permitted to raise requirements to a level above double the existing statutory one (or subsequently to reduce the ratios below it). This power applied, and still applies, to member banks only. Under the 1935 Act the Board was also prohibited from changing the ratios at one class of bank without making the same change at all member banks, but this latter restriction was removed in 1942. This weapon has always been used in much the same way as was originally intended in 1933. Ratios have been increased for certain emergency reasons and lowered when the emergency has passed and 'ease' required. The device is primarily for use in special situations and not as a substitute for open-market operations. When reserve requirements have been raised, it has meant that reserves have been or are being supplied to member banks in an autonomous fashion which cannot be offset by open-market sales or by the repayment by the Treasury of securities held by the System—either through lack of ammunition or for fear of upsetting the market. Inflows of gold are a typical autonomous factor. Another such factor arose in 1948 when member banks were supplied with new reserves by the liquidation of government bonds on the part of non-bank investors which were purchased by the System in support of the market. Detailed discussion of the use of these powers in the post-war period occurs in

later chapters, and a return will be made to the market in government bonds.

The volume of excess reserves outstanding in early 1936 constituted, in the view of the authorities, an inflationary menace—a condition of extreme ease in the availability of credit which only required a revival of demand in order that monetary expansion be carried out on a huge scale. The System had not sufficient open-market ammunition to make serious inroads into the stock of excess reserves. As a precautionary measure, about 50 per cent. of those reserves were sterilized by a raising of the legal requirements in summer 1936. At the same time the Treasury began to offset gold inflows by raising money on the market and paying the Reserve System for gold purchases with the proceeds. In early 1937 credit demands began to revive further and in the spring of that year legal requirements were again raised, this time to a point where only $750 million of 'excess' remained, still a substantial amount judged by any previous standards. The reviving demands for credit had already diverted pressure of available funds away from government bonds and the System had itself bought $100 million of such bonds but sold $100 million of Treasury bills. First short-term and later long-term yields rose abruptly—the Treasury bill rate from $\frac{1}{4}$ to $\frac{3}{4}$ per cent. and the long-term government bond yield from 2·5 to 2·8 per cent. The situation was aggravated by the second change in legal requirements which, such was the distribution of excess reserves or the nervousness of some bankers, precipitated further sales of bonds. There was serious doubt whether the market could stand such a strain without reverting to pre-1929 rates (after a period of disorder). The Board thus made the following well-known announcement, 'with a view to (i) exerting its influence towards orderly conditions in the money market, and (ii) facilitating orderly adjustments (to reserve ratio changes) . . . the System is prepared to make open-market purchases of United States government securities for the account of

Federal Reserve Banks in such amounts and at such times as may be desirable'. In fact, a purchase of $96 million of bonds was sufficient, along with the psychological effect of the above statement, to steady the market. The annual report of the Board for 1937 further referred to the growing importance of the bond market, in lieu of a *money* market, to the banking system.

The downturn of summer 1937 caused a rapid retreat from this policy. Gold was released from the Treasury inactive account in order to 'maintain at member banks an aggregate volume of excess reserves adequate for the continuation of the System's policy of monetary ease'.[1] In early 1938, legal reserve ratios were relaxed to the level decreed in summer 1936 and gold sterilization completely abandoned. The yield on Treasury bonds sunk yet further. When war broke out in Europe, however, there was a sharp reaction, mainly speculative, but partly due to liquidation of foreign holdings, on the New York bond market. The yield on long-term government bonds again rose rapidly, from $2\frac{1}{4}$ to $2\frac{3}{4}$ per cent., and again the System stepped in, buying $470 million. In its report for 1939 the Board justified its action more fully than in 1937, but prefaced this justification with the statement that: 'The System cannot, and does not guarantee any current prices of government securities, nor does it undertake to preserve for member banks such profits as they may have on government securities, or to protect them from losses.' In spite of this gesture of defiance in face of what seemed to be a rapidly approaching conclusion, the System then went on with the arguments concerning bank investments, and the slowly reviving capital market, declaring, in effect, that any serious upward shift of long-term rates would cause a disorderly market and a severe restriction in the availability of credit analogous to that of the depression years. Opposition to the policy inherent in bond-support, which very well illustrates the dilemma in which the more conservative

[1] *Annual Report of Board of Governors of Federal Reserve System*, 1937.

bankers found themselves, was summarized in a declaration made at the time by the Federal Advisory Council. The Council represents member banks from the twelve Federal Reserve districts, its purpose being to convey the views of member-banks to the Board and the public. The Council declared[1]:

> The so-called easy-money policy has been followed since 1929 upon the theory, so the Council understands it, that easy-money would act as a stimulant to business, that it would cause business to borrow and compel the banks to lend. It has done neither; but it has done, and is doing, undeniable economic injury to the whole saving class of the American people. The Council believes that the easy-money policy, through its failure to bring the banks normal rates on their loans and investments, is tending to weaken the capital position of the banks and is encouraging an essentially unhealthy position of the bond portfolios of the banking system through its inducement towards lengthened maturities at progressively lower rates.

The policy, the Council continued, made Congress and the people indifferent to the mounting national debt. It seriously affected institutional incomes. The banking system was 'confronted with a distinct menace to the soundness of its capital structure . . . prolongation of this situation threatens the existence of private banking and with it the whole system of private enterprise'. The Council was aware that retreat from easy-money would have to be slow but considered such a retreat would be 'the greatest single service the Board can render the country as a whole'. This advice was ignored. Renewed inflows of gold and the general state of demand for credit simply drove excess reserves higher and bond yields lower (whereas in mid-1936 required reserves and excess reserves were about equal at $\$2\frac{1}{2}$ billion, at the end of 1940 they were still approximately equal at $6\frac{1}{2}$ billions). No further support of Treasury bonds was required until 1942

[1] *Annual Report of Board of Governors of the Federal Reserve System*, 1939.

in spite of the fact that the rapid economic expansion of 1941, together with a further rise in legal reserve requirements, this time to the statutory maxima, brought a very substantial reduction in excess reserves. It seems that, by 1941, the low level of rates was far more firmly established than in 1937, although the eventual appearance of 'disorder' was no less likely.

The first of the two processes of such vital importance for future monetary policy, the extraordinary flow of gold to a country whose internal credit demand was relatively low and whose banking system was emerging from collapse, has now been surveyed. The second process, the sudden creation of a very large national debt during the four years 1942–5, must next be considered. Further reference to pre-war affairs, notably to what are known as selective credit controls, will be postponed to a later chapter.

III

THE SECOND WORLD WAR, THE NATIONAL DEBT, AND THE 'PATTERN' OF RATES

AS in other countries, the cost to the United States Government of meeting war expenses was not financed entirely, or even preponderantly, by taxation, but was met, to the extent of about half, by an expansion of the national debt. When the war ended in August 1945 the United States Federal debt was over five times the pre-war total. From a total of $49 billion, or approximately one-third the gross national product, in July 1941, the debt grew to $259 billion, or approximately 1¼ times the gross national product, by July 1945. Whereas in 1941 estimated private debt, at $140 billion, was approximately double the public debt (Federal, State, and Local), at the end of the war the public debt was not far from double all private net debt outstanding, while the Federal debt itself was over 60 per cent. of all outstanding debt,[1] and in late 1950 was still over 45 per cent. of the total. Whether offset against the rapid increase in production achieved by the war, or against suppressed or open inflation, this debt expansion involved considerable sales of government securities to the banking system and an equally considerable rise in bank deposits. Commercial-bank holdings of government securities shot up, by approximately $60 billion, to over $80 billion between December 1941 and July 1945, or nearly one-third of the total increase in the Federal debt during that period. Federal Reserve Banks bought over $20 billion of government securities, while

[1] Federal debt totals, *Treasury Report*, 1949, p. 465. For comparison with private debt see ibid., p. 12, or Historical Supplement, *Federal Reserve Chart Book*, Mar. 1950, p. 56.

total deposits and currency increased by approximately $85 billion to a total of $162 billion[1] (total deposits and currency in 1929, by comparison, were $55 billion). Gross national product was $126·4 billion in 1941, and $215 billion in 1945. This expansion was accompanied by unprecedentedly high taxation, an apparatus of direct price, wage, and rationing controls, and by intensive propaganda designed to induce maximum non-bank subscription to Treasury issues either by individual and business savers or by their savings institutions. As in the United Kingdom, this expansion of money and national debt was coincident with enforced public abstention from much ordinary expenditure on consumers' goods and capital equipment, and was not coincident with a very marked degree of open inflation. [Disregarding the unreliability of official index numbers in wartime or 'controls-time,' the American wholesale-price index (1926 = 100) rose only 10 points during the war, from 95 to 105, while the consumers'-prices index (1935–9 = 100) rose, in greater proportion, to 130 from 110.] That such an expansion of private liquidity possessed inherently inflationary possibilities for the future was indeed obvious, but before briefly considering that aspect, the actual management of the expansion—which is, for our purposes, more important—must be examined.

The vast borrowing operations of war cannot be undertaken without prior reference to certain problems. The first one to be considered is that of interest costs. Although it was at one time fashionable, in days of deficit advocation during the 1930's, to minimize the 'burden' of an internally held debt, contemporary needs for balanced budgets and for taxes so high as to encounter very serious political difficulties have produced something of a reaction to this fashion. In the United States the cost of the national debt, especially of a war-debt, is a matter of some importance to the Administration, and it is therefore not

[1] Currency outside banks 25 billions, deposits 137 billions.

surprising that the Treasury decided, early in 1942, for this reason amongst others, to finance the war as far as possible at the abnormally low interest rates then prevailing.

The second problem, which is to some degree affected by the first, is that of the structure of the debt created; the problem of the maturity and type of any new or refunding issue. Treasury issues can be varied according to term (length of time to maturity), can be marketable or non-marketable, taxable or tax-exempt, restricted or unrestricted as to ownership, and can be coupon-type obligations, discount-type obligations, or demand obligations (e.g. savings bonds). This composite problem is of greater importance when yields are low and it is desired to prevent them from rising without excessive reliance upon support from the central bank. In order to overcome liquidity-preferences of the public one does not offer, in this case, higher rates of interest; instead, one offers all kinds of maturities, and types of security, designed to suit particular types of investor, and varies the supply of each in accordance with demand. This may be described as orthodox 'cheap-money' procedure.

The third problem concerns the structure of interest rates and arises from the fact that the shape of the 'rate curve' (curve of redemption yields plotted against first call or maturity) which is appropriate to peace-time conditions may not be appropriate to war-time conditions. If this is so, then market forces of great strength may be set up which will try to effect a change in the shape of the curve and will seriously interfere with official attempts to reduce credit expansion to the minimum consistent with the requirements of government finance. This question of a 'rate curve' being appropriate to a certain credit situation and not to another was of paramount importance during 1945–6 and, indeed, was never far off throughout the whole post-war period.

To return to the first problem, that of interest costs, it was realized that the decision to finance a '2 per cent.

war' required, at least initially, close management of the market in order to avoid the possibility of a speculative raid on the Treasury market which would force up borrowing rates. Since it was clear that considerable borrowing from the banking system would be inevitable, especially at the start of the expansion, and that considerations of sound banking demanded the creation of a large floating debt to supply the banks with the money-market assets which they lacked, 'close management' was at first directed to the short-term market. It having been decided by the Treasury, in association with the Reserve System, that the war-time rate curve should move from a three-month Treasury bill rate of $\frac{3}{8}$ per cent. through a twelve-month certificate rate of $\frac{7}{8}$ per cent. and on out to $2\frac{1}{2}$ per cent. (for fully taxable securities) at 25–30 years, the System guaranteed, in April 1942, to buy all Treasury bills offered to it at a discount rate consistent with a maximum of $\frac{3}{8}$ per cent. for a ninety-day bill. It was also decided to allow the seller a repurchase option whereby he could buy back a like amount of bills of the same maturity at the same price. Later in the year the Discount Rate was lowered from $1\frac{1}{2}$ to 1 per cent. and a preferential rate of $\frac{1}{2}$ per cent. announced on government securities maturing within one year. Three further special measures were taken in 1942. Firstly, in order to protect the Treasury against any financial stringency, the System was empowered to buy securities direct from the Treasury (subject to a $5 billion limit to total holdings of such securities)—Ways and Means Advances thus being added to the mechanics of American public finance, though resort has seldom been had to them. Secondly, the System was empowered to guarantee, or to participate in, bank loans needed for defence purposes which commercial banks might not otherwise be able to grant. Thirdly legal reserve requirements at Central Reserve City banks were lowered from 26 to 20 per cent. against net demand deposits.[1] This last

[1] Subsequent to the legislative Amendment mentioned on p. 16.

step was taken in response to a drain of money out of New York and Chicago consequent upon the sharp increase in economic activity throughout the country. The guarantee on bills and the preferential Discount Rate mentioned above ensured the almost absolute liquidity of short-term government securities, in the sense that they could always be turned into bank reserves without loss. They also ensured that, regardless of what the market might attempt, short-term interest rates could not rise beyond certain limits. With these guarantees the Treasury began a rapid expansion of the floating debt, reintroducing the certificate of indebtedness (which had disappeared in the middle 30's) as well as increasing the bill issue. The certificate is not simply a twelve-month bill. It is a short-term bond sold on the market with a 'coupon' (i.e. par yield) fixed in advance by the Treasury, whereas the bill is sold by tender on a discount basis.[1] The importance of this distinction will be seen in later chapters.

When the curve of rates, from $\frac{3}{8}$ to $2\frac{1}{2}$ per cent., was selected, the actual market rates were slightly below those chosen and, although the response of the market to Treasury issues was satisfactory, tended to rise. In the autumn of 1942 there was held the first of a series of eight loan drives (seven during the war and one after), and under the strain of this operation market rates rose to the chosen curve. The Reserve System then supported the market, buying medium bonds and notes, as well as short-term government securities. By December 1942 this show of strength was sufficient, and no support outside the short-term market was again required until 1947, it being understood, in 1942, that not only would the short-term market be supported but that Treasury bonds issued during the

[1] 'Coupon-type' securities issued by the Treasury with a term of twelve months or less are usually called 'certificates of indebtedness', those with a term of 1–5 years are usually called 'notes', and the remainder 'bonds'. Notes and Certificates always have a single fixed date on which they mature, bonds may often be repayable at the Treasury's option some time before final maturity.

war would not fall below par in the then foreseeable circumstances.[1] The problem of cost was solved.

The second problem, that of type and maturity of issue, must now be considered. Four broad classes of lender may be distinguished; the banking system, the non-bank financial institution, other corporate lenders, and the individual. The banking system requires short-term securities up to a certain percentage of total liabilities, but thereafter may be expected to take up medium-term securities as liquid investments and a small percentage (depending rather on banking prudence) of long-term bonds as illiquid investments. But while there is no limit to the total quantity of government securities which the banking system can be expected to take up, the proportions of available maturities, or the average length of bank portfolios, will depend both on available supplies and upon banking liquidity-preferences *vis-à-vis* the various securities and the yield obtainable from them. It may be that banking conventions are highly developed, in which case the above proportions are to some extent 'given' to the Treasury from the start. But in the United States this was not the case and the appearance of very large supplies of government securities of all maturities was a novel development. It was therefore much more a matter of official policy attempting to guide the banking system, than of the banking system automatically guiding the Treasury. That the banks required a substantial volume of short-term assets (up to 15–20 per cent. of the total) was obvious, but if they were confronted with relatively attractive earnings on medium-term bonds whose par value was thought to be safe, then pressure of low earnings and declining liquidity-preferences would render short-term assets increasingly unattractive and produce a wholesale 'lengthening' movement on the part of the banks. It was realized very early in the war that this might happen, owing to the fact that the 'rate curve' in-

[1] Evidence before the Douglas Sub-Committee (1949) on this point is obscure, but it seems that 'par' was guaranteed at least for the duration.

herited from the 1930's would soon cease to reflect the opinion of the market about future interest rates. This followed from the decision to stabilize the curve and could only be offset by market inertias and doubts about post-war policy. While the problems arising from this situation properly belong to the separate question of the structure of interest rates, they are a partial explanation of a decision taken early in 1942. This decision was to restrict the ownership of certain Treasury bonds to non-bank investors (i.e. all investors including Reserve Banks, other than commercial banks—defined as banks accepting demand-deposit business). Commercial banks were forbidden, save for certain exceptions based upon their time deposits, to buy up new issues with over ten years to maturity. Such issues are referred to as the bank-ineligible bonds and they become 'eligible,' with the passage of time, when their maturity falls within ten years. No bank-eligible bond was issued at a coupon rate of over 2 per cent. and all Treasury bonds issued after May 1941 were fully taxable. This restriction on the ownership of marketable bonds was based both upon orthodox banking principles and to avoid the difficulties which might arise during loan drives (and in between them, but that is another story) should the banks subscribe heavily to the longer issues and contribute to a seriously unbalanced debt structure (involving an excessive volume of refundings falling on one future period). This restriction is 'one-way'—that is to say, all issues eligible for ownership by banks can be owned by anyone else. No such system as the British compulsory Treasury deposit receipt was possible. Beyond this regulation, apart from exhortation, the absorption of issues by the banks depended very largely on their own preferences. Eventually they were forbidden to subscribe to new issues altogether, but by that time market forces were such that instead of subscribing directly they did so indirectly by bidding bank-eligible securities away from non-bank investors who bought the new issues with the proceeds of sales to the banks.

For the non-banking public, a variety of government securities were made available. Savings institutions, other corporate investors, and rich individuals were offered all types of marketable security up to twenty-seven-year $2\frac{1}{2}$ per cent. bonds, as well as non-marketable 1 per cent. two-year tax and savings notes and $2\frac{1}{2}$ per cent. twelve-year savings bonds (either compound-interest discount bonds or simple-interest par bonds). Other individuals could buy marketable bonds or non-marketable 2·9 per cent. compound-interest discount savings bonds—maximum purchases per annum of the latter by any one individual being restricted to $10,000. Unlike the British savings certificate, no American savings bond was tax-exempt and, at that time, all savings bonds had a fixed maturity date after which interest ceased: but all U.S. savings bonds are encashable on demand or short notice. By offering this variety of securities, the Treasury satisfied the needs of the non-bank investor and, such was market demand, built up a balanced debt structure.

The third problem, that of the pattern of interest rates, was not seriously tackled. This problem more properly belongs to the chapters dealing with the reconversion period, but can be mentioned here as an explanation of the peculiar condition of the Reserve System portfolio towards the end of the war. Reserve Banks had to buy up large quantities of government securities throughout the war period—not so much to support the growth of bank deposits (excess reserves existing at the beginning of the war and freed by the legal reductions in New York City and Chicago were sufficient for this purpose up to the middle of 1944), but to support a very rapid growth in circulating currency. We have seen that, in late 1942, the System bought all kinds of securities; but thereafter it bought almost exclusively Treasury bills and certificates —Treasury bills being the majority. The System actually sold bonds against a rising market and, by 1945, had little ammunition left in this respect. By the end of the

war the System came to own nearly three-quarters of the entire Treasury-bill issue of $17 billion, while over 85 per cent. of Reserve Bank holdings of government securities matured within twelve months. This occurred in spite of the fact that the proportion of new floating debt to total new Treasury issues was cut back sharply in 1944 (to 24 per cent. from 43 per cent. in 1943 and 49 per cent. in 1942). The unbalanced portfolio of the Reserve System simply reflected the fact that liquidity-preferences, particularly those of the commercial banks, were declining somewhat faster than the Treasury, by varying the supply of new issues, could deal with; or faster than considerations of post-war banking liquidity, debt charges, and debt structure would allow the Treasury to deal with. The unloading of short-term securities on to the Reserve System, provided the reserves so supplied were necessary to offset currency flows or to support the higher level of deposits which was a consequence of war-time government finance, was not necessarily objectionable—that was, after all, what, among other things, short-term bank assets were for, even though large-scale dumping of bills revealed an anachronistic spread of ½ per cent. between the three-month and one-year yield. Indeed, had the Reserve System been constantly obliged to support the bond market, there would have been revealed either a serious misjudgement on the part of the Treasury or a widespread public distrust of the credit of the United States Government. But if the unloading of short-term securities were to provide an opportunity for the banks to participate in new issues indirectly, or to put strong downward pressure upon medium- or long-term bond yields, then the practice becomes disruptive and objectionable, as will be seen later. Furthermore there is little that can, in war-time, be done to stop such practices, unless the structure of rates is changed or unless the authorities capitulate to the market by offering unlimited quantities of bonds, or unless some measure for directly controlling banking

assets, after the British fashion (i.e. Treasury deposit receipts), is adopted.

In the appendix to this chapter Tables I to V show both the expansion of the debt by type of security and the absorption of that expansion amongst the various categories of ownership. It is not proposed to say much about these particular tables. Much might be said concerning the placing of the debt in 'firm hands' or otherwise, but it must be emphasized that this pattern of debt ownership and the debt structure which conforms to it cannot be regarded potentially as much more than a façade, a concession to an imagined state of affairs, an imagined normality, which never, throughout the whole period 1942–50, came nearer to reality than as a fear induced by official bluffing and by the possibility of a change of official policy. True, the commercial banks very properly possessed large quantities of short-term securities and short bonds which, together with an unusually[1] large volume of margin loans secured by government securities, came to something over 30 per cent. of their total assets. True, insurance companies, savings banks, and others absorbed large quantities of long-term bank-ineligible bonds as was proper for long-term savers who were traditionally expected to sacrifice liquidity to income. True, again, a large non-marketable debt had been created, over 80 per cent. of which was, as a matter of fact, savings bonds whose owners were supposed to hold till maturity, while, appropriate to times of prosperity and increasing incomes, the government trust funds[2] had been able to accumulate large surpluses which were invested in special issues. But much of this imposing structure was based merely on the fact that the Treasury chose to offer various pieces of paper to various investors with various restrictions on, and nominal differences between, the several classes of paper. By bowing to the

[1] Unusually large compared to peace-time. Experience during the First World War was similar.

[2] Social security funds, &c., administered by Federal government.

convenience of each investor class, borrowing from tradition, and taking what advantage it could of remaining intersecurity liquidity-preferences, the façade of orthodoxy was built up. If, in the foreseeable future, all securities could be turned into cash at par or above, the structure did not of itself mean very much or, to be more exact, the meaning of the structure, the reality behind the façade, depended entirely upon the actions of debt owners (whether, for any reason, they chose to hold or sell) and *not* upon those traditional facts of market life which such a structure was supposed to reflect. For example, if insurance companies were in fact to treat their long-term government securities as long-term, relatively illiquid investments to be held near to maturity, whether or not they were always marketable at par or above, then the issue of such bonds to them might make sense, regardless of official policy towards bond prices. If, however, such investors did not so regard a substantial portion of their long-term government bonds, then their holdings of, for instance, 1967–72 bonds, simply reflected a penchant on the part of the Treasury for maintaining a polite fiction that there was some important difference (other than that of interest payment) between a bond dated five years, a bond dated twenty-five years, and a bill dated ninety days. The story of market policy during the post-war years seldom departs from this peculiar situation. 'Was it a mere façade, or was it not?' was the question to which the authorities tried to avoid a final positive answer, even though their actions continually spelt 'façade'. So we will not refer further to these tables. They are there to give an idea of the magnitudes involved, to corroborate in general fashion, what has been said regarding war-debt policy and what has been said regarding the accumulation of short-term securities by Reserve Banks. More detailed consideration of what was going on in the market is reserved for later chapters.

Discussion of what can be called the 'liquid asset'

problem thus rather comes down to the trite remark that liquid assets had expanded enormously, and faster than incomes. Quantitative statement of the problem is inevitably misleading, both on account of the fact that 'liquid asset' cannot adequately be defined, and because the novelty of the situation precludes one from assessing the gravity of the problem by reference to quantitative magnitudes. Granted continual support of government-security prices, and granted the very large holdings of savings bonds, time deposits, &c., one could certainly say that future levels of economic activity, or degrees of inflationary pressure and so forth, would not, for a considerable period, be affected by a *lack* of disposable liquid assets. One could also say that inflationary forces would be bolstered, and, in emergency, dangerously increased, by the existence of this huge volume of Treasury obligations or their counterparts (e.g. savings deposits, insurance policies, &c.). But one can say little more, for the reality of the problem depended upon what the various holders of government securities decided to do with their assets during the coming years. It is to the marginal movements in liquid-asset holdings, and their effects upon the credit supply, to which main attention must in future be given.

However, even though the general liquidity of the public may only be described as 'enormous', the changed position of commercial banks can be discussed more fully without spurious precision. Tables VI and VII of the appendix to this chapter show the change in the position of all member banks between April 1942 and June 1945. Treatment of member banks as homogeneous entities conceals the fact that there was a considerable geographic shift of deposits during the war. War-time industrial growth in new areas, and the advent of general prosperity, drew money away from the financial centres and enabled certain classes of bank to experience a much greater increase in deposits than others. The greatest expansion occurred in

the south and west relative to the rest of the country, while country banks grew relatively to city banks and small relative to large.[1] The importance of this lack of homogeneity is twofold. Firstly it represented a source of potential strain on the banking system should the movement of deposits prove temporary—even though the losing banks might have no difficulty in meeting a reverse movement to that of war-time, they might, being small banks, become restrictive and cause localized credit stringency. Secondly, since other outlets for funds were almost non-existent, those banks whose liabilities had expanded by, for instance, 200 per cent. or more (as had 40 per cent. of member banks whose deposits were, in 1943, $5 million or less) had experienced a much greater increase in that proportion of their assets which consisted of government securities. Further, such banks, owing severally to the greater proportion of their time deposits, their remoteness from money markets, a desire to maintain an adequate earnings ratio in face of rising costs,[2] and, possibly, due to less inherent caution, had bought relatively more bonds than had other banks. From these considerations two consequences follow: firstly that the essentially more unstable sector of the banking system was more interested than the remainder on the maintenance of the $ value of its investments, and secondly that the desire of the banks as a whole to buy bonds rather than Treasury bills or certificates, a desire which was to prove of great market importance, was assisted by the fact that deposits shifted in favour of those banks whose desire was likely to be greatest. This shift proceeded independently of the Treasury's loan drives and involved considerable market activity in between such drives. In the post-war years no reverse movement of deposits, on a significant scale, took place, but the other

[1] See 'Distribution of war-time Deposit expansion', *Federal Reserve Bulletin*, 1945, p. 101.

[2] 'Full employment' effects on, for instance, clerical salaries were pronounced.

consequences of the war-time shift are of practical importance both for market happenings and for official policy.

To return to the position of member banks as a whole—the existence of non-member banks, holding up to 15 per cent. of total deposits, does not materially alter the picture—the striking feature of the change in asset composition is the decline in the proportion of risk assets. Although total loans increased by nearly $3 billion—a trifling amount compared to the increase in government securities held—this is more than accounted for by a rise in virtually riskless loans to the security markets (mainly secured by government obligations). Other types of loan generally declined during the period (Table VII). This process, along with a slight decline in 'other' investments and a rise in capital accounts, increased the ratio of capital to risk assets from 26 to 37 per cent. By this criterion alone, therefore, the banks were in a strong position, but, it must be remembered, the ratio of capital to total assets had decreased sharply—an indication that the probable magnitude of post-war loan expansion might soon bring the capital structure of the banking system to a condition of weakness. The question of capital and the treatment of all government securities as riskless (i.e. free from credit risk) raises a further question concerning the tremendous increase in government-security holdings. Much discussion has arisen concerning the supposed illusion suffered by bankers regarding the feared depreciation of the market value of government securities.

Those who have stressed the illusory nature of the problem, have made particular reference to the support given to the illusion by conventional accounting practices. The 'illusion' such people are talking about seems to be the illusion that banks and others would be made 'worse off' by a rise in interest rates. But the 'worse off' under discussion may not, as is sometimes the trouble with other uses of the expression, be the same 'worse off' as bankers

are talking about. Questions of liquidity do not easily fit into criteria of 'better or worse off' and it is not sufficient to accuse a banker of suffering from an illusion without bringing in such questions of liquidity which are of the essence of fractional reserve banking. Under conditions of economic calm whose continuance may confidently be predicted, depreciation of the market value of government securities, the vast majority of which, in the case of banks, mature in ten years or less, may indeed be of little consequence to a wisely run bank. But in stormy conditions of great uncertainty, the situation is different, a bank[1] must be prepared for bad times, and the question as to whether its investment portfolio is showing a considerable book loss or not is important. This book loss may be concealed on the balance-sheet by valuation of government securities at par—which banks in the U.S.A. are permitted to do. But this is no comfort to a banker who is fearing withdrawal of large deposits by his largest—and most inquisitive—customers. It is still less of a comfort if, as is also the case, he is compelled by law to show on his balance-sheet any losses *realized* by the sale of depreciated investments. Reluctance to realize such losses, even in cases where reinvestment might be profitable, owing to fear of adverse reactions from deposit-holders who might look at their bank's balance sheet, means that a relatively minor depreciation can engender a most restrictive attitude among bankers. Thus although it is a fair presumption to say there is no credit risk involved in holding government securities, when attention is being paid to the adequacy of capital accounts, the liquidity risk is a real one, and the feared illiquidity of a large segment of bank assets that may currently be regarded as liquid can certainly not be dismissed as an illusion—the more so in conditions where reasonable stability in government-bond prices is dependent upon the maintenance of extremely low interest

[1] By the word 'bank' is meant 'bank in the U.S.A.'. The analysis hardly applies to the huge banking institutions of the United Kingdom.

rates by the central bank, whose withdrawal may lead to drastic falls in even the shorter bond prices.

However, such risk can only affect bonds, it cannot seriously affect short-term securities. Thus, while government securities had risen from 30 to 58 per cent. of total assets, nearly a quarter of those securities were bills and certificates, while over half the total matured within 5 years.[1] Given such holdings and given official policy (or even if not), the banks were extremely liquid by any standard and could be expected to desire less liquidity should the opportunity of acquiring more risk assets or less liquid, but riskless, ones arise. But here again, some offset is provided by the fact that cash reserves were unduly high in early 1942 and the gain in the proportion of liquid assets is to some extent offset by a fall in excess cash. On the liabilities side there is little to note save the emergence of a large item 'United States government war loan deposits'. This will be explained in Chapter V.[2] Finally, to complete these comments on Tables VI and VII, it must be pointed out that the reduction in commercial, &c., loans is the counterpart of the exceptional liquidity of business in general. During the war, business had no need to seek new bank loans, thanks to reasonable stability in the value and volume of inventory and to large-scale pre-payments for work done on government contracts. Not only that, but business had reduced its indebtedness to the banks in spite of the rapid rise in gross national product (from 126·4 billions in 1941 to 215·2 billions for 1945) and at the same time accumulated large holdings of government securities (Table II). Much of this accumulation, however, simply represented the investment of sums accrued for tax liabilities.

Before turning to the post-war period, reference must be made to the effects which the war had upon the basic

[1] Table IV; it is being assumed that the proportions applying to member banks are approximately the same as those applying to banks reporting to the Treasury.

[2] p. 64.

conditions in the security markets in general and upon the market in government securities in particular.

Upon the market in private debt the war had the familiar effect of reinforcing the downward trend of interest rates in that market and pushing such rates towards those prevailing in the government market. This was due both to the lack of new issues and to the desire of investors to increase their income beyond the level allowed by government securities. This latter force was strengthened by increased taxation of incomes relative to capital gains taxes and by the decreasing risk attached to medium- or low-grade bonds which resulted from increased prosperity and increased corporate liquidity (a consequence of war-time processes and, to some extent, of the relative increase of equity to indebtedness which followed from the rise in prices from depression levels).

The fall in bond yields did not at first spread to the yields obtainable on common stocks owing to market pessimism and to heavy liquidation of securities held by foreigners and appropriated by their governments. After 1942, however, pressure of foreign sales slackened (with the provision of lend-lease) and the market reacted to the monetary pressures associated with the war, if not to optimistic expectations of post-war profits. Thus while the Aaa yield fell from 2·8 to 2·6 per cent. during the war, the Baa yield fell from 4·3 to 3·6 per cent. and that on industrial common stocks from an average of $6\frac{1}{2}$ per cent. early in 1942 to 4 per cent. in mid-1945. Common stock prices reached a low point in 1942. Standard and Poor's combined index, 1935–9 = 100, averaged only 69 for the year—but thereafter rose steadily and stood at 121 in June 1945, dividends remaining stable throughout the war. The preference share index (on the same base) followed bond prices and rose steadily from an average of 162 for 1942 to 191 in June 1945. New issues, for new capital, of both bonds and stocks remained negligible throughout the war (in comparison with Treasury

borrowing), but beginning in 1944 the volume of refunding issues was very considerable, reaching $6·2 billion in 1945; many borrowers took advantage of the buoyant market, which was bolstered by certain happenings in the Treasury market, to adjust fixed charges, inherited from a past era of interest rates, to the new conditions. This refunding on a rising market gave a large volume of highly profitable business to investment bankers who further encouraged their actual or potential clients.

Mention of investment bankers and the profits accruing to dealers in new issues, on a rising market, raises the last point of this chapter. It is most important, in order to understand what, for example, lies behind certain policies advocated in later years by the Reserve Bank of New York in particular, to appreciate the changes wrought upon the American bond markets, especially on the government-bond market, by the reduction in interest rates to the low levels prevailing at the end of the war. Effects upon the private-bond markets are considered at a later stage and we shall only be concerned at present with a brief commentary upon the market in government securities.

This market, let it be said at once, is completely separate from the New York Stock Exchange. Government bonds were at one time bought and sold on Wall Street but now hardly ever. The market is an 'over-the-counter' market in which the dealers who make the market act as principals, buying and selling for their own account. Such dealers make their working profits on the spread between 'bid' and 'asked' prices, and from gains or losses on trading in a market in which the price of their wares changes daily. They are backed by their own capital and they finance a large proportion of their working portfolio by obtaining call loans from the large money-market banks. Such is the character of their business that these loans are obtainable either without margin[1] or with a very low one, and at low

[1] United States government securities are exempt from legal margin requirements.

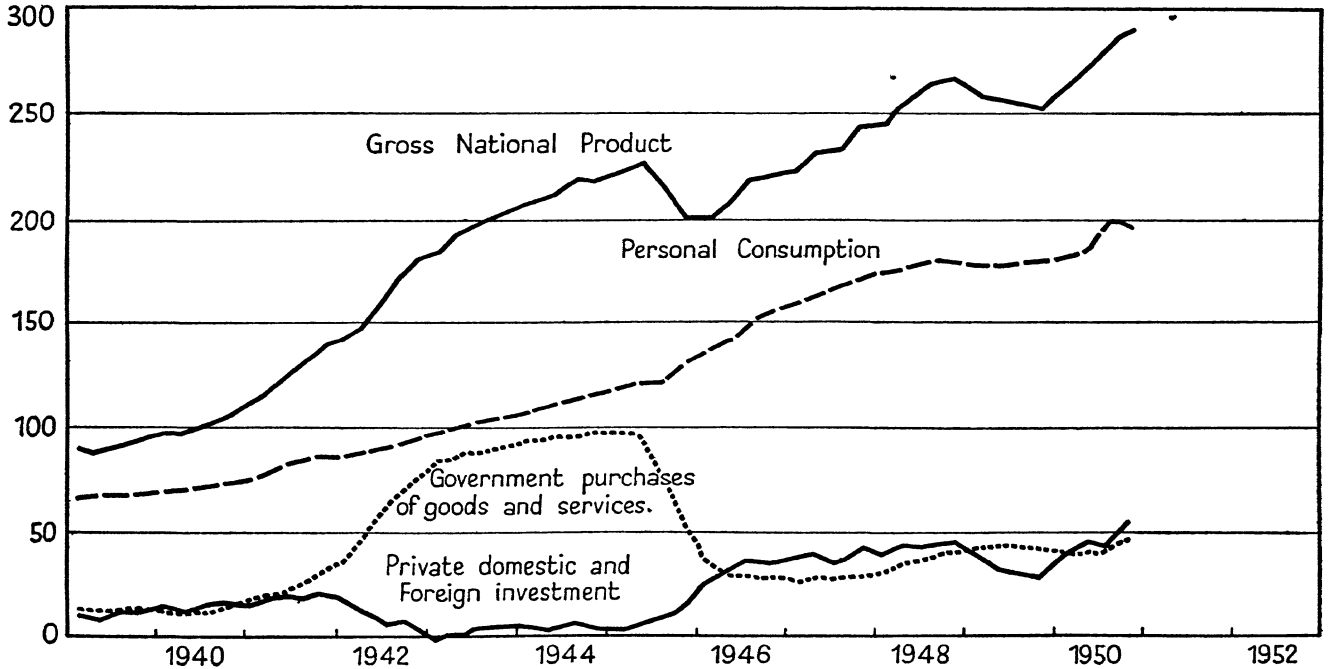
money-market rates. A dealer may make further profits by receiving more interest on his portfolio than he pays out to his banker. The actual physical market consists of a number of these dealers whose organization may be roughly compared to the discount companies of Lombard Street. Each firm of dealers is in telephonic communication with other firms and with actual or possible clients throughout the U.S.A. The market is highly competitive and, unless the whole price structure is demoralized, its money-market character is conducive to fine gradations of price on long-term bonds as well as on short-term securities. Over the whole market broods the Reserve Bank of New York, whose trading room resembles in some degree an air operations room, complete with 'controller,' telephonists, and blackboards. The Reserve Bank is in constant close touch with the market, or, to be more precise, with the dealers through whom Federal Reserve purchases and sales are made. These dealers, to whom the System is a valuable client, are required[1] to comply with certain demands as to financial soundness, size of business, and trade ethics, and to supply the Reserve Bank with the information it may require regarding the state of trade in the market. The authorities thus have very complete knowledge of what is happening from day to day and even from minute to minute and, in conditions where the System is an important buyer, can and do use their knowledge and power to prevent, as far as possible, indiscriminate dumping of securities on to the open-market account.

The rise of the national debt to a position of dominance over other debt entails, equally, a rise in the importance of this type of market among the security markets of the country. When this is coincident with the reinforcement of very low interest rates, it encourages great sensitivity to small fluctuations in the level or structure of rates. Sensitivity is imparted not only by the relative increase in the

[1] See *Annual Report of Board of Governors of Reserve System*, 1944, pp. 48–51.

importance of capital gains and losses, realized on sale of securities, which arises from the reduction in interest payments and the added importance of tax considerations as well as from those considerations mentioned on pp. 34–36, but also by the essentially money-market character of the trading institutions. If these changes encouraged sensitivity, the fact that government bonds actually came to be regarded, as a result of official policy, as money-market assets and, even, that other bonds came to fluctuate in price after the same fashion as government bonds, aggravated that sensitivity. A situation is reached whereby a change of policy may break up this 'money-market' in bonds, and, quite apart from liquidity-preference considerations mentioned in the previous chapter, bring about a state of extreme disorder. Nevertheless, if sensitivity be not too extreme, small fluctuations in bond prices may reflect a change in the availability of credit not usually regarded as possible without far wider fluctuations. This was the state of affairs emerging at the end of the war.

Our survey of the effects of the war is now as complete as space and patience allow, and it is possible to move on to the post-war period.



U.S.A. Gross National Product, 1939–1950

FIG 1. Seasonally adjusted quarterly totals at annual rates

TABLE I. GROSS DEBT OF THE UNITED STATES GOVERNMENT, 1941–5

$ billions *Source: Federal Reserve Bulletin*

End of month	*Bills* and certificates*	*Notes**	*Bonds**	*Savings† bonds and notes*	*Special issues*	*Guaranteed‡ securities, &c.*	*Total§ gross direct debt*
Dec. 1941 .	2·0	6·0	33·4	8·8	7·0	6·8	57·9
,, 1942 .	17·2	9·9	49·3	21·8	9·0	5·1	108·2
,, 1943 .	35·9	11·2	67·9	36·6	12·7	5·6	165·9
,, 1944 .	46·8	23·0	91·6	50·9	16·3	3·2	230·6
June 1945 .	51·2	23·5	106·4	56·2	18·8	2·7	258·7

* Marketable issues.
† Including adjusted service and depositary bonds (a minor quantity).
‡ Including non-interest-bearing debt.
§ Does not include guaranteed securities (a minor quantity from 1944 onwards).

TABLE II. MATURITY DISTRIBUTION OF UNITED STATES GOVERNMENT MARKETABLE BONDS, 1941–5

Par value. $ billions *Source: Federal Reserve Bulletin*

End of month

	Dec. 1941	*Dec. 1942*	*Dec. 1943*	*Dec. 1944*	*June 1945*
0–10 years. .	11·0	22·9	36·9	51·9	57·1
Over 10 years .	22·3	26·4	31·1	39·7	49·4

TABLE III. ESTIMATED OWNERSHIP OF UNITED STATES GOVERNMENT SECURITIES, 1941–5

Par. value $ billions *Source: Treasury Bulletin*, Feb. 1951, p. 35

End of month	*Total Federal securities**	*Banks*		*Held by non-bank investors*						
		Commercial banks	*Federal Reserve Banks*	*Individuals*	*Insurance companies*	*Mutual savings banks*	*Corporations*	*State, local, &c.*	*U.S. Govt. agencies and trusts*	*Miscellaneous investors†*
June 1941	55·3	19·7	2·2	11·2	7·1	3·4	2·0	0·6	8·5	0·7
June 1942	77·0	26·0	2·6	17·8	9·2	3·9	4·9	0·9	10·6	1·1
June 1943	140·8	52·2	7·2	30·9	13·1	5·3	12·9	1·5	14·3	3·4
June 1944	202·6	68·4	14·9	46·0	17·3	7·3	20·0	3·2	19·1	6·4
June 1945	259·1	84·2	21·8	58·9	22·7	9·6	22·9	5·3	24·9	8·9

* Includes guaranteed securities.
† Includes savings and loan associations, non-profit institutions, corporate pension funds dealers and brokers, foreigners, and international institutions.

TABLE IV. TREASURY SURVEY OF OWNERSHIP OF MARKETABLE PUBLIC DEBT (FEDERAL GOVT.)

Change in Bank Holdings, 1941–5

Source: Federal Reserve Bulletin

End of month	*Federal Reserve Banks*					*Commercial banks*					
	Total	*Bills*	*Certificates*	*Notes* and bonds 0–5 years*	*Bonds over 5 years*	*Total*	*Bills*	*Certificates*	*Notes and bonds 0–5 years*	*Bonds 5–10 years*	*Bonds over 10 years*
June 1941 .	2·20	..	..	0·95	1·23	19·0	1·1	..	4·3	3·4	6·1
,, 1942 .	2·64	0·24	0·07	0·87	1·46	24·9	1·6	2·0	8·2	5·0	8·3
,, 1943 .	7·20	3·80	1·10	1·40	0·90	48·7	6·5	9·8	13·2	10·1	9·0
,, 1944 .	14·90	8·90	3·40	1·50	1·12	63·5	4·9	15·0	17·4	18·9	7·3
,, 1945 .	21·80	13·00	6·00	2·10	0·75	77·5	2·9	16·8	21·8	29·1	6·9

* All Notes and bonds classified by time to final maturity.

TABLE V. TREASURY SURVEY OF OWNERSHIP OF MARKETABLE PUBLIC DEBT (FEDERAL GOVT.)

Increase in Non-bank Holdings, 1941–5

Par value. $ billions

Source: Federal Reserve Bulletin

End of month	*U.S. agencies and trusts*		*Mutual savings banks*		*Insurance Co's.*		*Others*		*Total non-bank*	*Total marketable*
	*0–5 years**	*over 5 years*	*0–5 years*	*over 5 years*	*0–5 years*	*over 5 years*	*0–5 years*	*over 5 years*		
June 1941 . .	0·2	2·2	0·4	2·9	0·5	6·3	1·6	8·7	22·9	44·1†
,, 1944 . .	0·3	4·3	0·6	6·6	1·4	15·1	16·7	18·2	63·2	141·6
,, 1945 . .	0·3	5·8	0·6	8·8	1·4	19·5	18·9	26·7	82·1	181·4

* Years to final maturity.

† Totals and component figures include guaranteed securities.

TABLE VI. CHANGE IN ASSETS AND LIABILITIES

All Member Banks, 1942–5

$ billions *Source: Federal Reserve Bulletin*

Items	*30/4/1942*	*Per cent.*	*30/6/1945*	*Per cent.*
Assets				
Reserves with Federal Reserve Banks	12·7	18·9	14·8	11·7
U.S. Govt. securities	20·4	30·3	73·2	57·9
Other investments	6·0	8·9	5·6	4·4
Loans	17·9	26·5	20·6	16·3
Other assets (cash items in collection, &c.)	10·4	15·5	12·2	9·6
TOTAL	67·5	100·0	126·4	100·0
Liabilities				
Demand deposits: total	48·9	72·5	96·6	76·4
1. Individuals, partnerships, and Corporations	32·6	48·3	57·4	45·4
2. U.S. Govt. war-loan deposits	2·2	3·2	21·7	17·2
3. U.S. Govt. other deposits			0·25	0·2
4. Interbank	9·7	14·3	11·1	8·7
5. Other (state, local, and foreign, &c.)	4·5	6·7	6·1	4·8
Time deposits	12·1	17·9	21·8	17·2
Capital accounts	5·9	8·8	7·3	5·8
Other liabilities	0·5	0·8	0·78	0·6
TOTAL	67·5	100·0	126·4	100·0

TABLE VII. ANALYSIS OF LOANS

All Member Banks, 1941–5

$ billions *Source: Federal Reserve Bulletin*

Loan category	*31/12/41*	*per cent.*	*30/6/45*	*per cent.*
1. Commercial (including open-market paper)	8·67	48·1	7·09	34·5
2. Agricultural	0·97	5·4	1·13	5·5
3. Real estate	3·49	19·4	3·25	15·8
4. Consumer	3·69	20·5	1·69	12·7
5. Miscellaneous			0·93	
6. Security trading	1·19	6·6	6·50	31·5
TOTAL	18·02	100·0	20·59	100·0

PART II

THE RECONVERSION PERIOD

JULY 1945–JUNE 1946

IV

GENERAL SURVEY

BEFORE considering the monetary problems of this period, it is necessary to survey the 'real' background against which they arose. In so far as the monetary authorities attempted to achieve a position of neutrality as regards the 'real' situation, this separation, in narrative, between the two is justified, both on account of the fact that the 'real' situation, until late 1948, remained inflationary and because the attainment of neutrality is more associated with the technical market situations than with the outside world. This is particularly true of the reconversion period, during which the authorities grappled with a monetary problem whose presence had very little direct, day-to-day, connexion with happenings outside the market.

In the U.S.A. and elsewhere it was, and is, customary to divide a post-war period into three parts and to consider three sets of problems. Initially there was the problem of reconversion, or of the 'impact effect' of the cessation of hostilities—the unwinding of the peculiar war-time pattern of production and employment, a large-scale redeployment of labour and resources back to peace-time uses, and the restoration of the budget to a less extraordinary position. This operation was regarded as essentially similar in type to the former process of war mobilization and demanded to a varying, and diminishing, degree the suspension of 'ordinary' business, monetary, and fiscal practices and, in their place, a temporary adaptation of war-time agencies of control to the needs of reconversion.

Successful 'remobilization' led directly into a second period during which the productive machine would have to satisfy the war-accumulated wants of the consumer, the deferred demand for capital equipment, and very likely, owing to the strong dynamic influences of a war period superimposed on previous under-utilization of resources, would have to meet the needs of an economy which desired to grow in wealth, over and above pre-war standards, at a very rapid pace. This latter factor demanded a period of extremely high fixed investment at a time when the capacity of the economy was already strained by replacement, re-equipment, re-clothing, &c., not to mention the abnormally high level of government spending (as a proportion of the national product compared to pre-war) and, in the American case, an intense reconstruction and relief demand for exports side by side with a low level of imports.

In countries where war damage was considerable, the war period of maximum length, the economic organization disrupted, and the foreign balance under heavy adverse pressure, the period of reconversion and that of reconstruction both demanded the use of 'extraordinary' expedients—sometimes, depending upon political circumstances, of a more or less permanent character. But in, for instance, the U.S.A., the need to prolong an apparatus of direct controls beyond the reconversion period was not an obvious one and, indeed, the general trend of opinion was in favour of abolition as early as was politically (if not economically) opportune. Granted a successful reconversion—an unsuccessful one could bring a sharp inflation and a quick collapse—the country would then enter a period of inflationary pressure, a period of unknown duration which could at best continue until the war-engendered forces of rapid growth (to some extent, and for a short period, self-perpetuating in the post-war period) had worked themselves out. This period would either be assisted and prolonged, or else brought to an abrupt and

premature conclusion, by the unprecedented degree of liquidity present in the economy following the expansion of cash and liquid assets, relative to incomes, during the war period. Avoidance of an abrupt conclusion depended upon the productive capacity of the economy, the 'restraint' of business men and commodity traders, and—of equal importance—the application of careful fiscal and monetary policies. Eventually a third stage would be reached known as the 'peacetime normal', when the country had, so to speak, digested the war. Little could be said about this third stage, but considerations of past experience and the writings of 'new' economists pointed to chronic deflationary tendencies, and a degree of unemployment substantially higher than that to which the country had become accustomed during the abnormal inflationary period. Whether one regarded this as a reappearance of the business cycle, or as a secular deflationary trend, or as both—and both it was likely to be—the problem would be raised, in practical form, of maintaining a high and stable level of employment (as a percentage of an increasing labour force) or, if one prefers, a steady rate of growth of production at near-capacity levels. Solution of this problem involved the translation of 'unorthodoxy' to 'orthodoxy', i.e. full-employment programmes, and, possibly, an acute political controversy so engendered.

Looking back to 1945 from 1951, reference to the 'third stage' may seem somewhat 'previous'. But in August 1945 the outlook was obscure and forecasts conflicting; nobody knew either how successful the reconversion would be nor how long the subsequent inflationary period was likely to last. Generally both the Administration and Labour, highly influenced by the experience of the 1930's and by the 'new economics', inclined to a pessimistic view of the prospects and to an early need for 'full-employment' programmes. 'Business' and 'finance', on the other hand, took an optimistic view of the potentialities of the situation combined with a fear of excessive inflation.

Since a resurgence of unemployment on a scale familiar in the 1930's was widely feared, notably by Labour and by certain circles in Washington (the War Manpower Commission forecast 6 million out of work by Christmas 1945), we may start by considering developments in this field during the reconversion period.

Reconversion had in fact begun before the end of the Japanese war, having been set in hand as early as April. The index of factory employment fell from 157·6 in April to 145·5 (seasonally adjusted index 1939 = 100) in July, while in August average hours worked per week in manufacturing industry fell abruptly from 44·0 (July) to 40·7. At the close of the war the 'civilian labour force', which is defined as 'those in work, temporarily not working but with a job, and not working but looking for work', and obtained by means of monthly surveys, amounted to approximately 54 millions, of which upwards of 9½ millions were engaged in agriculture and 1 million unemployed. 12½ million people were in the armed forces, of whom 10 millions could be expected to join the civilian labour force during the first twelve or fifteen months of peace. Concurrent with this influx of labour, withdrawals, of up to 6 millions or more, were to be expected by those people whose presence in the labour force was due to the special circumstances of war.[1] Whatever happened, frictional unemployment was bound to increase beyond the low war-time level, both due to reconversion and to the abolition of manpower controls in August. As to what in fact happened during the ensuing twelve months, it is statistically difficult to say owing to the definition of 'labour force' and 'unemployment', &c., used by the Bureau of Labour. This tends to mask a heavy increase in unemployment, of a kind, during this period, but no doubt reflects accurately enough what might be called 'subjective' unemployment, i.e.—whether people considered themselves unemployed, or bothered if they

[1] *Vide* 'Employment situation at end of war', *Federal Reserve Bulletin*, 1945, p. 855.

were. In fact, the figures of actual working employment were no doubt swollen by the inclusion of those temporarily laid off or hired in anticipation of work, while the total figures of the labour force were diminished by the retirement of war workers and the taking of extended holidays. The 'total labour force' remained approximately constant until January 1946 when pressure of returning servicemen began to outweigh retirements. (This pressure, combined with the normal increase due to population growth, raised the total figure to 60 millions in July 1946.) Unemployment, strictly defined, rose to 1·75 million in autumn 1945, to 2·7 millions in January 1946, and had fallen to 2·3 millions in July—a figure which was to remain typical until the 1949 recession; it represented $3\frac{1}{2}$ to 4 per cent. of the labour force and was regarded as the peace-time full-employment minimum. Subsequent to July 1946, until the 1949 recession, the Bureau of Labour estimates gave satisfaction, 'unemployment' so defined, coinciding, in those years of prosperity, with other ideas as to what constituted unemployment.

The adjusted index of factory employment tells a slightly different story—not surprisingly considering the strain of reconversion and the absorption of labour into 'services', &c., depleted during the war. This index fell from 145·5 in July 1945 to 128·1 in December but rose again to 140·6 by July 1946 (in durable-goods industries from 195·2 through 141·2 to 161·2, but in non-durable-goods industries from 117·4 through 117·8 to 125·0). Average hours worked in manufacturing industry, after the initial drop, remained at approximately forty per week. The employment picture is thus one of successful redeployment and the statistics are fortified by the fact that there arose no complaints about the level of unemployment—on the contrary, business men complained of a shortage of labour, and the trade unions were able to win, though not without some recourse to strikes, a substantial increase in wages.

The onset of this first round of wage increases was

hastened both by official approval on the part of the Administration and by a sharp reduction of earnings in the durable-goods industries. This reduction was due to the fall in hours worked which followed the end of the war. Wage increases were fought by managements, who objected to being squeezed between rising costs and fixed controlled prices. High profits were indeed necessary for the finance of new investment and the expenses of reconversion—in spite of the abolition of the excess-profits tax and provisions for tax refunds to offset reconversion losses —unless liquid reserves were to be heavily drawn upon. In the spring of 1946 the authorities gave way, the Office of Price Administration abandoned '1935–9' as its criterion of reasonable profit, price ceilings were raised, and the resistance to wage increases speedily collapsed.

Owing to these wage increases, to the maintenance of a high level of employment, and to heavy government disbursements to demobilized servicemen,[1] 'personal income' quickly recovered, and surpassed, its war-time level. From a seasonally adjusted annual rate of $174·2 billion in the second quarter of 1945 'personal income' fell to 168·6 in the fourth quarter but recovered to 175·0[2] in the second quarter of 1946. Tax reductions, moreover, lent support to disposable personal incomes, while personal consumption *expenditures* steadily increased throughout the period, from an adjusted annual rate of $123·3 billion in the third quarter of 1945 to 142·3 in the second quarter of 1946, along with a steady reduction in personal savings from artificial war-time levels to the equally artificial early post-war levels. Movement in the other elements of gross national expenditure, which declined from an adjusted annual rate of $225·0 billion in the second quarter of 1945 to one of 205·6 in the second quarter of 1946 (through

[1] Government transfer payments (adjusted annual rate) $4·2 billion in second quarter of 1945, $12·0 billion in first quarter of 1946.

[2] Average hourly earnings in manufacturing industries were 103·3 cents in July 1945, 98·5 cents in Oct. and 105·8 in Apr. 1946.

a trough of 199·7 in the first quarter of 1946), was marked by a rapid reduction of government purchases, a sharp increase in gross private domestic investment, and the re-emergence of substantial net foreign investment (the export surplus during the war being subsumed into 'government expenditure', the foreign investment figure had fallen below zero in the last two years of the war). Government purchases were running at an adjusted rate of $97·3 billion per annum in the second quarter of 1945 but had fallen to one of 55·2 billions in the last quarter of 1945 and to 29·9 billions in the second quarter of 1946. Gross private domestic investment rose from a rate of $9·9 billion per annum in the second quarter of 1945 to one of 28·1 billions in the second quarter of 1946—inventory accumulation commencing in the new year and further swelling the rapidly increasing gross total. Corporate profits, after tax, fell from an adjusted annual rate of $10·5 billion per annum in the second quarter of 1945 to one of 5·4 billions in the fourth quarter but rose rapidly to 12·8 in the second quarter of 1946. These figures[1] merely lend some sort of quantitative authenticity to assertions about the process of reconversion, but are not of themselves much assistance in tracing the emergence of an inflationary situation. For that task we must turn to prices and production, if not to the monetary situation.

In August 1945 the Administration set its somewhat unsteady post-war course by dismantling a substantial portion of the apparatus of controls. All manpower controls were removed and, except for a few commodities of exceptional scarcity, almost all physical commodity controls. Consumer rationing of petroleum, and some foods, was abandoned. The array of price controls was, however, retained almost intact and, shortly afterwards, extended to a number of consumers' durable goods whose production had been suspended during the war. In consequence, prices

[1] The revised series of national income statistics (*Survey of Current Business*, July 1950) are used throughout this book.

remained uneasily steady, pressure on raw material supplies being also temporarily held in check by the reconversion pause in production and the running down of stocks.

The retention of price control was not intended as a complete anti-inflationary safeguard—such a task was realized to be beyond the scope of price control alone—but rather as an attempt to secure an orderly and steady inflation (if there was to be inflation, uncertain at the time) unmarred by violent price inflation of certain commodities. The danger in the immediate future lay in bottlenecks and frictions, in a distorted productive system failing to adapt itself smoothly to very strong peace-time demand, in a scramble to build up inventories on the part of optimistic capitalists, and in the resulting rapid price inflation in certain sectors, built up on speculative positions, speedily giving way to a general collapse. Further, the maintenance of food price controls and, if need be, food rationing, would do something to restrain the pressure of rising wages.

The index of wholesale commodity prices only rose by 1 point from July to December 1945. Relaxation of price ceilings, conceded in the spring in face of the critical situation of industrial unrest, changed this picture, and the index rose 7 points to 113 (1926 = 100)[1] from January to June 1946. By June, the continued existence of the Office of Price Administration had become the subject of strenuous controversy. The Government had just emerged from an exhausting interference in industrial disputes that had culminated in its 'seizure' of the railways for a few days in May, and had already abandoned any pretence of price rigidity. Impressed, however, by the increasing volume of expenditure upon capital investment, exports, and consumption, and the practical impossibility of adequate fiscal and monetary disinflation at that time,

[1] The cost-of-living index rose 4 points to 133·3 (35–39 = 100) during the year June 1945 to June 1946.

the Government was loth to abandon the remaining controls—especially when the possibility of holding down wages in event of further price advances was extremely remote. The Opposition replied that the productive capacity of American industry was equal to the task, that inflation could only be cured by production, that too much concentration upon monetary factors led to the adoption of suppressive controls which only prolonged the disease, and that the maintenance of price control actively hindered the expansion of output, intensified bottlenecks, and was in any case proving impossible to administer without widespread evasion. Indignation was aroused by an exasperating 'shortage' of food—upon which subsidies were increased in the first half of 1946 to offset a rise in farm prices—and by the extent of the black market in food. The case for controls (and the Administration demanded, rightly enough on its line of reasoning, a restoration of physical controls as well as the prolongation of price control) was also greatly weakened by the fact that official forecasts of deflation had been proved completely false six months previously, confidence in the reliability of current forecasts of rampant inflation being severely shaken thereby (founded in current experience though they may have been). In a somewhat breathless atmosphere of approaching inflationary storm the Opposition gained substantially their point. The Price Control Act came up for renewal on 30 June and the 79th Congress replaced it with what was, in effect, an Act for the speedy dismantling of price controls and food subsidies. Mr. Truman defiantly vetoed the Act, demanding a proper act or no act, and all controls thereupon collapsed. Their collective phantom was to cast an ineffective and irritating shadow over the country for a short period, when a new Act was passed and signed in early August, but controls were effectively done to death on 30 July.

Production, however, was mounting rapidly, concrete evidence of what must have been one of the most successful

redeployments of resources in history. The Federal Reserve Board's index of industrial production (seasonally adjusted, 1935–9 = 100) fell from 210 in July 1945 to 162 in October, thereafter it moved erratically due to the widespread labour troubles, sinking as low as 152 in February, but by July 1946 had recovered to 172. Similarly, but more revealing, the sub-index for durable-goods production fell from 292 to 186, through 138 to 202, whilst that for non-durable goods moved from 165 to 154, through 167 to 157. Apart from the undoubted fact that the advance of production was held up in the first half of 1946, these figures must be treated with caution. The durable-goods index is heavily affected by quite abnormal production of armaments and their ancilliaries during the war, whilst the comparatively stable production of non-durable goods hides a substantial switch from, for example, military clothing and footwear to civilian goods. However, some measure of the extent of 'recovery' can be gained from the fact that production of iron and steel in July 1946 was a bare 5 per cent. below that of a year previously, whilst that of 'lumber and furniture' and 'stone, clay, and glass products' (i.e. mainly construction materials) was up approximately 20 per cent. Production of 'machinery' and transportation equipment (including aircraft) was down sharply, to levels approximately double those of pre-war, from the very high war-time levels. In view of subsequent production figures (e.g. a peak of 195 in 1948), the volume of production reached by July 1946 must be regarded as highly satisfactory. The production of non-durable consumers' goods was in fact nearly sufficient to satisfy existing demand, but that of durable goods—both producers' and consumers'—inadequate. The physical difficulties of reconversion in the durable-goods industries were of course far greater and the intense post-war demand far exceeded capacity. Shortages of basic materials—steel and construction materials—also quickly developed. Unlike 1918–21, however, and due in large degree

to the great increase in the power of organized labour that had taken place in the interim, the investment bottleneck did not produce so large a localized and distorting price–cost movement. Wage increases, beginning with concessions in the basic industries, spread very rapidly throughout the economy and helped to even out disparities in costs between capital- and consumption-goods production. To this factor must also be added those of business restraint and caution, the initial period of peacetime price control, the successful maintenance of farm incomes, and the greater availability of substitutes for scarce materials. Improvement in business method and technical ingenuity must have greatly increased the flexibility of the American economy and compensated, in some degree, for the shortage of materials and empty pipe-lines. Mention should be made of the high mobility of labour—amply demonstrated during the war, which witnessed extraordinarily large and unprecedentedly rapid migrations of population (notably to the Pacific coast), movements of a labour force generally imbued with the idea that increased production and higher productivity was the essential task to which the maintenance of adequate security and remuneration came a close but nevertheless definite second.

To conclude this chapter, reference must be made to a further powerful inflationary factor—foreign trade. As is well known, the early post-war years witnessed an unprecedented demand for goods *and* services from the western hemisphere, a demand that had to be satisfied if the war-disrupted economies of Europe and Asia were to be saved from famine, from inflation, and from a long period of intolerable economic misery. At the same time the supply of those goods (mainly raw materials) which the United States was accustomed to import was restricted by shipping shortages and the destruction of other supply facilities: this shortage was to some extent overcome by the use of synthetic substitutes (e.g. synthetic rubber), but

nevertheless effectively widened the gap between exports and imports, which had to be closed by gold movements and by the provision of dollar credits on a lavish scale (after the unexpectedly early termination of lend-lease). During the reconversion period, the export surplus was financed by the drawing down of foreign dollar reserves, UNNRA credits, Export–Import Bank credits, and, at the end, by the Anglo-American loan. The very heavy exports of food from the U.S.A. helped both to sustain farm incomes and also to drive up food prices later on to exceptionally high levels with important inflationary reactions upon wages (though with possibly deflationary effects upon other consumption). Heavy exports of manufactures and raw materials simply added to the general strain to which the American economy was being subjected, while the insecurity of the trade balance—largely dependent upon annual Congressional action—also raised fears of a sudden deflationary shock which, in conditions of high boom, might be sufficient to upset the expansionary movement. But in June 1946 the level of exports—intimately bound up with quasi-political foreign commitments—appeared likely to continue, or to rise, for at least another year.

It is now time to approach the monetary field, having noted the inflationary 'real' background of a highly successful reconversion.

V

MONETARY RECONVERSION: THE FIRST PHASE, JULY–OCTOBER 1945

§ 1. *Introductory*

AT the end of the war the Federal Reserve System was tied, somewhat uneasily, to its war-time master, the Treasury. As with many of the economic institutions and proceedings outside the Communist areas there could be noticed, or rather felt, a faint air of paradox, of transitory contradiction.

The System was powerless to stop a downward pressure upon bond yields, a pressure financed by the liberal exchange of its own credit for an increasingly embarrassing quantity of unwanted Treasury bills and certificates. Yet it was apparently unwilling, should this pressure be reversed or should the System somehow regain control, to countenance a significant rise in the yield. The System was anxious concerning the unpredictably inflationary effects of the very liquid condition of the public and the banks, yet fully aware of the strength given by such liquidity to the American economy should it ever, and few doubted that sometime it would, be confronted with deflation, or even a deflationary hiatus during reconversion. The paradox was not to be removed quickly; five years later the feeling was still very much present. Gone indeed was that brief classical age when the central bank aspired to a position resembling that of an economic emperor, an age presided over by the now almost mythical figures of Strong, Schacht, and Norman.

This and the following two chapters are concerned with the monetary and fiscal operations of the reconversion period: they are not concerned with the 'selective' fields nor with the prevailing opinions and thoughts—those

come later. They deal primarily with the operations in the national debt, a joint undertaking of the Treasury and the Reserve System. To understand the debt manipulation of this and other periods, it is first necessary to explain the budgetary position, analyse the budgetary concepts as used in the U.S.A., and analyse the banking significance of public-debt operations.

§ 2. *The Federal Budget*

The extremely rapid decline in defence expenditure has already been noted. This decline, was, however, subject to some offsetting influences; firstly, the decrease in revenue[1] due to tax reductions of autumn 1945, and to falling incomes, and, secondly, the increasing expenditure upon transfer payments, tax refunds, peace-time works projects, and relief exports. The deficit for the fiscal year 1945–6[2] was $22 billion, but nearly 19 billions of this was incurred in the first six months. During the tax-gathering season of late winter the Federal accounts actually went into surplus,[3] while for the first six months of 1946 the deficit was only 3·3 billions.

What, for present purposes, is a deficit or surplus in the Federal budget? We are not, be it emphasized, discussing the precise economic effects of the budget, but we are concerned with the funds provided by the fiscal authorities, out of current operations, for the repayment of debt. That being so, it is important to know where such funds come from. A budget surplus, as declared by the Treasury, is a 'true' surplus in the sense that there are no prior 'below the line' claims on it. If there is a 'Treasury' surplus, then funds are available, to that amount, for debt redemption. But there are also other sources of funds whose use, while not reducing the gross total of the debt, may nevertheless

[1] Revenue for 1945–6 at $43 billion was $3½ billion lower than that for 1944–5.

[2] The American fiscal year ends on 30 June.

[3] $240 million for the first quarter of 1946 compared with a deficit of $11 billion in the same period of 1945.

reduce the total of *marketable debt*. The first and most obvious of these latter sources is the sale of non-marketable securities to the public, i.e. savings bonds or notes, the net proceeds of which can be used to repay currently maturing debt. The total of government savings bonds outstanding increased by $850 million,[1] for instance, in the first half of 1946. The inflow of funds from this source continued steadily throughout the early post-war period. The second, and more important, additional source of funds is the current surplus of the Federal social insurance funds and other trust accounts and government agencies.[2] Fragmentary proportions of such funds are sometimes invested in ordinary marketable government securities but the great bulk of them are usually invested in special non-marketable securities issued by the Treasury for this purpose. By selling such 'special issues', as they are called, to its trust accounts the Treasury obtains control of this part of the trust surplus and, if the budgetary balance allows, can use it for the retirement of other debt. The net cash operating surplus of the trust funds and government agencies for the fiscal year 1946[3] amounted to no less than $4·4 billion, at least half of which accrued in the second half of the fiscal year, bringing the cash operating account of the Treasury practically into balance. That is to say, during the second half of the fiscal year the deficit on budgetary account was more or less met by borrowing from trust accounts and individual savers. Within six months of the ending of the war, therefore, the Federal

[1] Such a total includes currently accrued interest which is not paid out until maturity or encashment. This interest is an annual charge on the budget, like any other interest charge on the debt, but such budgetary funds can meanwhile be used for other purposes.

[2] The holdings of these trusts, agencies, &c., range in size from over $10 billion to, e.g., $20,000 (Panama Railroad Co.). The more important are: the Federal old-age and survivors' insurance fund, the unemployment fund, the Veterans' life insurance funds, the Civil Service pension fund, the Postal Savings system, the Railroad pension fund, and the Federal Deposit Insurance Corporation.

[3] Year ending 30 June 1946.

government had freed itself from recourse either to the banking system or to the open market in general, while nevertheless maintaining a level of expenditure over four times the 1939 level. In so far as it was spending savings upon current purchase of goods and services rather than using them to retire outstanding government debt, the 'public sector' might still be an inflationary factor, but it had ceased to be an engine of direct monetary expansion via the banking system.

§ 3. *The Mechanics of Repaying National Debt*

The monetary implications of repaying national debt depend firstly on the ownership of the securities retired, and, secondly, upon the type of money used. By 'monetary implications' is meant the effects which the immediate operations of repayment may be made to have upon the reserve position of the commercial (in practice *member*) banks and, but farther off, the effects of such retirement upon the monetary balance of the whole economy. Where the immediate operations are concerned, emphasis will constantly be placed upon the reserve position of commercial banks. Monetary processes, in the early post-war years, were viewed as factors affecting *reserves* rather than as factors affecting the *liquidity of earning assets*. This emphasis is made not only for the obvious reason that changes in reserves and changes in the availability of reserves, the sources of their supply and so forth, are analytically necessary for any technical explanation of changes in the quantity of bank money, but also for reasons of policy. The System persistently tried, during those early years, either to bring pressure to bear upon member-bank reserves, or to offset autonomous supplies of reserve money, by means of various expedients resorted to in a situation where straightforward open-market operations were not thought feasible. While, it must be admitted, official policy was generally directed at reducing the quite exceptional liquidity of the banking

system, this was a general, rather longer-term, aim. Short-run policies were in the main designed to force the banks to sell their liquid assets, in response to pressure upon their reserves (officially induced or not), *while preventing the banks from being supplied with reserves in any other way.* Only later in our period does the question of directly influencing the liquidity of bank assets in the short-run become important.

Before proceeding, it is also necessary to make clear what is meant by the word 'money'. There is firstly central-reserve money, that is to say 'Fort Knox', or that type of money of which the central bank is required to hold a certain percentage against deposit and note liabilities; central-reserve money is of no importance, as such, in our period, gold reserves being enormously in excess of legal requirements.[1] There is, secondly, reserve money: this constitutes the legal and excess reserves of member banks,[2] but such reserves are not the only 'reserve money' in existence. One can define reserve money as 'deposits at Federal Reserve Banks and any type of currency or metal which can be exchanged for such deposits': thus Federal Reserve Notes, and other currency (Treasury Silver Certificates for example) can be deposited with Federal Reserve Banks by member banks (and others who have accounts there) in exchange for deposit credits. Gold may also be so exchanged. Reserve money is created when the Federal Reserve Banks buy securities or grant loans, and, vice versa, may be destroyed. Thirdly, there is the familiar 'commercial bank credit', being simply the deposit liabilities of commercial banks. Such money is, of course, quite distinct from reserve money although it is changeable on demand *into* reserve money—either by a customer de-

[1] Generally the Reserve Banks held 50 per cent. of assets in gold certificates compared with a legal 25 per cent. ratio (lowered to 25 per cent. in July 1945 when Federal Reserve reserves did begin to get near legal minimum of 35 and 40 per cent. against deposits and notes).

[2] Deposits of members at Federal Reserve Banks; 'Cash in hand' does *not* count as legal reserve.

manding Federal Reserve Notes, or by him drawing a cheque which is paid into another bank, the transaction being completed by an inter-bank transfer of deposits at Federal Reserve Banks.

To enumerate three types of money is only to say how the term 'money' is to be used. It is not to deny that various other types of liquid assets—a wider generic term which itself includes 'money' as defined here—may commonly be regarded as money according to some subjective classification of liquidity on the part of their owners. In a context where this subjective type of classification is of primary importance, it is frequently the custom to include, for example, savings-bank deposits in the phrase 'money supply'. But it is well understood that money, in our sense, can be created in a way that other liquid assets cannot (except in so far as they are the counterpart of newly created bank money). An insurance company can lend money, to a house purchaser, which has been paid to it by a policy holder or obtained by sale of some asset previously acquired with such money. Similarly, a mutual savings bank or savings and loan association or (in the United Kingdom) a building society can lend money. The same applies to such institutions as a whole. But a commercial banking system, or a central bank, can lend money by the process of acquiring the asset offered (e.g. house mortgage, or government security, &c.) *without* at the same time liquidating some other asset or passing on money deposited with it. A net addition is thereby made to the supply of money (in any sense) and to the supply of 'money' in our sense. By an increased turnover of money-in-our-sense, or by a change in its use by one segment of the public relative to another, the 'supply' of money-in any-sense may indeed be increased and the volume of liquid assets grow larger. But since we are intimately concerned with net additions to, or subtractions from, the supply of money-in-any-sense that are effected by the banking system, it is better to restrict the use of the term

'money' to our sense and use the wider term 'liquid asset' in other contexts, whether or not such assets are popularly regarded as money. Increases in liquid assets that occur outside the banking system are simply a consequence of what the public does with money created by the banking system and the amount of work they make that money do; and there are good reasons for regarding such increases as logically distinct from those effected by the banking system alone.

Returning to the mechanics of national-debt repayment —the question 'What sort of money is used?' will first be considered. Debt is, of course, repaid in the first instance by drawing down the Treasury general fund balance. But the American Treasury maintains two kinds of bank balance; one with Federal Reserve Banks and the other with commercial banks. The first is reserve money, the second is not. Thus the repayment of government debt, if financed from the Treasury balance at a Reserve Bank, places reserve money in the hands of the owner of the security retired; if financed from Treasury deposits with commercial banks, it does not. The fact that the Treasury maintains these two types of balance is important. The account with Federal Reserve Banks is kept fairly stable in order to avoid the usual monetary difficulties inherent in the status of a central bank as the government's banker; but it is not kept as stable as, for instance, the public account at the Bank of England. Nor are the authorities averse to using this account for deliberate central banking purposes. The accounts with commercial banks are not kept stable. They are a means whereby large cash balances can be built up and run down without affecting bank reserves, and whereby seasonal changes in the budgetary position can be accommodated without changes in floating debt. At certain times, as will be seen later, this facility was, and is, of some importance from the viewpoint of monetary policy.

The second question about debt repayment is 'Who owns

the securities?'. There are three possible types of ownership—Federal Reserve ownership, commercial bank ownership, and non-bank ownership. If the securities are owned by the Federal Reserve Banks, then repayment must be paid in reserve money which may involve a reduction in commercial bank reserves. If the securities are owned by commercial banks, they may be paid off with reserve money (in which case the banks find a quantum of government securities replaced by reserves) or alternatively they may be paid off by, in effect, cancelling a quantum of Treasury deposits with those banks against an equivalent amount of government securities. If the securities are held outside the banking system then there will be a rearrangement of bank deposits, Treasury deposits going down and private deposits up; depending upon what funds are used for this, there may or may not be consequential effects on commercial bank reserves.

The points in the preceding paragraph may now be combined and the effect of debt repayment upon the reserve position of member banks then emerges. But first there is an additional complication to be considered. Under normal circumstances, all bank deposits of monetary significance are subject to legal reserve requirements. But during most of the war, and for some time after it, there was a very important exception to this rule. By an Act of Congress, dated 13 April 1943, the Federal Reserve Act was amended. The amendment stated that member banks were not required to hold reserves against deposits in so-called Treasury war-loan accounts. A war-loan account was an account opened by a bank in favour of the Treasury into which were paid subscriptions to war-loan issues made by banks themselves or by others. Such accounts were subsequently drawn down and the deposits found their way into ordinary accounts against which reserves had to be held. The existence of the war-loan account provision enabled the banks to subscribe to loan issues, or buy up securities in the market, during loan

drives, without obtaining fresh reserves: for, during such drives, the transfer of deposits into war-loan accounts liberated reserves. Since bank credit and circulating currency expanded steadily and rapidly throughout the war period, the war-loan account mechanism facilitated a spreading out of the necessary expansion of reserve money over the periods in between loan drives,[1] instead of concentrating it in the loan-drive periods (awkward for Reserve Banks and discouraging to individual bankers, whose reserve position would be under pressure during loan drives, which was not desirable). Having noted this complication, we can proceed. The permutations and combinations are many and can be enumerated as follows:

1. *The repayment of government debt held by the Federal Reserve Banks.* If payment is made out of the Treasury account at those banks, then investments and deposits of Federal Reserve Banks are cancelled, but there is no *direct* effect upon member banks (whose reserves may nevertheless have already been reduced by a rise in Treasury balance at Federal Reserve Banks). If payment is made from Treasury deposits with member banks,[2] then those banks lose deposits and an equal amount of reserves (cheques are drawn upon them payable to Reserve Banks) while the Reserve Banks lose investments and deposits as before. Repayment of debt owned by the central bank thus directly, or (via previous building up of a government account with the central bank) indirectly, extinguishes an equivalent quantity of bank reserves. If the repayment is made out of war loan accounts, the effect on the reserve position is maximum (deposits against which no reserves were held have to be wholly converted into reserve money).

[1] In the United States there were no marketable 'tap' issues, only a series of issues in 'drives'.

[2] The Treasury does not actually make payments out of these accounts directly but does so by transfers through its Federal Reserve account. Provided such transfers do not swell that account for a significant period, this point is of no importance.

If repayment is made from ordinary accounts the effect is not so severe (as up to 20 per cent. in reserve money was already held against such deposits).

2. *The repayment of government debt held by member banks.* If payment is made from the Treasury balance at Federal Reserve Banks, the member banks are paid in reserve money. They therefore lose investments and gain reserves, deposits remaining unchanged. The Reserve Banks only experience a shift in ownership of their liabilities. If repayment is made out of war-loan accounts, member banks lose deposits and investments, but, since they held no reserves against the cancelled deposits, they do not now find themselves with excess reserves. The effect is neutral. If repayment is made out of ordinary Treasury deposits with member banks, deposits and investments are cancelled, but this time reserves held against the cancelled deposits are freed and become 'excess'.

3. *The repayment of government debt held by non-bank investors.* If the investors are paid out of the Treasury balance at Federal Reserve Banks, they are paid in reserve money which they, in turn, pay into commercial banks. The latter, therefore, as a whole, gain deposits and an equal quantity of reserves. If the investors are paid from war-loan accounts, then bank deposits are transferred from accounts against which no reserves are required into those against which reserves have to be held. The banks as a whole thus have to obtain new reserves from somewhere (or liquidate loans, &c., reducing deposits).[1] If investors are paid from ordinary Treasury deposits, the effect upon the banks is neutral, they merely experience a shift in the ownership of their liabilities.

It will be seen from this analysis that much the same reasoning applies to any government expenditure paid out

[1] i.e. individual banks sell investments or call loans. If the Reserve System does not buy the investments sold, security prices fall sufficiently for the public to hold additional securities in lieu of bank deposits, such that total deposits are reduced to a level consistent with the reserve base.

of an accumulated balance (of one or other type), and that this reasoning can be used for analysing the *direct* banking repercussions of Treasury operations—which may, and do, involve a combination of the various possibilities outlined above, and which derive their significance from the fact that the monetary authorities may, and do, exploit these possibilities in the furtherance of their general credit policy. This apparatus is part of a much wider one explaining all the various ways and means by which the reserve position of member banks is affected—either by changes in the quantity and type of bank credit, or by changes in the supply of reserve money. It is convenient to hang such a general analysis on the debt repayment peg because the latter has *got* to be explained. The existence of non-member banks greatly complicates but does not materially alter the picture.

The place of debt repayment (and Treasury operations in general) in the monetary balance of the whole economy is familiar. Debt repaid from the cash account surplus of the Treasury—a surplus achieved by an excess of revenue plus social insurance savings plus small savings over total government expenditure—represents the passing on of 'savings' by the Treasury to the banking system and to others. Provided the securities repaid are not owned by Federal Reserve Banks, this process simply shifts bank credit from 'savers' (mostly compulsory) directly or indirectly into the hands of 'investors', 'hoarders', or even 'consumers'. When such savings are excessively deflationary, that is to say, when investment demand cannot absorb them, then their being passed on leads either to an increase in idle balances or to a slight rise in security prices (depending on central-bank operations, and on the degree of distress sales of securities by the public). In post-war inflationary circumstances repayment of government debt is a mechanical part of what has come to be known as 'fiscal disinflation'. If, however, the securities repaid are held by Federal Reserve Banks, then not only

are the savings extinguished but an equivalent quantity of bank reserves are also extinguished. Unless the central bank replaces those reserves, a contraction of bank credit over five times[1] the 'savings' passed on must ensue. In practice the central bank does replace such reserves, but the banks are put under pressure to induce such replacement.

Retirement by use of a Treasury cash surplus (as distinct from a budget surplus) has now been considered. Suppose, however, that debt is repaid from the proceeds of previous issues of *marketable* securities, or, what amounts to the same thing, assume a prolonged funding operation. Savings, or new bank credit (if banks subscribe directly or indirectly), or hoards, or all three are acquired by the Treasury. It may be supposed, in the case we are considering, that such savings have mostly been generated by very heavy deficit spending on the part of the government, combined with an enforced restriction of all kinds of private spending. What is to be done with such 'savings' if the government deficit is reduced and restrictions on the private sector removed? Granted that no severe restrictions upon the creation of new credit are contemplated and no adequate fiscal surplus yet possible, the only restraining action the authorities can take—direct controls apart—is to dispose of their hoard of savings-plus-new-credit in such a way as to restrain its final expenditure, that is to say, the hoard is passed on into active use with an eye to the general monetary balance of the economy—the aim being to restrain the excessive expansion of credit or, equally, the excessive use of existing credit. The simplest way of doing this would be the continued hoarding of the lot—forcing the banks to obtain fresh reserves in order to satisfy the monetary demands of an expansionary 'private sector'. But, besides being somewhat unorthodox, this would be unnecessarily expensive if the same effect, or better, could be achieved by a careful process of debt

[1] With American reserve ratios.

repayment which kept the reserves of member banks under continual pressure (when a sum of 20 billions is involved the saving, even at ½ per cent., is substantial). Further, when it is declared policy to place no general restriction upon the monetization of debt by the banking system, while nevertheless bewailing its presence, a reduction of the floating debt will reduce the liquidity of the banks' earning assets which, under the circumstances, is a desirable development. It will be seen from the analysis of debt repayment that, with due care, very large sums may be disbursed for repayment of debt while yet maintaining or initiating strong anti-expansionist pressure upon the banks by way of attrition of their primary and secondary reserves. The repayment of debt is thus not merely a question of 'passing on' savings but, according to the direct method of repayment, a significant ingredient of monetary policy.

§ 4. *The 'Pattern' under Stress*

It is now necessary, with the aid of the previous sections, to get down to the complex business of analysing the monetary process. The first piece of analysis may try the reader's patience, but its elaborations are meant to be expository. Rigour is relaxed in the analysis of subsequent periods. During this first period[1] the gross Federal debt increased by 2·8 billions to a new total of $260 billion, but this includes the receipts of the last week of the 7th War Loan. Subsequently there were only minor changes in the total. There was considerable shifting in non-marketable items, receipts from special issues and savings bonds being counterbalanced by encashments of tax and savings notes by businesses (possibly to meet actual or anticipated reconversion expenses as well as

[1] This and the two subsequent periods are those adopted by the Treasury, in its report for the fiscal year ending 30 June 1946, for its analysis of debt operations for the year. Owing to the intimate relationship between such operations and those of the central bank, these periods are also used here.

tax payments). A minor reduction in the marketable debt occurred (after the end of the 7th War Loan), due to an incomplete exchange of new for maturing securities. Three maturing issues of twelve-month certificates, and one of bonds, were refunded, in September, into three new $\frac{7}{8}$ per cent. twelve-month certificate issues. But regardless of the debt total, market activity was considerable. There are four forces at work: firstly, the increase in deposits subject to reserve requirements due to Treasury payments made out of its war-loan accounts, an increase heightened or offset by concurrent changes in the level of member bank loans to customers; secondly, the drain on bank reserves due to a continuing steady increase in currency in circulation and a minor decrease in gold reserves; thirdly, the desire of the banks to lengthen the average maturity of their investments; and fourthly, the willingness of the non-bank owners of bank-eligible bonds to sell their holdings to the banks at some premium. The first two forces compel a sale of short-term securities by member banks and, in the circumstances, their purchase by Reserve Banks. The second two factors dominate the prices of certain bank-eligible securities, account for certain changes in bank assets, and may cause further sales of short-term securities by member banks.

Deficit spending by the Government out of its war-loan accounts amounted to over $\$11\frac{1}{4}$ billion during the period. Most of this found its way into ordinary private accounts at comercial banks[1] while some (over a billion) was dispersed outside the banks in the form of currency. Concurrently, member banks bought an estimated net $\$1\frac{1}{2}$ billion of government securities from the public, while loans to their customers suffered an estimated net decline of $\$1{\cdot}7$ billion. The result of the above movements of reserve money and bank credit, and of other, minor, factors was an increase in deposits subject to reserve re-

[1] But not all into accounts at member banks: they are estimated to have received 10·8 billions (not allowing for currency outflow).

quirements[1] of $9½ billion. These figures are estimated from reporting bank figures, from fortnightly averages of all member-bank deposits, and from Treasury estimates of debt ownership. Complete accuracy is not claimed for them, nor are minor factors taken into account, but they are quite adequate for our purposes. The increase in net deposits was distributed as to $7½ billion into demand deposits and as to 2 billions into time deposits. Although war-loan accounts were drawn down over 11 billions, the Treasury still retained 11 billions in those accounts, at the end of October—a larger figure by 3 billions or so than at comparable times in the recent past. The deficit was beginning its sharp contraction. The decline in loans is due to repayment of loans for the purchase or carrying of United States government securities, slightly offset by an increase in loans to business (−2·3 offset by +0·6 billions —estimated for all member banks, assuming reporting banks in this respect a proper sample, i.e. that they had the same proportion of the two classes of loan in October as they did in July). The increase in loans to business—at an annual rate of 1·8 billions—represents the beginning of a post-war expansion, as business accumulation of reserves slowed to a halt and peace-time expenditure began. The decline in loans on government securities is a normal war-time process. Such loans, not subject to margin requirement, were built up during loan drives and run down subsequently, both by market dealers (due to a high level of market activity as owners of old securities unloaded for reinvestments in new issues) and by individuals who bought new issues on credit. The latter did this allegedly ahead of income but, when the process known as 'pattern playing'[2] had developed, more often in anticipation of a capital profit if they were to sell the securities

[1] Deposits subject to reserve requirements = all time deposits + net demand deposits. The latter equals gross demand deposits less cash items in process of collection, demand balances due from domestic banks, and U.S. Government war-loan deposits.

[2] For full explanation see pp. 74 ff.

shortly afterwards and repay the loan with the proceeds. This repayment of loans is, in fact, to some extent the counterpart of the estimated flow of $1½ billion of government securities into member banks from outside the banking system. There was also a minor increase in bank loans to consumers which, over this period, can be ignored.

The increase in demand deposits, according to the distribution of the increase among Central Reserve, Reserve City, and Country banks, was subject to an 18 per cent. reserve requirement, and that in time deposits to 6 per cent.[1] This gives us an increase (estimated) in required reserves of $1,470 million: the *actual* increase was $1,484 million (*vide* weekly figures of member bank reserves). But that is not the end of the 'reserves' story. Besides having to find $1,484 million of new reserves, the increase in circulating currency drained off another 1,100 millions which member banks had somehow to replace. Minor factors seem on balance to have helped. These are such factors as the Treasury balance at Reserve Banks, gold movements (minor just then), and changes in non-member clearing deposits at Reserve Banks; they are not always so 'minor', but they were at this time, and can be ignored. However, the main sources of reserve money which the member banks drew on were as follows:

1. Sales of short-term securities to the Reserve Banks	$1,480 million
2. Borrowing from Reserve Banks	$395 ,,
3. Drawing down of excess reserve balances	$681 ,,
Total main sources	$2,556 ,,
Total required main demands (above)	$2,584 ,,

The above process of acquiring new reserves, or utilizing existing excess reserves, was typical of the later inter-

[1] Member bank reserve requirements at this time were:

A. Against net demand deposits:	Central Reserve City banks	20 per cent.
	Reserve City banks	20 ,, ,,
	Country banks	14 ,, ,,
B. Against time deposits:	All member banks	6 ,, ,,

loan periods. On 31 October excess reserves were still over $900 million, and member-bank borrowings under $500 million, whereas in early July the former were abnormally high and the latter negligible. The main weight of monetary expansion, in fact, fell upon the open market operations of Reserve Banks rather than upon the other, more temporary, expedients. Such operations increased the total of reserve money in existence, the 'expedients' in the main redistributed the existing supply. The Reserve System did not object to undertaking such operations in support (technically speaking) of the pegged short-term rates, provided this was necessary for war-time needs. It did object, however, to such operations, if a portion of the reserves so created were used to maintain or increase bank holdings of government securities in general and of bank-eligible bonds in particular. This, in fact, is what was happening.

It will be realized that sales of government securities by member banks to the Federal Reserve Banks in order to obtain reserves required to back deposits shifted out of war-loan accounts, or to compensate for currency movements, ought to have resulted in a fall in member-bank holdings of government securities. In fact, the Treasury estimates show, such holdings of government securities remained approximately constant; member banks having bought in from the public as fast as they (or others) sold to the System. The effect of this process was to increase the rate of net deposit expansion, or to cancel loans for the purchase or carrying of government securities. It was upon such expansion of credit that the rise in the price of medium-term Treasury bonds, which proceeded steadily throughout this period, was based. The supply of reserve money was supposed, by the authorities, to be expanded to meet the needs of war-time. During loan drives the expansion of bank credit was more or less legitimate and thus the whole vast expansion was carried through, reserves being supplied as necessary. But, since the technical

basis of this supply of reserves was the support of a short-term rate of interest, the authorities had no means of ensuring that they were legitimately used.

The average yield on 7–9-year Treasury bonds—the banker's favourite purchase—declined from 1·56 per cent. in June to 1·5 per cent. in October, having been 1·93 per cent. in December 1944. The average yield on bonds of over fifteen years length had declined from 2·48 per cent. in December 1944 to 2·35 per cent. in June 1945, but for the following four months remained approximately stable, being 2·35 per cent. again in October. The rise in the price of the former type of bond was the overt expression of an arbitrage movement (which has been foreshadowed in Chapter III), undertaken mainly by the commercial banks, and a consequence of the unduly wide spread between guaranteed short-term rates and the coupon rate on new issues of medium- or long-term bonds. The banks were aided and abetted in this activity, firstly, by the professional speculators and others who bought new issues on credit during loan drives, and to whom reference has already been made, and, secondly, by the more general process whereby other owners of bank-eligibles sold out at a profit and either bought old near-eligible (i.e. just over ten year) or longer issues with the proceeds, or went temporarily into the short-term market in anticipation of further new issues.[1]

Basically, this process was an attempt to narrow the long-short spread and is easily understandable as such. Technically the process is worth further study, both on account of its explosive possibilities and for understanding of the forces inherent in the typical contemporary 'gilt-edged' market.

The story is this: the ultra-low yield on Treasury bills and certificates, though partly due to restrictions of supply of such assets, arose from nervousness about the future

[1] Or, again, going into the general stock-market where prices were rising.

long-term rate *and* of the future *medium*-term rate. The structure of rates frozen into the war-time pattern thus produced a yield curve that rose very sharply at the short end from $\frac{3}{8}$ to $\frac{7}{8}$ per cent. and rapidly to $1\frac{1}{2}$ and 2 per cent. As soon as nervousness of the three- or 4-year rate declines sufficiently for a number of banks, in the ordinary course of cash-adjusting business, which arises from the moving around of bank deposits, to shift out into the three-year range from the one-year range, the game begins. Insufficient demand for the one-year securities compels Reserve Banks to purchase, and thereby release new reserves. They are (in the circumstances under consideration) generally unable to recover such reserves by selling bonds, either because they have no bonds to sell or because, *ab initio*, they only have very long bonds whose market will not yet bear any sales. The provision of fresh reserves enables the banks to buy up additional Treasury bonds in the market. The price of medium-short bonds will begin to rise substantially in order to give a yield to maturity, in line with the one-year rate, that is consistent with confidence in the maintenance of the short end of the yield curve. Such medium-short bonds move through a price curve as they approach maturity—rising above par to a peak and then falling rapidly near maturity. A change in the shape of the rate curve, brought on by the above pressure from the banks, hastens the onset of this price movement. Both bank and non-bank holders of such bonds, who had bought them at par or only slightly above par, thus find themselves with a capital gain sooner than expected. It therefore becomes profitable to sell out of such bonds and buy in again farther out on the yield curve, earlier than originally anticipated. The process is fed by constant creation of new reserves at the 'short end' as bills or certificates are unloaded on to Reserve Banks. Gradually, or not so gradually, depending on the degree of market sophistication, the profitability of 'playing the pattern' becomes known, first to professional speculators, large banks, and other money-market

specialists, later to country banks and others. Sooner or later the rise in price of a particular bond begins to occur farther away from maturity, as banks reach out farther and as speculative buying presses upon the volume of securities existing beyond the bank's current buying range. When this 'price curve' has moved out as far as the point where new issues are periodically available at official pattern rates, the game becomes a 'racket'. For by buying up such new issues from the Treasury at par, the holder is guaranteed an immediate capital gain. This was a particular variant of 'pattern-playing' which came to be known as 'free riding'. In effect, what has happened is that the market rate on such bonds has declined and the Treasury is taking no cognizance of the fact. The process can, of course, go on out farther, even though the banks are prohibited from buying the over-ten-year bonds. For unless ten-year bonds are on tap at par (which they were not) the market price of such bonds will be well above par, depending on the degree of 'reaching-out' by banks and the degree of speculation by others. As soon as this happens it is profitable to buy longer issues and wait for *their* price to rise and so on until the price curve has shot out to the longest bonds. The more that investors get wind of this process and join in the game, the worse the situation gets—the logical conclusion being a horizontal rate curve with the price of all bonds giving a yield to maturity of $\frac{7}{8}$ per cent.[1]—provided, always provided, that existing short-term securities can be unloaded on to Reserve Banks. It does not matter whether such reserves are created to support, in effect, government expenditure, or directly to finance 'pattern playing', as long as the new money finds its way round into the government-securities market and is not completely

[1] The reason why the curve is said to be anchored to the one-year rate ($\frac{7}{8}$ per cent.) rather than the three-month rate ($\frac{3}{8}$ per cent.) is only because, in the case considered, almost the entire Treasury-bill issue was dumped on the Reserve System and ceased to be of market importance. The $\frac{7}{8}$ per cent. one-year certificate then became the effective short-term instrument and the anchor of the rate curve.

mopped up by new issues. Such a logical[1] conclusion can be stopped by such devices as continuous tap offers of bonds or, effectively, by some such direct control as the British device of legally compelling the banks to take up Treasury Deposit Receipts. The former device, carried to its conclusion, will lead to the tap rate becoming in effect the short-term rate, with all lower yielding securities dumped in the central bank. The latter device, in theory, stops the entire movement but cannot, in all probability, be completely effective in practice. However, suppose that the short-term anchor is expected to shift. If short-term rates are expected to rise, then the process will tend to stop, for a sufficient rise in the short rate will put a ceiling on the possible price of longer-term securities and, by causing uncertainty about the ultimate future of long rates, may bring about a fall in such prices (if yields have already got near to the existing one-year rate, a rise in that rate will produce a fall in bond prices automatically). If short-term rates are expected to be lowered, however, there will be a rapid speculative outburst (assuming the market is now thoroughly aware of what goes on) since bond prices will be forced to rise to give a lower yield sooner or later and there will be a rush to buy in at existing yields. In practice the whole movement cannot go to the extreme conclusion for a number of reasons—market inertia and ignorance, a periodic supply of new government issues, and some uncertainty about the future of rates in the middle distance. The mere sight of a $2\frac{1}{2}$ per cent. bond priced at, say, 115 would 'look wrong' to many investors, regardless of the logical possibilities. However, it can go quite far enough, as we shall see later, and the profits to large-scale operators can be sufficiently high for the game to become, in any circumstances, an undoubted scandal.[2]

[1] A $2\frac{1}{2}$ per cent. twenty-year bond has to be priced at 129·75 to give a redemption yield of $\frac{7}{8}$ per cent.

[2] Since government securities could be bought on a very low margin, the return on the speculator's own money, gained by betting on a certainty, was very high indeed.

But (and this must occur to the reader) suppose the authorities should *desire* to bring about a general reduction in the rate structure. In that case it is only necessary to reduce the one-year rate, restrict the supply of new bonds, and talk loudly about lower interest rates. This situation was of great assistance to the British authorities when they were driving down interest rates during Dr. Dalton's Chancellorship.

The impetus given to this whole process by the war-time movement of bank deposits[1] was well illustrated during the first few months of peace. Inspection of the statistics shows that, during this period, the weekly reporting member banks (banks in 101 leading cities) are not, where bond-gathering is concerned, a proper sample of all commercial banks and are, to a marked degree, 'not guilty'. These banks increased their holdings of Treasury bonds by $400 million during the period, to a total of $26 billion, but hardly at all after mid-July (i.e. after the end of the 7th War Loan), while commercial banks reporting to the Treasury[2] are estimated to have increased their holdings by nearly $1·3 billion during the period, to a total of $43½ billion, $550 million during the latter three months ($350 million in August alone). This was not quite the whole story. $1·2 billion of bonds were refunded into certificates in September, of which $6–700 million appear to have been bank-held.[3] The banks must have offset this loss by more market purchases of bonds, making a total of nearly $2 billion, of which the reporting banks may have accounted for, say, $700 million. Since the reporting banks on 30 June 1945 held 62 per cent. of net deposits plus war-loan balances, they might have been expected to account for 62 per cent. of the increase in

[1] See *Federal Reserve Bulletin*, 1945, p. 1099, concluding paragraph of article on 'War-time monetary expansion and post-war needs'.

[2] i.e. commercial banks covered by the Treasury survey of debt ownership. They account for 95 per cent. of total commercial bank deposits.

[3] Treasury estimate: 605 millions on 30 June 1945 (*Treasury Annual Report*, 1945–6).

bond holdings. In fact they only account for 35 per cent. There would seem to be two reasons:

1. Reporting banks are subject both to higher reserve requirements and to greater liquidity needs: both on account of their location (over 90 per cent. of New York City deposits are 'reported') and on account of a lower proportion of time to demand deposits. On 30 June 1945 they held 66 per cent. of member-bank reserves, and in the last fortnight of October they still held 66 per cent., while their share of deposits had declined to 59 per cent.
2. The last figure of 59 per cent. indicates that reporting banks as a group were subject to a drain of deposits—an indication fortified by remarks about geographical shifts of deposits into country and small-bank areas in Chapter III.

For the above reasons, one would expect the reporting banks to be subject, both on account of greater need of fresh reserves and on account of a withdrawal of deposits, to a disproportionate selling pressure upon their liquid assets. On that account they might have been expected to be less insistent on 'arbitrage'. Whether for the above reasons, or because of greater regard for the views of the authorities, or because of more conservative liquidity rules in the reporting banks as a group, they did not, either in these four months, nor in the six months ending 30 December 1945, increase their bond holdings by an amount which their share of deposits suggests they might have done. In the second half of 1945, total commercial-bank bond holdings increased by an estimated $5·4 billion: of this the member banks obtained their correct share (85 per cent.), but reporting banks only 41 per cent. of the member-bank total instead of 60 per cent. or so. In the four months under consideration, the latter proportion—35 per cent.—is even lower. The principal actors in the bond-gathering process thus seem to have been (as foreshadowed in Chapter III)

the non-member banks and, more especially, the non-reporting member banks.

It is thus possible, if the banks are regarded individually, to explain much of the 'pattern playing' process in terms, not of some rather reprehensible urge on the part of the banking system, but entirely as a consequence of a shift of deposits between banks. Lacking precise liquidity rules regarding short-term assets, banks that lose deposits are prone to sell short-term securities, while those who gain them are prone to buy longer-term securities, leaving the central bank as the residual buyer in support of the short-term market. To an individual commercial banker a gain in deposits from another bank or loss to another bank is the same as a gain or loss of reserves. Thus one cannot blame the losing banks, in such equivocal times, for selling bills or certificates, since these were, after all, the banks' secondary reserves, nor can one blame the gaining banks for buying bonds—they already have plenty of 'shorts'. A sustained shift of deposits can therefore be regarded as the prime mover in a general lengthening of investment portfolios *as a whole*, and a cause of general deposit expansion due to the involuntary provision of new reserves by the 'residual buyer'. This is simply another way of saying that 'in the ordinary course of cash-adjusting, the banks . . . '. But it is a more revealing way of saying it.

This, then, was the process whereby the commercial banks bought approximately $2 billion of bonds in the market during these few months.[1] These bonds were almost all acquired, according to Treasury estimates, from the category of owner known as 'others'—owners other than Reserve Banks, commercial banks, government agencies and trusts, mutual savings banks, and insurance companies, or, in other words, individuals and non-financial businesses. Conversely the sales of short-term securi-

[1] Commercial banks seem to have concentrated on the over-five-year bonds; see *Treasury Report*, 1945–6. Notably the 2 per cent. 52–54 issue, bank holdings of which went up $1·2 billion June–Dec. 1945.

ties by the banks caused an increase in Federal Reserve holdings of $1,500 million and the remainder (since total bank holdings of government securities remained constant) seems to have been bought by 'others' (apparently in the form of Treasury bills).

Since the price of the longest Treasury bonds remained steady, it seems that the majority of the deposits created by bank purchases of bonds were cancelled by repayment of margin loans, and that the remainder were directly or indirectly placed in the short-term market in anticipation of the next round—the banks selling short-term securities to those investors in exchange for bonds. Some funds may also have found their way into the stock-market. It is unlikely that longer-term issues were liquidated for 're-conversion' purposes. Businesses preferred to cash savings notes, raise bank loans, or sell certificates, rather than sell longer-term investments. So far, downward pressure had not spread in any marked degree from medium to long-term rates, but the boom in bank-eligible bonds could quickly spread to the longer issues as soon as their supply became restricted (i.e. no further loan drives). Within a few months, they were, and it did.

The potentialities of the situation, as likewise in London where Dr. Dalton had recently taken office as Chancellor, were only too clear, if the authorities were to permit it to develop.

VI

MONETARY RECONVERSION: THE SECOND PHASE, NOVEMBER 1945–FEBRUARY 1946

§ 1. *The Victory Loan*

IT will have been observed that the first few months of peace made little difference to affairs in the market for government securities or in the monetary system generally. Monetary expansion was running ahead regardless of the needs of the economy, the pressure of funds upon the market was growing stronger as the anachronistic rate pattern was steadily attacked; there was no other reason, given the declining liquidity-preference of the banks, and the degree of speculative knowledge, for this development. If only the Reserve System could weigh its short-term anchor, the movement could be stopped. But the Treasury had other plans, with equally effective possibilities, and an increase of ½ per cent. on its bill and certificate rates would cost $260 million in interest. It was better to get the floating debt reduced before raising rates—if, after such a reduction, a rise in rates should still prove necessary—especially if the attack on the pattern could temporarily be stopped by carefully conducting the retirement of floating debt. But first the funds must be obtained for such a retirement programme. Fortunately, given the rapidly improving budgetary situation, such funds were readily available. At the end of October the authorities embarked on the first stage of what purported to be a prolonged funding operation, this stage being known as the Victory Loan. The loan lists were closed on 31 January 1946, having raised $21 billion.

The mechanics of raising such a large sum are basically extremely simple. The transfer from war-loan accounts to

ordinary accounts is reversed. Savings are invested in the new issues and placed by the Treasury in its war-loan accounts. Bank reserves, created during the previous period, are now gradually freed. On the basis of these reserves the banks buy up bank-eligible securities in the market. Since any new money created by this mechanism (a mechanism set going in the first place by transfer of genuine savings into war-loan accounts, and by previous bond-gathering activities of banks continuing into the 'tap' period) is not subject to reserve requirements, where does the process stop?

Theoretically it might be possible for all non-bank owners to exchange their entire holdings of bank-eligible securities for new Treasury tap issues: for provided 'genuine' money tranfers *to* war-loan balances exceed government expenditure *out* of them,[1] and provided the non-bank sellers *do* exchange for tap issues, no matter how many securities the banks may buy, they cannot use up their excess reserves. In practice anything approaching this glorious conclusion was not possible. Certain limitations may be enumerated. Firstly, the banks knew that the huge accumulation of war-loan deposits was only temporary, and were thus not willing to 'back them' with securities that had several years or more to run, and which could only be bought at a premium above par. They were certainly willing to buy large quantities of Treasury bonds of the 5–10-year range, but this was because they were unwilling to hold so large a proportion of short-term assets against their ordinary (i.e. not war-loan) deposits. Unlike other operators the banks were reaching out for earnings rather than capital gains and were not so rash as to suppose that they could dispose of bonds in unlimited quantities at or above purchase price in six months' time. In circumstances of this kind, therefore, bank demand will begin to concentrate sooner or later on short-term securities (certificates

[1] This is a practical consideration; we assume banks only act when they *have* excess reserves.

or even bills), and as soon as their supply becomes restricted the central bank can begin to sell from its portfolio and absorb excess reserves. There are, in addition, further obstacles to the possibility of a runaway accumulation of war-loan balances.

Firstly, there will be some point where speculative buyers of tap issues become nervous at the amount of such issues that will be on the market in the future. Secondly, the speculative selling of eligible bonds to the banks will not spread to the entire market without a considerable rise in their prices, a rise which will in turn restrain the banks. However, the machine can be remarkably efficient, and, by staying out of the short-term market until the unloading of short-term securities by non-bank investors on to commercial banks has ceased, and short-term rates quite definitely fall, the central bank can ensure that the machine does not run down too soon.[1] In an emergency, of course, there is nothing for it but to abandon the pattern or turn off the tap. In practice the tap was not opened full for very long, except for individuals.

Subscription lists were opened for the Victory Loan on 29 October 1945.[2] The tap for non-marketable securities was 'open' until 3 January, for marketable securities until 8 December, but for corporate investors it was only open from 3 to 8 December. No bank-eligible security was offered (our previous exposition assumes this). Non-bank investors were offered a choice between $\frac{7}{8}$ per cent. twelve-month certificates, $2\frac{1}{4}$ per cent. bonds 1959–62, and $2\frac{1}{2}$ per cent. bonds 1967–72. The latter two issues, being over ten years long, were bank-ineligible by established practice, but the certificates were bank-ineligible during the tap period only and became unrestricted on 4 January. The restrictions on the bonds were relaxed by

[1] A further theoretical possibility is an infinite creation of loans for the purchase of government securities (tap), but this has obvious limitations, for borrower's risk will increase sharply.

[2] Terms and results of Victory Loan. See *Treasury Report*, 1945–6, and *Treasury Bulletin*, Feb. 1946.

special dispensation whereby a bank could buy up an amount equal to 10 per cent. of its time-deposit liabilities, or $\$1\frac{1}{2}$ million, whichever was the less. The Federal trust accounts bought some of the new issues under an analogous dispensation. For rather spurious reasons these last two purchases were not counted in the 'Victory Loan' totals. Coincidentally with these marketable offers there was a renewed drive to sell savings bonds.

As in the previous loan drive, the Secretary of the Treasury requested the banks, by circular letter, not to make loans to finance speculative purchases of the tap issues—loans to investors buying ahead of income were encouraged—and not to purchase existing marketable securities if the seller was thought to be selling solely for reinvestment in the tap. In the light of previous experience and the development of pattern-playing within the previous few months, this can only have expressed a pious wish. When all was over on 3 January, sales totalled $21 billion, or $23·4 billion including direct purchases by banks and government trusts under the special provisions mentioned above. Of the $21 billion, 61 per cent. was marketable bonds, 18 per cent. certificates, and 21 per cent. non-marketable securities. Of the bond sales 75 per cent. were those of the $2\frac{1}{2}$ per cent. 1967–72 issue. There were also certain other changes in the national debt during the whole period up to 28 February 1946. Sales of non-marketable issues outside the Victory Loan period totalled $1·7 billion, and sales of special issues to government trusts came to 1·2 billion. Total sales by the Treasury for November to February thus amounted to $\$26\frac{1}{2}$ billion. This total was offset by redemptions and cash maturities amounting to $\$7\frac{1}{2}$ billion. This reduction in the total is explained by gross encashment of savings bonds and notes—4·6 billions—gross encashment of special issues—1 billion—and a cash retirement of maturing marketable securities amounting to 1·9 billions. This latter sum was paid out almost entirely in December when

holders of maturing certificates, notes, and bonds were offered a $\frac{7}{8}$ per cent. certificate in exchange. Presumably many owners preferred to subscribe to the Victory Loan $2\frac{1}{4}$ per cent. bond issue, in so far as they were not banks. The success of previous and subsequent certificate offers does not indicate any substantial movement into cash at this time.

In its annual report for the fiscal year 1945–6, the Treasury published absorption tables showing 'where the money came from' to increase the national debt by nearly 19 billions during these months.

It is reproduced below.

ABSORPTION OF INCREASE IN THE NATIONAL DEBT

29/10/45–28/2/46

$ billions

	Purchases from Treasury	*Redemptions and cash maturities*	*Market transactions*	*Net absorptions*
Non-bank investors	25·0	−7·5	−6·8	+10·7
Commercial banks	1·4	−·1	+7·1	+8·4
Federal Reserve Banks	0	0	−·3	−·3
NET TOTAL	26·4	−7·6	0	18·9

NATIONAL DEBT TOTAL, 28/2/46 = $279 billion.

The net absorption by non-bank investors represents genuine savings, subscribed as follows:

Individuals	4·3	$ billion
Insurance companies	2·5	,,
Mutual Savings banks	1·1	,,
State and local governments	1·2	,,
Federal agencies and trusts	1·2	,,
Other corporations and associations	0·4	,,
	10·7	,,

The last category in the table in fact bought heavily from the Treasury but offset this by heavy sales to the banks, encashments of savings notes (mostly to meet tax

liabilities), and cash redemption of the December maturities. The fact that, as a group, they did not reduce their holdings is satisfactory. It is on this group that the weight of reconversion expenses, and of 'interim' reduced earnings, must have fallen heavily. Evidently the satisfactory level of earnings, refunds of excess profits tax, activation of idle deposits, and, to some extent, the availability of cheap bank loans, had so far staved off any liquidation of investments by this group, on balance. New stock-market issues (other than refundings) were small at this time, whereas commercial and industrial loans at commercial banks increased sharply during this period. The fact that 60 per cent. of the subscriptions of this investor class were for $\frac{7}{8}$ per cent. certificates indicates anticipation of early liquidation.

Meanwhile the rest of the increase in the debt—$8·2 billion—was delivered by the credit-creating machine, 6·8 billions by market activities. But this is an understatement: loans for the purchase or carrying of government securities increased by an estimated $2 billion during the period, the majority of this being loans 'for account of others'. Some of those loans might be repaid from savings, but it is fair to assume that another billion of the increase in national debt was new bank credit, created by these loans, which would be paid off, if possible, by sales to the banks themselves in the usual 'free-riding' fashion. Thus it would seem that nearly half the net funds obtained by all these operations were, directly or indirectly, new bank money. Moreover, by 28 February a large proportion of the genuine savings had already been dispersed in Treasury expenses (the last of the war-time deficit). In so far as this expenditure, and indeed all expenditure since the 7th War Loan ended in June 1945, had been financed 'long' and by genuine savings (arising from previous credit creation notwithstanding), the financing of the deficit was eminently sound. In so far as genuine savings remained in the Treasury, they could

be used to retire floating debt—an orthodox funding operation. But what of the hoard of unused new bank credit? Under the machinery as it then existed, one could in fact 'fund' large quantities of debt whose creation in the first place was totally unnecessary—the net result being a victory for the banks, who gained on balance because they obtained larger quantities of higher-yielding securities in the process. This was a somewhat ironical consequence of attempting to hold an untenable pattern of rates—or a pattern untenable in the absence of mandatory controls on the commercial banks—made the more untenable by the apparatus of war-loan accounts. One should not be too critical, but given the pattern nothing much else could possibly result.

§ 2. *Bank Reserves, the Fiscal Position, and the Market Outlook*

In spite of considerable expenditure by the Treasury during this period, financed by drawing on war-loan balances, the reserve position of member banks was seldom under any strain at all. While the national debt increased by nearly $19 billion, the Treasury general fund rose by just over 13 billions—reflecting a 'deficit' of 6 billions. Since genuine savings subscribed to the Victory Loan issues were over 9 billions, it follows that excess reserves appeared sufficient to support 3 billions of net deposits at all commercial banks.[1] These figures are approximate and do not take into account a continued increase in time deposits (1 billion) which in fact released reserves further. For member banks, as opposed to all commercial banks, the figures are slightly smaller. In fact, required reserves fell by 300 millions during the period. In the light of the above estimates regarding Treasury expenditure, one would have expected them to fall by over 600 millions

[1] i.e. flow of savings into war-loan accounts less deficit expenditure out of them = net decline in deposits subject to reserve requirements due to this process = 9 − 6 = 3 billions.

(say 20 per cent. of 3 billions); but member-bank loans, other than those for the purchase or carrying of government securities 'on account of others', expanded by over 2 billions (again an estimated figure, details for all member banks are not available over such an arbitrary period). Weekly reporting member banks alone increased their 'commercial, industrial, and agricultural' loans by $1 billion. Owing to the extreme fluidity of the reserve position and to seasonal operations connected with a further outflow of currency before Christmas, as well as the fluctuation of the Treasury account with Reserve Banks during the period—which ranged from zero to over a billion dollars—there is little purpose in following central banking operations in detail. But, up to Christmas, the Reserve Banks appear to have been unable, or unwilling, to attempt positive sales of securities and to have concentrated on lubricating the machinery by offsetting any pressure arising from currency flows or Treasury balances. Excess reserves rose as high as $1,500 million in early December, and were 1,400 millions early in January. As a result of the pressure exerted by these reserves on the market, and, indeed, of expectations which will be referred to later, the yield on certificates began to fall from 0·84 to 0·75 per cent. in the seven weeks commencing 7 January. In these circumstances, but after the tap had been turned off, the Reserve Banks may have sold rather more than the after-Christmas inflow of currency required, but they did not take steps to force the yield up to 0·84. By 28 February excess reserves had declined to 1 billion, and member-bank borrowing was at a normal figure of 350 millions. Over the whole period the security holdings of Reserve Banks declined 300 millions, but in January and February they declined by over 1 billion—sales being almost entirely from the certificate portfolio and almost entirely to the banks.

What, after all this, or to be more correct, after the tap was turned off in December, was the outlook for the

market? Since, in fact, the Treasury hoard was largely new money—for with deficit expenses and new bank loans the amount of savings drawn in through the tap had largely 'gone out' or were about to go out into the stream —there could be little reason to suppose that the demand for securities was exhausted. The last round of deficit spending was still going through the economy; savings could still be expected to be, at least temporarily, very high. The underlying trend, in short, was strong, particularly from the savings institutions. Add to this the speculative movement that had been developing since late 1944, in response to insistence on the antiquated pattern, and the market was obviously ripe for a sharp rise. There were, also, few 'offsets'—no heavy volume of new capital issues, and few signs that net bond liquidation by individuals or businesses was going to become heavy in the immediate future—such investors might sell shorts or even short bonds but the banking system could take care of that. As regards the supply of new Treasury issues, not only was the tap turned off but the Federal accounts were rapidly going into cash balance: new borrowing, save for funding purposes, was finished. Further, there was not any *need* to fund anything, save as a matter of policy, for, together with what was left of the 7th War Loan receipts, the Treasury now possessed a general-fund balance of nearly $26 billion, of which over 24 billions could be used to meet maturities of debt in the coming year.

The possibility arose that, by dispersing this new money, the Treasury could both increase the demand for, and decrease the supply of, government securities—it could, of course, merely cancel its war-loan accounts by repaying the entire sum to the banks, but if it also repaid some securities to non-bank investors (any effect on bank reserves being met by Reserve Banks) then the demand for other government securities would increase—ignoring effects on the whole economy if the money leaked out. It will be seen then, that the Treasury was in a position,

if it so desired, to use the whole combination of savings, speculation, banking policy, and hoard dispersal, to force a régime of even cheaper money on to the market. Even if it did not do so, the market was liable to boom. More particularly, if it was *thought* that the Treasury contemplated '2 per cent.', there would be a rush by all forces to buy while higher yields and lower prices were still obtainable. But conversely, as we have seen, if the Treasury did not want to force a 2 per cent. régime, *and* wished to prop up the discredited pattern, it might be able to do so by repaying large sums of maturing debt held by Reserve Banks.

§ 3. *The 'Pattern' in Crisis*

The account so far given in this chapter must now be modified slightly. 'Debt absorption' was given for the entire period, and we have rather assumed that the banks increased their investments only during the period when new marketable securities were on tap. Since the corporate investors' tap was only open for a short period, however, and since war-loan balances continued to build up (owing to sales of savings bonds) until the end of December, certain of the 'machine' processes went on in a slightly modified fashion. It is suspected that many investors subscribed to the utmost *during* the open-tap period and replenished cash balances by sales to the banks later (in the same fashion as those who bought on credit). Coincidentally, the ease of the reserve position enabled banks to go on increasing their investments into January and February. This modification of the aggregate picture for the whole period is of some significance as regards market prices and, in addition, reflects a continuous replenishment (at a profit) of depositors' cash balances which might not otherwise have taken place on such a scale. Slowing down of government expenditure out of war-loan balances further aggravated the market situation as, unlike the previous after-loan periods, the banks did not have to meet

pressure on their reserves due to a rapid rise in net deposits arising from Federal expenditure. However, readjustments after the closing of the tap seem to have delayed the explosion until after Christmas; for a few weeks investors either took their quick profits and replenished cash, or waited to see what was to happen. Thus, while the 7–9-year yield had fallen to 1·40 per cent. by 30 November from 1·50 per cent. on 1 November, reflecting continuation of the 'arbitrage' and steady working of the loan machine, it was still 1·38 per cent. on 29 December. In face of this, however, the average yield on taxable Treasury bonds 'fifteen years and over' had fallen, from October through December, only 0·02 per cent.—mainly due to the supply of new long-term issues of 2½ per cent. at par.

But in early January the pressure began, fortified by rumours, and reasonings, that the authorities would use their power to drive cheap money to the limit.[1] This expectation produced a speculative rush fed with funds provided by the banks, whose appetite for Treasury bonds seemed inexhaustible. In eight weeks the 7–9-year yield fell from 1·38 per cent. to 1·28 per cent. In a similar period the full force of the situation we have described fell at last on the 'longs'. 2½'s 1965–70 reached 106·04 from 102·1 and the newly issued Victory 2½'s 1967–72 reached 105·0 from 101·15 on 31 December (and par on 8 December). To anyone accustomed to contemporary conditions in London this may not seem very spectacular, but under conditions of very cheap money in a highly specialized market it is a disorderly rout of the official position (a fall of 6 points *below* par in an equivalent period would unquestionably have produced a panic). During the October–February period the banks increased their holdings of Treasury bonds by no less than $4 billion, mostly in the 5–10-year range,[2]

[1] Reinforced by the fact that a bond issue maturing on 15 March was called for cash redemption, while two further maturities in June were expected similarly to be called.

[2] See details of Treasury survey of ownership, *Treasury Bulletins*, Nov.–Mar. 1945–6.

2·8 billions being market purchases (the rest were special Victory Loan purchases). At the same time, with an eye to war-loan balances, they bought $4 billion of 'shorts' from non-bank investors who presumably, on balance, bought 'longs'—though only on balance. During the first two months of the year, commercial banks increased their bond holdings, upon the basis of excess reserves and liquidation of security trading loans, by $900 million, the rate of purchase slowing up sharply in February when only 175 millions were purchased. This slowing up may have been due to Reserve Bank sales of certificates, but considering the volume of excess reserves outstanding at the end of February it was more likely due to greater caution—the majority of the rise in market prices occurred suddenly in January. It may be considered as a pause, for digestion, rather than much else.

The effect of this buying was to increase the effective dispersal of savings drawn into the war-loan accounts and bring the 'net absorption' totals to those of the Treasury table on page 86. But this dispersal was made in a disorderly rising market, the shock being transmitted, along with general pressure of genuine and speculative loan funds, immediately to the corporate bond market and to the Stock Exchange generally. The situation was 'serious'. Insistence on cheaper money would certainly produce a distress movement out of 'governments' into any reliable security yielding $2\frac{1}{4}$ per cent. or more, while support of a 2 per cent. level would feed fresh reserves faster than ever. In sight was an inflation of all capital values based upon automatic credit expansion just at the time when the country was embarking on a period of peace-time inflationary pressure with every prospect of early decontrol. However, provided expectations of 2 per cent. at long-term could be destroyed (or those of $\frac{1}{2}$ per cent. at one year), the market might steady down, with Victory $2\frac{1}{2}$'s at 104–6, and the 'pattern' maintained by debt retirement and by a psychological campaign inducing some uncertainty. The

problem, be it noted, is not one of general credit restraint in the usual sense: the problem is how to maintain an anachronistic structure of rates under a stable-money régime, how to prevent that structure giving rise to a severe inflation of capital values based on inexhaustible supplies of new money. Ethically, one did not want to procure further attrition of the 'rentier' (be he bond-holder, policy holder, or savings-bank depositor) and least of all did one want an even larger series of handsome benefactions to speculators. Although, later on in these years, the problem did shift more towards 'credit restraint' in the usual sense, the Reserve System was constantly concerned to obtain a rate structure that was at least tenable—broadly speaking a structure with higher short rates and some uncertainty about the long rate, a structure that is tenable but yet avoids the logic of the basic position which demands a horizontal yield curve.

The account of this early post-war episode is necessarily critical of the United States Treasury, whose insistence on maintaining the prevailing short rates was largely responsible for an unnecessary inflationary movement and unnecessary benefactions to 'free-riders'. But it should be remembered that the task of managing this vast debt, and the task of selling it as cheaply as possible, was not one at which the authorities had great experience. Rightly or wrongly the Treasury was much concerned at the interest cost of the national debt. Moreover, it lived under a lively apprehension of what could happen should confidence in the market value of outstanding securities be shaken. The debt, or a large part of it, was not regarded as firmly held by investors, and the large volume of frequent maturities that lay ahead had an oppressive effect upon the Treasury. Add to this a vaguely 'Keynesian' belief in the efficacy of perpetually cheap and stable money—'depression' was never far out of mind—and a suspicion that opposition to the pattern came from the old orthodoxy, and one can understand the Treasury's insistence. The managers of the

Federal Reserve System fully agreed on cheap money but objected to the rate structure—in this they were indubitably correct, and to the failure of the two monetary agencies to agree on this point can be traced the unfortunate schism which finally burst into the open in August 1950. Meanwhile the authorities began to attack the market, still clinging to the pattern, with all the means at their disposal. They began with a strong denial in late February that a general lowering of rates was contemplated—and it is not suggested here that the Treasury ever did contemplate it.

NOTE: No mention has been made in this chapter of the geographical shift in deposits referred to in Chapter V. In fact, the process was somewhat reversed, the share of the reporting banks in the total of net deposits plus war-loan accounts rising to 61 per cent. in the second half of February compared with 59 per cent. in the previous October and 62 per cent. the previous July. The increase in reporting-bank bond holdings was 54 per cent. of the increase in commercial-bank bond holdings as estimated by the Treasury, compared with 35 per cent. in the previous period. Many of the influences that shifted deposits the previous summer are likely to have been halted or reversed. The great rise in Treasury deposits benefits the reporting banks as a group, while the shift of demand deposits into war-loan accounts and the consequential liberation of reserves could be expected to neutralize the effects of the higher reserve requirements of reporting banks. Moreover, the sharply declining Federal deficit and the closing down of war plants must have slowed down or halted the shift of deposits induced by the war. But it is still likely that the smaller banks would be inclined to buy relatively more bonds than the larger ones owing to their need to maintain a smaller proportion of short-term securities—reporting banks possess almost all interbank deposits and constitute, in a sense, a large nucleus of the American banking universe of which the non-reporting and non-member banks are the periphery. This change in the bond-purchase proportion of reporting banks gives some support to our previous hypothesis concerning the importance of deposit shifts in the expansion process.

VII

MONETARY RECONVERSION: THE THIRD PHASE, MARCH–JUNE, 1946

§ 1. *The Repayment of Debt and the Application of Pressure*

IN spite of differences of opinion as to method, the authorities were agreed that the boom in long-term bond prices must, somehow, be stopped. During the concluding months of the fiscal year (ending 30 June), policy was thus directed towards the solution of this problem along the lines previously indicated—the repayment of debt and the use of propaganda.

Between 1 March and 30 June eight issues of marketable securities (excluding Treasury bills, the total of which remained steady) reached maturity or first call. All were either retired outright for cash or partly refunded into new $\frac{7}{8}$ per cent. twelve-month certificates as follows:

$ millions *Source: Annual Report of the Treasury, 1945–6*

Date	*Security*	*Total*	*Refunded*	*Retired*
1 March .	$\frac{7}{8}$% certificates	4,147	3,133	1,014
15 March .	$3\frac{1}{4}$% bonds 1946–56	489	Nil	489
15 March .	1% notes	1,291	Nil	1,291
1 April . .	$\frac{7}{8}$% certificates	4,811	2,820	1,991
1 May . .	$\frac{7}{8}$% certificates	1,579	Nil	1,579
1 June . .	$\frac{7}{8}$% certificates	4,799	2,775	2,025
15 June . .	3% bonds 1946–8	1,036	Nil	1,036
15 June . .	$3\frac{1}{8}$% bonds 1946–9	819	Nil	819
TOTALS (rounded)		19,000	8,700	10,200

During the same period savings bonds outstanding increased by $340 million while savings notes declined a further $1,330 million due to heavy tax payments and to increasing business capital expenditure. An increase in special issues (i.e. investment of the government trust

funds' surplus) largely offset this reduction in public non-marketable issues, and the national debt was reduced, net, by just under $10 billion during the period, to a total of $269 billion. The dispersal of this large sum probably had important effects upon the market situation which will be dealt with in two sections; firstly, the effects of the dispersal (and of other concurrent processes) upon member-bank reserves; secondly, the effects upon market prices and debt ownership. Owing to considerable market activity coincident with, and itself partly due to, the retirement programme, it is scarcely possible to sort out the ownership of securities retired. However, the Treasury published certain estimates which will be used as a basis for analysis.

The reserve position of member banks it will be recalled (Chapter V) is subject to three distinct influences arising from debt-retirement: the cash retirement of securities held by Reserve Banks extinguishes, directly or indirectly, via the Treasury account with Federal Reserve Banks, member-bank reserves: the retirement of securities held outside the banking system means, probably, a transfer of deposits from war-loan to ordinary accounts and some consequential pressure on reserves: the retirement of securities held by commercial banks reduces deposits and investments but does not—in so far as *war-loan* deposits are cancelled—liberate reserves, and therefore does not enable the banks to reinvest or increase loans without further ado. Coincident with these possible effects we have two further factors during this period: an increasing demand for new loans to business and, still operative, a continuing desire on the part of the commercial banks to increase, or at least maintain, their holdings of short- and medium-term government bonds. The strength of the latter two factors will be affected not by the actual availability of new reserves (for Reserve Banks will buy up Treasury bills and certificates at the support price), but by the reaction of individual bankers to pressure upon their reserves and to a reduction of their holdings of

floating debt—not to mention the price at which non-bank bond-holders are willing to part with their holdings. In brief, there may be some reaction upon the availability of new bank credit—in the government bond market if not elsewhere.

The entire retirement of marketable debt, plus a small net cash deficit arising from redemption of non-marketable debt and current government expenses, was financed by a draft on the Treasury general fund. War-loan balances declined by $11·45 billion, and the account at Reserve Banks by $200 million. The Treasury thus disbursed $11·6 billion of money from its hoard. According to estimates given in the Treasury annual report $5·8 billion of this was cancelled by cash retirement of securities held by commercial banks, while a further $1·6 billion was cancelled by retirement of debt held by Reserve Banks. It follows that of the whole 11·6 disbursed, $4·2 billion found its way into non-bank hands and was, at least initially, added to deposits subject to reserve requirements. At the same time, commercial banks increased their outstanding loans. Weekly reporting banks increased their commercial, industrial, &c., loans by $460 million but owing to further liquidation of security trading loans their total loans declined slightly. However, the non-reporting banks increased their ordinary loans faster and underwent less contraction of security trading loans (they had a much lower proportion of the total). Interpolating from the figures for all member banks for the six months ending 29 June 1946, it would seem that member banks increased their total loans by a net $500 million in these four months—the increase in ordinary loans for the six months was $2·2 billion (to 18·4). Counteracting these expansionary forces upon net deposits, the Treasury estimated a sale, by the banks to the public, of $900 million of government securities (part reinvestment, by the public, of cash received by debt-retirement).

As a resultant of these forces, net deposits at member

banks increased by nearly $4 billion during the period: time deposits moved up approximately $1·2 billion and net demand deposits nearly $2·8 billion. Required reserves moved up, in consequence, by $500 million. Non-member banks, too, benefited from the Treasury disbursements, but they also increased their net loans, and this further over-all expansion seems to have offset any drain of deposits from member to non-member banks. In addition to this $500 million of new required reserves, member banks had also to offset the pressure upon existing reserves exerted by a retirement of $1·6 billion of securities held by Federal Reserve Banks. Pressure, or relaxation of it, by gold or currency flows and fluctuations of the Treasury balance with the Reserve System, was negligible, and the weight of the pressure on reserves was as usual removed by open-market purchases. The System open-market account purchased on balance $2,500 million, increasing its holdings by a net $900 million, supplying all the reserves needed above and, over the period, permitting a further decline in member-bank borrowing and a slight rise in excess reserves. Purchases by the System were heaviest in the bill market, where ⅜ per cent. was now apparently less attractive than ever, and holdings of Treasury bills increased by about $1,400 million. Certificates bought totalled $725 million and notes $375 million (mostly a 0·9 per cent. issue due in July). This renewed dumping of bills brought Reserve Bank holdings to 85 per cent. of the entire $17 billion of Treasury bills outstanding (and the end was not yet). Commercial bank holdings of such bills were reduced to $1,140 million by the end of June 1946, compared to $28 billion of certificates and notes.

The retirement programme had been conducted so far, it seems, in a comparatively cautious fashion. At this stage the Treasury retired a certain percentage of each issue for cash, sometimes the entire issue, and whatever type of security matured, only offered, in part exchange, ⅞ per cent. certificates. The intention seems to have been to

reduce existing floating debt, other than bills, by use of the hoard without at the same time offering any new medium- or long-term bond. It was open to the Reserve Banks to force the pace by accepting a larger proportion of cash in lieu of new certificates, but they did not do this (although they may have tended to buy up the very short issues and sell slightly longer, in order to 'force the pace' indirectly by increasing their holdings of maturing issues month by month). Since, in principle, they were still committed to the pattern, they were no doubt content to act more passively in this matter and examine the effects of the programme for future reference.

If the pressure upon bank reserves was cautiously begun, disbursements of money into the stream were on a lavish scale and the rise in net bank deposits, checked during the winter, went ahead rapidly. Some of the money came back, not unexpectedly, through the buying of 'shorts' by the public from the banks—but this merely indicates the ease of the whole monetary position. But one cannot criticize this lavishness. Short-term securities were being held by non-bank investors, in a great many cases, purely as liquid reserves in anticipation of post-war expenditure (witness corporate buying of certificates and savings notes in the Victory Loan). If cash retirement had not taken place, then the securities would have doubtless been sold on the market and brought Reserve Banks into action in support of the pattern (the certificate yield had returned to 0·83 in June, having risen steadily from 0·76 in February). This type of liquidation could hardly be stopped in any case; what *was* desired was restraint on bank buying of *bonds* and, but hardly feasible yet, some restraint on bank lending. Before considering what occurred in the government-securities market, it should be noticed (or, rather, repeated) that the so-called funding operation that was now taking place involved in fact the release of new money (created several months before) and continuation of credit expansion proper. This may not

have added significantly to inflationary pressure at the time but its lavishness certainly added to inflationary potential—perhaps it could not have been stopped but it was, if anything, aggravatory. The authorities had two expressed aims; firstly, to 'reduce the amount of debt in the hands of the banks', and secondly, to smash the boom in government securities. The first aim was rather meaningless, under the circumstances, but concealed more definite long-term aims. The success of the second must now be considered. It depended in no way upon a reduction in the volume of savings flowing into the market, though such a reduction obviously would have its effect. It did depend upon a reduction in bank demand for bonds and upon the inculcation of a less bullish speculative outlook (which would increase the supply of bonds).

In pursuit of this latter objective the Reserve Board resorted to threats and loud talk, a procedure followed up by use of its one remaining 'orthodox' weapon: on 24 April the preferential discount rate of ½ per cent., on government securities maturing within twelve months, was removed, the ordinary Discount Rate of 1 per cent. remaining. This move was accompanied by a severe statement from the Board,[1] somewhat counterweighted by a declaration from the Treasury (Chapter X, p. 140), explaining that the preferential rate encouraged (in effect) pattern-playing and, owing to the cessation of huge war-time deficits, was no longer desirable as an aid to Treasury borrowing. But the Board 'did not favour a higher level of interest rates on government securities at the present time', and pointed out that the change would not involve 'any increase in the cost to the government of carrying the public debt'. The move was almost entirely 'psychological' or 'persuasive' since, in fact, the preferential rate was not being used to any considerable extent as an aid to pattern-playing (dumping of bills being, at the time, more important) and its removal in no way freed the Board from

[1] *Federal Reserve Bulletin*, 1945, p. 462.

obligation to support the short-term market. But the preferential rate *was* an anachronism—had to be removed anyway—and was, in some degree, symbolic of 'absolute ease' in the market. Its removal was interpreted in some quarters as a significant turning-point. What was the response of the banks and the market to these forces?

§ 2. *The Market Subsides; the 'Pattern' Reprieved*

The effect of these operations with the national debt was, as the *Bulletin* remarked, 'only moderate'; but, and this was half the battle, the boom in prices was stopped and, to some degree, reversed. What seems to have happened is that while the banks were still eager to reach out longer, they ceased to do so on the basis of new credit and, instead, indulged in swapping activities with non-bank investors—the public 'went short' while the banks went 'long'. After the disorderly conditions of the first two months of the year the market was obviously due for some technical reaction and it was the aim of the authorities (one may say in retrospect) to clinch the reaction into a genuine downward movement of bond prices and hold the market at a lower price level—with some assistance from debt-retirement.

During March the market remained steady while, no doubt, many were evaluating the significance of the debt-retirement programme, reconsidering the possibilities of '2 per cent.', and meditating on the future of the pattern. Meanwhile the commercial banks continued to buy, offsetting a loss of short bonds (due to repayment) by further purchase of longer issues. Sellers of such Treasury bonds did not then go aggressively into the bank-ineligible market, or, if they did, met a changed situation. In this market insurance companies and mutual savings banks were still firm buyers, but 'others' were selling long bonds fairly freely (no doubt to take the very considerable capital profit and, as well, go out into the stock-market). By

early April it was clear that the market was running short of speculative funds. The result of meditation had generally been bearish—if only because speculators themselves expected other speculators to liquidate the very considerable holdings that were carried on margin, longer-term expectations being that the game, as recently played, was over. In consequence, without much change in underlying factors, the boom reversed. All bond prices came down; in the second and third weeks declines of the maximum permissible amount—$\frac{1}{4}$ of a point—were common. When the whole movement had become definitive, the authorities stepped in on 24 April with their discontinuance of the preferential rate. But this seems to have been more a coincidence than anything else. On 26 April dealings dried up entirely and on the 27th the market recovered; but the new position was consolidated: not until the winter of 1949–50 were such prices, at long-term, to be seen again as were seen in March 1946. During April 'others' sold on balance $600 million of Treasury bonds of all maturities, of which insurance companies and savings banks and government trusts picked up the longer-term issues and commercial banks the rest (with the exception of the bank-eligible $2\frac{1}{2}$'s 1967–72,[1] $2,700 million outstanding, bank holdings of which increased 50 millions). Commercial banks bought $500 million altogether. In addition, insurance companies and savings banks switched in a minor degree into longer issues from bank-eligible bonds.

There was thus little lack of buying, particularly at lower prices, but an excess of speculative selling. In May the process slowed down, bank buying fell to $260 million, while insurance companies and savings banks maintained their purchases. Prices remained stable, a state of affairs which continued in June apart from a minor rally. But in the latter month the process of shifting securities into

[1] This issue, an exception to the usual eligibility rules, was the one to which the banks were permitted to subscribe (see p. 85) on the basis of their time deposits. It was distinct from the other 1967–72 issues.

banks or savings institutions slowed down further, conditions being quiet and orderly.

Considering the scale of repayment of short-term securities held by non-bank investors, it would not seem that the selling of bonds noted above was due to a shortage of cash by 'others'. In any case cash requirements, with or without debt-retirement, were not, given the volume of short holdings, the sort of requirement that was likely to be met yet by sales of bonds. In brief, the sales were, in the main, speculative. All the cash supplied by the banks for their bond purchases was in fact drawn back by sales of short-term securities, plus 900 millions of that released by the Treasury. This way of putting it ignores all kinds of shifting of assets, but that was the net result at the centre. To repeat: the banks and savings institutions, in search of earnings, went 'long', 'others' pocketed their capital profit and went 'short'. If it had not been for institutional support, it may be noted, the bank-ineligible market would have collapsed badly, even to the point of support by the Reserve System. As it was, the 7–9-year yield rose from 1·28 to 1·43 per cent. and the 'over fifteen year' yield from 2·08 to 2·18 per cent., at which point the latter yield was still extremely low.

In assessing the influence of official policies and programmes on the market at this time, great care must be taken not to attribute too much to such influences. It is worth recalling to mind that the boom in government bonds represented, formally speaking, a movement of the premium on bonds, arising from the spread between short and long, right out to the 'long' end of the yield curve. This was made possible by unconditional support of the 'short' end, by confidence in the limit to the possibility of capital losses (confidence in 'par' as the lowest foreseeable price of bonds), and by the impetus given to the state of affairs by expectations arising from the cessation of new Treasury issues in immediate post-war circumstances. Whatever the logical conclusion of maintaining the short

rates might have been, a serious attempt to push the market towards it was clearly something of the nature of a speculative raid. Against such a raid the authorities clearly had the ultimate sanction of refusing to play: the farther the raid went the greater the possibility of such refusal, and the more peculiar did prices look. In the more distant future could be seen many normal factors which would decrease the underlying strength of the market. In such circumstances there was no doubt some upper resistance point, far below 'the logical conclusion', where speculative holders would sell willingly and institutional buyers buy reluctantly. At about 106 the long-term bank-ineligible $2\frac{1}{2}$'s had reached such a point. It only needed sufficient general uncertainty to blur the normal picture, in the speculative mind, based upon officially anchored yield curves whose shape could be changed only by the market, not by the authorities, for prices to decline sharply in a spurt of profit-taking. Official action no doubt did accomplish some blurring—or at very least it removed the dream of a *new* official pattern, based on 2 per cent. at twenty-five years, that was thought to be a feature of the speculative daydream in January and February. The repercussions of debt-retirement were themselves a subject for hard thought, making bond-holders pause to reconsider. Thus, if the pressure upon bank reserves itself only produced 'moderate' effects upon bank policy—and it was upon the bond-gathering banks that official attention was mainly directed—the general effect of both debt-retirement and psychological pressure was to make the official pattern of rates slightly less inappropriate to the ruling conditions. This was a salutary effect. It stopped, for the moment, a net expansion of credit arising from bond-gathering, and stopped, in consequence, both a spill-over of such new funds into other markets and the aggravated tendency to force seekers of income-earning securities to look elsewhere than the government-securities market. This latter tendency is a danger of ever-cheaper money in inflationary

circumstances: developments in April–June 1946 certainly did not remove it, but they diminished it. The most one can say here is that official actions had some success in hastening, and consolidating, a speculative reaction, and, in all probability, that is all the authorities hoped for.[1] It must not, however, be concluded that the Reserve authorities were now content. They saw it as a temporary relief, and no permanent solution to the difficulties of the 'pattern'. The Treasury, however, was made happier and its position strengthened.

[1] Since the basic liquidity of the commercial banks was scarcely affected, as yet, neither by the reduction in the floating debt (much of which was held by the banks as backing for war-loan deposits), nor by the expansion of loans, it is not surprising to find the smaller banks again buying bonds on a heavy scale. With the dispersal of war-loan accounts and pressure on bank reserves, the movement of the previous summer seems to have recommenced: the share of reporting banks in net deposits plus war-loan accounts fell again to 59 per cent., while their bond holdings fell by a net 500 millions, indicating net purchases by non-reporting and non-member banks (since total commercial bank holdings remained steady), quite apart from the replacement of bonds lost by the repayment of March and June.

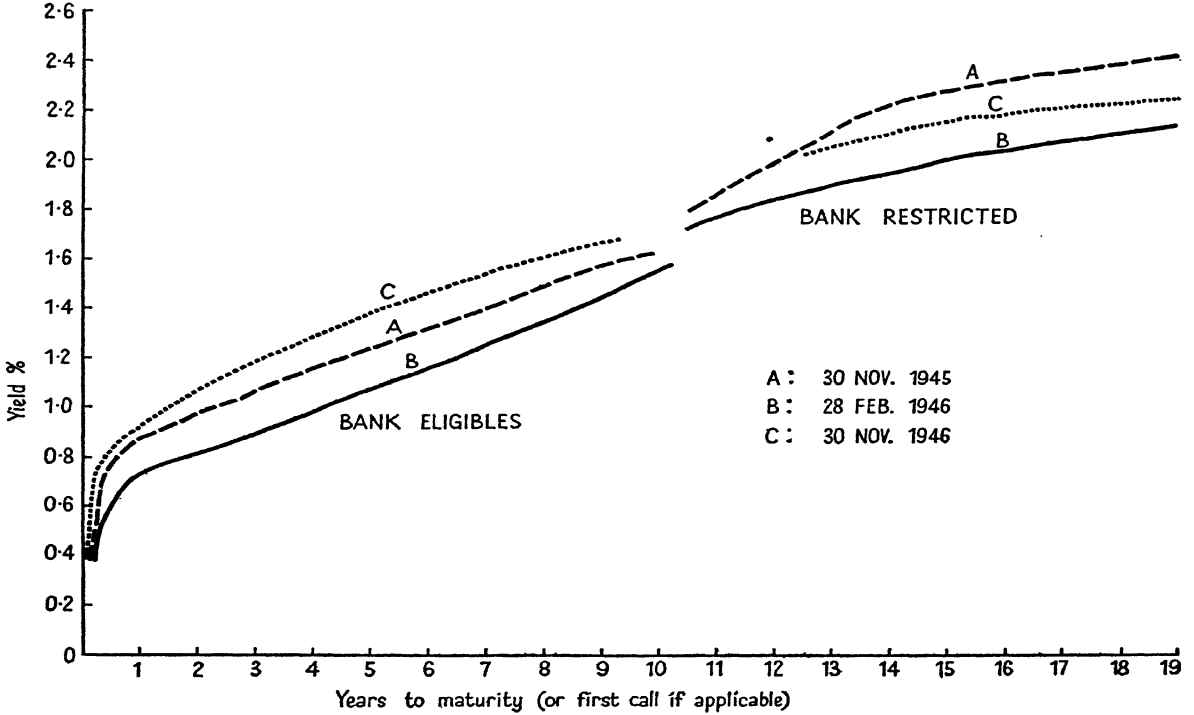


FIG. 2. Yield curves: U.S. Govt. taxable securities. Source: Treasury Bulletins

VIII

SELECTIVE CREDIT CONTROLS

§ 1. *Margin Requirements and the Reconversion Boom on Wall Street*

NO single economic event of the past thirty years, with the possible exception of the 'fall of the £' in September 1931, is so indelibly stamped upon the minds of the general public as the Wall Street crash of October 1929. It is symbolic of all that was unsatisfactory about those years. That a repetition of it has not occurred is due both to the reforms of the Securities and Exchanges Act, and to secular factors that have combined to diminish the forces of equity speculation—the lessening dependence of business upon both stock exchange and bank finance, the growth of the 'term loan' system,[1] and a change in the type of investor who patronizes the equity market. To such considerations may be added the psychological effects both of the 1929 débâcle and of the prolonged stagnation of the 1930's. Regardless, however, of such factors, a speculative boom of the old 'Wall Street' type is difficult without a constantly increasing supply of call-money to finance speculation on margin.

Since the Securities and Exchanges Act of 1934, the quantity of call-money lent to the stock-market (as distinct from the government-securities market) has been subject to control by the Reserve Board. Under that Act the Board was empowered to prescribe and regulate a legal minimum to the margin on which securities could be purchased, or carried, with the aid of a loan from a security

[1] Term loans: loans by a single bank, or group of banks, to a private borrower, with fixed repayment terms running over a period of years. They are, in origin, an extension of the hire-purchase system to business finance, an admirable source of cheap borrowing with a minimum of lender's risk. See *Federal Reserve Bulletin*, 1947, pp. 495–517.

broker or dealer secured by the stock concerned. The regulation was extended, in 1936, to similar loans obtained from commercial banks. If, for example, the legal requirement was 100 per cent., then all trading in stocks or bonds listed on leading exchanges had, with certain exceptions, to be made on a full cash basis. The important exception was trading in United States government securities. This control was the first of the 'selective credit controls' which are the practical consequence both of the traditional view that the speculative use of credit should not hamper the accommodation of the legitimate business borrower,[1] and the more modern view that general credit control should be abolished in favour of specific regulation of particular areas of credit instability, that the monopoly of credit should be, in fact, a discriminating monopoly.

We have already noted the steady rise in common stock prices that took place during the war (Chapter III, p. 37) under pressure of the sheer volume of liquid funds, the tax-incentive to capital gains, and, no doubt, to some expectation of post-war profits.

The average yield on Moody's 125 Industrial Common Stocks was 4 per cent. in June 1945 and, if such a yield was to be maintained, it was clear that a very considerable rise in stock prices would have to occur to offset what were likely to be substantial increases in dividends. Exactly what level of average yield the market might be prepared to regard as 'normal', given a $2\frac{1}{2}$ per cent. yield on long-term government bonds, was difficult to predict, for, as elsewhere, there was no precedent to go by. Nevertheless, a Wall Street boom of some size could be expected. Such a boom might encourage undesirable marginal capital expenditure, the further expansion of bank credit, and a general attack of speculative fever throughout the economy —in commodity markets and real estate, that is to say, as

[1] *Vide* Federal Reserve Act, 1913. The System is required to find out if 'undue use is being made of bank credit for the speculative carrying of, and trading in, securities, real estate or commodities'.

well as stock-markets. A speculative heyday in Wall Street, if allowed to develop, would further complicate the management of the market in government securities owing to the resulting drain of funds from that market, and any subsequent collapse of the equity market would heighten disorder. Obviously any attempt to restrain speculation *other* than by margin regulation would simply be inconsistent with official policy then operative in the market for government securities, unless new legislation on capital gains, &c., was forthcoming (most unlikely in post-war Congresses).

From every possible consideration, a stock-market boom was the very least desirable development of the general inflationary situation. The difficulty, if there was any, was to decide when a perfectly legitimate rise in prices, offsetting a rise in yields, became a speculative menace. This difficulty could, however, easily be resolved. For a legitimate rise in prices could occur without the assistance of increased stock-market credit (unless, of course, such a boom were to be wholly supported by new credit generated in the government-securities market), while a speculative boom could not. The remedy was therefore simple. The supply of new margin credit would be cut off if necessary, or at least limited to a level which enabled professional speculators to perform their proper market function and no more.

Margin requirements had already been raised, from 40 to 50 per cent., in February 1945, the first change in the regulation since 1937. This warning produced little or no effect, in spite of some plain speaking by Chairman Eccles who advocated an increase in the capital-gains tax (and the application of the increase to securities purchased after a certain date) which he regarded as unduly low when compared with prevailing surtax rates.[1] Mr. Eccles also took the opportunity to condemn speculation on moral grounds.

Outstanding stock-market credit for the purchase or

[1] *Federal Reserve Bulletin*, 1945, p. 222.

carrying of securities other than obligations of the federal government rose, for the weekly reporting member banks of New York City,[1] from $725 million on the 31 January 1945 to $870 million on 3 July 1945. This in itself, compared with the 1920's, is a very minor increase, but the Board, with an eye to the movement of prices and its dislike of any increase in such credit, was not satisfied. As a further precaution, requirements were raised to 75 per cent. on 3 July, when our period begins. In order to heighten the effect of this regulation, it was further required that the proceeds of all sales of securities in undermargined accounts (those built up before the 75 per cent. rule) must be used to reduce outstanding indebtedness in that account. This effectively stopped the increase in outstanding credit, although the fact that the figure did not decline indicates an increasing volume of trading on credit.

Apart from the steady rise in prices there was considerable activity in new issues of stocks and bonds (other than Treasury bonds), most of which, however, were refunding operations. At $8 billion the total of new issues for the year 1945 was the highest since 1930, but only $1·8 billion were raised for new capital (several hundred millions below the 1936–41 average). Of the $1·8 billion, $1·3 are attributable to incorporated business (the rest to State and municipal authorities); whittling the $8 billion down yet further, $650[2] million, only, were new common stocks. But such was the pre-war depression in Wall Street, and such, to some degree, the inflation of the dollar, that this figure was well above the average for 1936–41 and the highest since 1930. For the sake of filling in the picture, one may mention that the total market value of all listed ordinary shares on the New York Stock Exchange at 30 June 1945 was over $65 billion. By comparison with the concurrent activities in the national debt these new issues for new money are very small and marginal. The slight

[1] Accounting for about two-thirds of such credit outstanding.

[2] Up to one-half of which may have been preference shares.

revival of equity financing is, however, noteworthy, if only for future reference. It did show that, given a chance, the equity would straightway surpass the bonded debt in popularity. New bond financing, by corporations, for 1945, at $600 million, was below the 1936–41 average. As to the use to which these figures were put: of the three great groups of corporate enterprise—railways, public utilities, and 'industrial'—the 'industrial' sector accounted for a large majority of the 'new money' issues while the other two carried out extensive refunding operations. This pattern continued into the first half of 1946. Of the 'new money' issues, over 40 per cent. was required for working capital and the rest for new plant and equipment. Thus if business as a whole was in no need of new finance, there was nevertheless a needy fringe.

By January 1946 the index of common stock prices had risen to an average of 145 from 121 in July 1945. Since 1 July, however, the volume of stock-market credit reported by New York City banks had remained static, or even declined somewhat, at around $800 million.[1] But, confronted with the boom in the government security market which gathered force early in the new year and the general pressure of funds which, as we have seen, lay behind that boom, the Reserve Board became extremely anxious. In the corporate bond market the pressure of funds had already reduced the Baa bond yield from 3·46 per cent. in January 1945 to 3·10 in December, while in January 1946 it fell further to 30·1 per cent. The yield on Aaa corporate bonds had fallen from 2·69 to 2·61 early in 1945 and thereafter remained steady, but fell from 2·61 to 2·54 per cent. in January 1946. It was not clear how long the acute pressure of funds would last—how effective, for instance, the forthcoming debt-retirement programme would be—but, in the inflationary situation of the time, clearly it would be unwise to let a further push to an already bullish equity market go unimpeded. Such a push, already noticeable in

[1] Total for all reporting banks was around $1,100 million.

the corporate bond market, might induce a much more severe rise in equity prices—which could also go on rising under, as it were, their own speculative steam. The pressure of funds was already severe enough. In these circumstances, and with an eye to its inability to rein in the banking system, the Reserve Board decided to prohibit any extension of margin trading. If Wall Street was to boom it could do so on a full cash basis. On 20 January 1946, therefore, margin requirements were raised to 100 per cent. and until a year later the only stock-market credit (other than on government securities) outstanding was that lent out prior to the 100 per cent. rule.[1] Governor Eccles made a public statement about this action.[2] Nothing was left that could be done except possibly the conversion of existing margin accounts to a cash basis, he said. To whatever extent speculative activity was dampened by the new regulation, it was desirable at a time of strong inflationary pressure. After reviewing the general causes of inflation, he pointed out that general price controls, rationing, &c., could not stop the flow of speculative funds into the stock-market whose effects there could best be stopped by, he again advocated, an increase in the capital-gains tax. But the root of the matter was the monetization of the public debt. It was 'imperative' that this process should cease, so that the rate of return on investments would be stabilized and—a curious conclusion to derive from stabilization—'would reflect the supply of savings and investment funds in relation to demand instead of reflecting an increasing amount of bank credit'. The process could only be stopped by a fiscal surplus or by some special measures—i.e. new regulations—to check the expansion of bank investments. Mr. Eccles was not in a good temper. Since he was himself a commercial banker (in Utah) his remarks may be construed as an oblique attack

[1] Credit was still available for dealings in unlisted securities, but no data are available on the volume and movement of such credit.

[2] *Federal Reserve Bulletin*, 1945, p. 121.

upon the Treasury and its insistence on the ⅜ per cent. anchor. Further, he remarked, 'far too much of the cost of the war was financed through the creation of commercial bank credit . . .'.

Nevertheless Wall Street continued on its way after a pause during the annual period of American economic introspection—late winter—and the common stock index rose to an average of 154 in May and was 153 in June. Corporate bond prices closely followed the Treasury bond market, reaching their peak in March and April (Aaa reached a low of 2·46 per cent. and Baa one of 2·94 per cent., with Treasury bonds at a floor of 2·08 per cent). By June, however, Wall Street was defeated. In the autumn a sharp reaction set in, the index falling back to 121 in November. Deprived of direct new bank credit, and, by the summer, deprived also of a spill-over of such credit from the government securities market, the equity market had not enough steam to go on. The state of 'real' expectation, as opposed to expectations of a purely monetary character, was not sufficiently optimistic; the fear of too rapid inflation and subsequent slump was strong. Considerations of capital security and, therefore, of a high 'proper' yield became paramount, and the high level of new issues during the first half of the year seemingly drew off a surplus of funds which were not replaceable. It is difficult to assess the importance of the Reserve Board's action here. It deprived the equity market of, at the most, $400 million during the first half of 1946 and, psychological effects apart, it seems likely that the effects of changes in the government securities market were more important than those of 100 per cent. cash trading. The boom of 1945–6 appears to have been essentially a monetary phenomenon of the reconversion period, as is demonstrated by the persistent refusal of stock prices to rise in subsequent years of rising dividends. But that is not to say that, in the circumstances of January 1946, the Board was not absolutely right to make the 100 per cent. rule. It clearly was.

As for new issues the pattern already noticed continued during the buoyant period of 1946. For the first six months of the year new issues totalled $4·2 billion, over half of which were sold in the second quarter. $1·6 billion of the total was for new capital, of which $730 million were corporate stock issues—a rate of stock issue far exceeding that for the previous year or any pre-war year since 1930. But if allowance is made for the increase in the national income, the volume of equity financing becomes much smaller in importance. It was a very limited revival, largely due to the peculiar monetary situation which made equity financing temporarily cheap. If the Reserve Board had had a revenge, it had not really had to fight.

§ 2. *Consumer Credit in the Transition*

The second of the selective controls, the regulation of consumer credit, is potentially of greater importance than the first, but has, as yet, had a somewhat chequered career. This control is often referred to as if it were a permanent feature of American life. It has never yet been a permanent feature, though the chances of it becoming so would appear good. Instead, it has been a temporary control, originating from emergency, which has three times been put into force and twice, by Congressional insistence, abolished. But for the onset of the Korean emergency its abolition might well have lasted for some years.[1]

Regardless, however, of its career, the control is of a type which makes it extraordinarily attractive to economists, the more so in a country where the mass distribution of those goods which are bought on the instalment system has become vital to continued prosperity. Not only is the prosperity of the U.S.A. vitally affected by the prosperity of, for example, the automobile industry, but that and similar industries are thought to be subject to an unrivalled instability of demand. Consumers' durable

[1] More recent (1952) events suggest that permanent regulation of consumer credit terms is still very much in doubt.

goods are more accurately described as consumers' capital equipment, and the industries which produce them are inherently subject, particularly in the contemporary decades of extremely high investment in such equipment, to 'accelerators' and replacement cycles of great violence. Any general control which might mitigate such instability is, thus, prima facie, desirable. The fact that such control may be exercised by regulation of credit terms, a form of control which, by reason of the fact that it 'rations by price' and does not interfere directly with freedom of choice or with day-to-day business operation, makes the idea more attractive than other forms of control. Quite apart from the peculiar status of those industries which produce consumers' durable goods, control of demand for their products is a very useful anti-cyclical, and, particularly, anti-inflationary device, when the production of such industries represent a large proportion of the total. Strong demand for consumers' durables, assisted by easy credit terms, may not only heighten instability in the industries concerned, but aggravate general inflationary pressure by a reduction in savings and by causing excess demand for basic materials (e.g. steel). Similarly, heavy consumer indebtedness in a period of falling incomes may cause a perverse fall in the propensity to consume at exactly the wrong moment. Whether, thus, for reasons associated with the demand for consumers' durables as such, for reasons associated with general economic fluctuation, or for reasons associated with the liquidity or illiquidity of consumers, this type of credit control may be desirable. It may also be efficient—though not necessarily so, depending, for example, in the case of boom, on alternative sources of purchasing power available to consumers (e.g. savings bonds) and the extent to which, in the case of slump, demand can in fact be increased by a relaxation of credit terms. Evidence in favour of this control in normal circumstances is, so far, good, provided the situation has not got out of hand. But it must be admitted that

its use in normal circumstances has so far been confined to 1948–9. 'Korean' circumstances cannot be described as normal, any more than the years immediately following the Second World War.

The regulation of consumer credit originated in an Executive Order made by Mr. Roosevelt, under the Trading with the Enemy Act, in September 1941. It was, therefore, legally, an entirely temporary control—instituted to meet the situation, not unlike that of September 1950, posed by an armaments programme which was likely to run directly up against consumers' demand. The control was subject to sudden abolition, or periodic reprieves, by Congress. It was also entirely experimental: its use in war-time was purely restrictive and its effects in peace-time, that is to say the sensitivity of borrowers and lenders to changes in regulation, unknown. Its administration involved the Reserve Board in a considerable extension of its work—statistical, legal, and 'classificatory'—in order to control effectively a large, diverse, and highly atomistic business which varied from being a business in itself (finance companies, banks, &c.) to being merely an every-day feature of ordinary retailing (charge accounts). 'Consumer credit' is usually associated completely with hire-purchase or 'instalment credit' while in fact the term covers 'charge accounts' and 'single-payment loans' as well. Regulation W, as formulated and variously amended under the Executive Order of 1941, sought to control all forms of consumer credit over a wide and complex range of 'listed articles'—until the drastic simplifications of the later post-war period confined the regulation to instalment credit only. During the transition period the future of the regulation, and of who should administer it, was doubtful.

For a few months before the war, and for the war period, the purposes of the regulation had been entirely restrictive in two ways—firstly to check, in 1941, the alarming rise in instalment credit, particularly on motor-

cars, which added impetus to inflation and diverted production away from armaments, secondly, and for the next few years, to encourage the steady repayment of consumer debt, thereby mopping up a certain percentage of rising personal incomes. The first purpose was partly relevant to peace-time conditions while the second was not. The purpose of a 'selective' credit control is to apply specific local treatment to a particular area of market instability. The general use of charge accounts and single-payment loans is not such an 'area of instability' but more a stable function of income; moreover its control is complex and irksome and to be effective in peace-time would require an urgency of purpose which it does not possess. Instalment credit (instalment sales credit or instalment loan credit) is, as we have seen, however, just such an area of instability and lends itself to schemes of anti-cyclical treatment. It must be remembered, however, that in 1945 the Reserve Board had no long-term responsibilities in this matter, but only a short-term task of a restrictive character. Further, one should notice important differences between this control and the stock-market control. In the latter type of selective regulation, action can be taken with regard to the general monetary balance of the economy without much fear that, for instance, restriction might easily be overdone, with rapid deflationary consequences. Though its reasonable good health is desirable, the stock exchange is not an industry whose *great* prosperity is vital to the whole. Consumer credit regulation, however, by seeking to manipulate the demand for consumers' durable goods—preeminently, automobiles—is quite capable, if overdone, of inducing a slump in the industries concerned which can spread all too quickly to the whole economy and overwhelm the regulators with angry recrimination. Attractive in theory, it may be a difficult and rather dangerous weapon to use in practice—which may explain why the Reserve Board, at this time, was not especially keen to administer this control itself, while favouring its retention.

Modern forecasting techniques in the U.S.A., however, suggest that such a control can be used with comparative safety.

However, during the reconversion, Regulation W was regarded as an indispensable adjunct to the general apparatus of anti-inflationary controls. It also had another salutary effect, namely, as follows: the instalment credit business was, and is, extremely profitable on account of the high interest charged on loans and the low interest charged for the finance of the finance companies. The business nominally[1] carries considerable risks, but even in periods of deflation losses on loans are not common. In the days of unrestricted instalment credit, the competitive weapon consisted not of 'price cutting' but of offering longer maturities and lower down-payments. Regulation W stopped such competition and therefore, it was thought, shifted the emphasis on to pricecutting and service improvement—a salutary development both for consumers and for the general economic status of instalment credit. The post-war period was characterized by an intensification of competition between banks and finance companies.

By 30 June 1945 the total of consumer credit outstanding had declined from $9·9 billion in December 1941 to $5·7 billion. The total had in fact been growing slowly since the end of 1943, reflecting an increase in some working minimum due to the rapid increase in national income. In the last six months of 1945 the rate of growth increased markedly, the total rising by $1 billion to 6·7. After a momentary seasonal drop in January 1946 the increase went on at the same rate of $2 billion per annum, reaching a total of $7·9 billion at the end of June. Compared to the 1941 level, and with regard to the increase in incomes, the reconversion totals are extremely low; but so long as the

[1] By 'nominally' one means that loans are secured by goods whose second-hand value is, normally, very much less than their retail price when new.

shortage of durable consumers' goods continued it was highly desirable that the total should remain extremely low. Indeed, of the increase of $2 billion during the fiscal year 1945–6, only half was accounted for by the rise in instalment credit, while that rise itself was evenly distributed amongst the various types of goods bought. In the prevailing circumstances, therefore, little relaxation was permitted in the terms of Regulation W. The terms of this regulation, since 1942, had been, generally, as follows: minimum down-payments on all listed articles, for instalment credit, $33\frac{1}{3}$ per cent., maximum maturity twelve months (automobiles, fifteen months). Single-payment loans were restricted to three months' duration and charge accounts had to be settled every two months. In October 1945 two relaxations were made: firstly, 'home-repair and improvement' loans were removed from the 'list' altogether, secondly, the maximum maturity on loans other than those for the purchase of durable goods was raised to eighteen months. These concessions to the fact of peace added little to the forces of inflation—non-durable goods were comparatively plentiful and a too-strict regulation of instalment credit might only provoke a greater encashment of savings bonds or drawing down of time deposits, thus achieving nothing.

To conclude, the operation of this control during reconversion remained essentially unchanged and the increase in consumer credit, though more rapid than ever before, did not, in the circumstances, give cause for alarm. Not until the production of, e.g., motor-cars approached the level achieved in 1950 did this selective area become a major problem.

NOTE: For general statistical tables applying to the reconversion period and to subsequent years, see Appendix to Part III.

IX

THE INSTITUTIONAL PROBLEM:— THE TREASURY, THE RESERVE SYSTEM, AND THE FEDERAL CONSTITUTION

THE opinions, and differences of opinion, current amongst the American monetary authorities during the reconversion period must now be considered. But before doing so it is necessary to include a short chapter on the powers and responsibilities of those authorities in the context set by the Constitution of the U.S.A. Unless the peculiarities imparted to the traditional struggle between central bank and central government by the American Constitution are realized, the course of dispute or agreement between the Treasury and the Reserve System cannot be fully understood.

Since the writer is not an American, and his knowledge of what underlies the administrative arrangements of the U.S.A. necessarily limited, it would be presumptuous for him to attempt a detailed critical survey of the administrative difficulties involved in monetary management. Nevertheless, before commenting upon the trends of opinion revealed by published statements of top officials, it is essential to set out the administrative position involved. In so far as interdepartmental rivalries, confusion of policy, or the reverse, can be attributed to shortcomings or advantages of the particular division or concentration of powers and responsibilities, knowledge of the administrative arrangements is extremely useful. This chapter is therefore devoted to a brief résumé of these arrangements and their probable consequences.

In so far as the Administration formulates general economic policy—whatever that may mean—responsi-

bility lies with the President. The question is, who advises him and do particular kinds of economic advice necessarily come from any one particular adviser? The answer would seem to be that although certain departments and agencies naturally give advice on matters directly affecting the individual department or agency, there is nevertheless considerable overlapping. One could not say, within certain limits, whether a certain policy 'came from' a certain department or whether a certain agency would or would not be acting entirely outside its field by devoting time and energy in putting forward certain advice. This state of affairs may cause considerable friction, and a constant shifting of predominance: it arises, no doubt, from the exceptionally personal character of each Administration consequent upon the supremacy of the Chief Executive in the American constitutional system. The smooth working of the executive branch depends to an unusual degree upon the ability of the President to drive his team, and upon the ability of the members to get along with each other. In spite of the growth of the presidential staff (e.g. Bureau of the Budget), one of whose purposes is to relieve the President of excessive burdens of co-ordination, the increasing complexity of government places a strain upon the presidential office which it cannot altogether be expected to bear—particularly in face of constant congressional prying. These difficulties are plainly visible in the monetary and debt-management fields, where one of the 'departments' involved is not, in law, part of the Administration at all but is an independent agency set up by Congress, and one that is financially self-supporting. The controversy about 'the independent central bank', which is both ancient and familiar, persists in the U.S.A. today; but inside that controversy is a further dispute as to whom or to what the central bank should be 'subservient' if its legal independence is, in practice, not to be asserted.

This further dispute is peculiarly American and arises

largely from the fundamental difficulties of the executive branch just mentioned and from the comparative weakness of the United States Treasury. The common solution of making the central bank at least nominally subservient to the treasury[1] is not an obvious one, nor necessarily a workable one in the United States. The whole problem is accentuated if, for a variety of reasons, the Administration is a weak one *vis-à-vis* the Congress, in that the legal independence of the central bank, or, to be more exact, its legal responsibility to Congress is necessarily enhanced thereby. We have referred to the 'weakness of the United States Treasury'. What does this mean?

The Treasury, superficially, looks as we should expect it to look and rather more besides. That is to say, the Treasury collects taxes, makes federal payments, manages the public debt, supervises customs and excise, and so forth. Further, it has certain accretions of duty—it regulates the drug laws (Bureau of Narcotics) and operates the Secret Service (which guards the President from assassination and the currency from counterfeit). Still further, it retains certain monetary powers which it possessed in the days when there was no central bank: as the sole buyer and seller of monetary gold, it operates the form of international gold bullion standard currently adhered to by the U.S.A., and, under the current remnant of bimetallism, monetizes domestically mined silver; finally, the supervision and chartering of National Banks (under the National Bank Act of 1863) is vested in the Comptroller of the Currency, who is a Treasury official.

The Secretary of the Treasury is significantly described as 'the chief fiscal officer' of the government. He is a

[1] The extent to which, e.g., the Bank of England is subservient to the British Treasury in fact as well as in law must primarily depend on personalities. But the point has been well made by Mr. Harrod that the closer association of Bank officials in the business of government, their presence on official committees, &c., arising from nationalization, increases the potential power and influence of the Bank. See also p. 132, note.

member of the President's cabinet, and a senior member, by tradition, who may be expected to be very close to his chief. His under-secretary, and assistant secretaries, whose duties might correspond to those of permanent under-secretaries in the United Kingdom, are generally not permanent civil servants but temporary 'political' nominees of the President. So much, in broad fashion, for duties; what of powers, or of the departmental power of the Treasury? The crucial point here is that the Treasury is *not* responsible for general supervision and control of all departmental spending, nor is it responsible, therefore, for the budget in the sense that the British Treasury is. Budgetary policy is a matter for the President, in which he is assisted by the White House office of the Bureau of the Budget and by the Council of Economic Advisers. The actual form of the budget has to be fought out between President and Congress. As chief fiscal officer the Secretary of the Treasury administers the budget, and will advise on taxation or debt creation, but one cannot talk about a 'Morgenthau budget' as one might talk about a 'Lloyd George budget', instead one might refer to a 'Roosevelt budget' or, even, to 'an 80th Congress budget'. Lack of Treasury supervision leads to a certain unpredictability in expenditures, but that is not our concern. Now whatever the personal prestige or ability of a particular Secretary may be, the fundamental position remains unchanged and inevitably detracts from the superiority of the Treasury in inter-departmental struggles of a fiscal or monetary character. Fiscally, the Treasury is weak. This being so there is both a tendency on the part of the Reserve Board, whatever its fundamental views on 'independence' may be, to revolt against subservience to the Treasury *per se*, and a tendency on the part of the Treasury to assert itself in those fields where it really does possess undoubted power and responsibility. The Reserve Board is inclined to regard itself as a departmental equal of the Treasury (an opinion which should scarcely be tenable if held by the

Governor and Directors of the Bank of England), but, owing to its legal independence, its Chairman is not a member of the Cabinet and has not the direct access to the President possessed by the Secretary of the Treasury. Thus, under American conditions, a Board Chairman who regarded himself as bound to fall in with the policy of the Administration would not regard this as meaning subservience to the Secretary of the Treasury, but would be prevented by his legal independence from becoming an equal member of the President's team. Further, the Board would not wish to sacrifice its independence completely, nor would it be acting in accordance with the wishes of Congress, its ultimate master, if it were to do so.

In the light of all this, it will be seen that close co-operation in the monetary and debt-management field, co-operation producing coherent policy and well-timed action, is even more dependent than elsewhere in Washington upon the ability of the Board and the Treasury to see eye to eye. The administrative arrangements are, in fact, positively conducive to friction and so designed as to produce something of an epitome of the 'checks and balances' theory. It may be added, that the financial independence of the Reserve Board, and the profitability of central banking, may enable it to employ a much larger research staff and to marshal a more impressive array of argument and evidence than the Treasury: this fact does not help to improve frayed tempers in the Treasury.

As to specific monetary powers: the Reserve Board, at the apex of the Reserve System, is a statutory body with powers delegated to it—some specific, relating to the operating powers of a central bank, some vague, amounting to Congressional hopes of the contribution central banking might make to economic stability and to the avoidance of speculative excess. It is these vague powers that contain the implicit doctrine of central-bank independence and which inevitably conflict with any ideas of 'subservience' either to any department or, lacking a clear

expression of popular will in a strong government, to a given Administration. Independence is fortified by the fourteen-year term enjoyed by members of the Board: those members are appointed by the President subject to Senatorial approval, but are likely to outlast the President who appoints them, and outlast his policies.[1] But, and it is a big 'but', it would be a mistake to regard the Reserve System as a tightly-knit organization which always speaks with one voice. The divorce of actual market operations from the nucleus of power tends to produce divisions of opinion and some multiplicity of staff. Further, since the Board is located in Washington, amidst the intensely 'political' atmosphere of that city, and the market operations centred in New York, where the atmosphere is entirely different (but not typical of the whole country), the above tendency is aggravated. It is thus possible, for example, for the Treasury to operate on a 'divide and rule' principle.

The powers of the Treasury are nominally great in international monetary matters, but important policy decisions in this field do not concern us. The power which is vital for our purposes is that of debt management. Specifically, the Secretary of the Treasury, and he alone, has the power and responsibility for fixing the 'coupon' rate on any new government security, and of deciding what type of security should be offered, and in what amounts. He would be finally responsible for the failure of an issue and, in a sense, can be regarded as responsible, at least in the short run, for maintaining the 'credit of the government'. This is the basis of the Secretary's monetary power under present conditions. This is the one big administrative field in which the Treasury enjoys practical autonomy of executive action and in which it is inclined to exercise

[1] This point is somewhat offset by the dominance, in recent years, of the Chairman of the Board, whose term as Chairman (but not as Governor) is only four years. Both Mr. McCabe (1948) and Mr. Martin (1951) were appointed Chairmen by Mr. Truman and made members of the Board for the purpose.

power with zest. Routine co-operation between the two agencies is of necessity very close, over decisions of policy it may not only be far from close but, in isolated cases, entirely absent. Concerning the terms of a refunding issue, the Reserve System has, in some cases, not even been consulted by the Treasury. Whatever the personalities or opinions involved, the fact remains that the Treasury is responsible for the management of the debt without being, in law, responsible for, or capable of undertaking, the monetary management without which the proper handling of a modern national debt is extremely difficult if not impossible (more especially in the U.S.A.). The two agencies may differ on debt management problems either for purely 'market' reasons, or wider reasons of monetary policy, and such differences are, as has been seen, extremely difficult if not impossible to resolve under an organization of government which produces both a weak Treasury and the various further complications we have outlined. The fact that in certain circumstances one may consider the Treasury view the correct one and the Reserve Board wrong, or vice versa, affects one's critical judgement but in no way alters the fact that authority is divided and confusion possible, neither of which may in principle be desirable,[1] however haphazardly good the outcome.

As we have noted, or hinted at, in previous chapters, the Treasury view during this period, and even throughout the post-war period up to 1951, was nothing if not consistent in its practical formulation. The Treasury had one clear objective from which it seldom averted its stare; the arguments used in favour of its policy might, and did, vary from the highly theoretical to the specifically practical, the vaguely ethical, or the uninhibited dogmatic, but the policy was simple and unchanged. Essentially it was a policy dictated primarily by technical managerial

[1] Some would, of course, hold that occasional confusion is the necessary price to be paid for the avoidance of excessive centralization of monetary power.

considerations reinforced by fear and apprehension of an unregulated market in government securities. To this can be added certain suspicions that its opponents were hard-money wolves masquerading as not-*quite*-so-cheap-money sheep, and the Treasury had a theoretical and moral basis for its low-interest bias. But I do not think these frills to Treasury policy in any great degree lessen the importance of the fundamental managerial considerations and basic fears mentioned above. The Treasury objective was quite simply the *de facto* stabilization of the government securities market under a structure of interest rates not significantly different from that of war-time. Almost any change in, for instance, short-term rates was undertaken with great reluctance, save for downward changes which were readily accepted. Reluctance to move short-term rates upwards was an effect not so much of narrow considerations about debt service charges, but of a feeling that this was the thin end of a wedge which was being driven into the cheap-money position. The Treasury refused to admit the logic of the 'stable money' position, and continued to do so as long as practice could evade logic.

Any serious abandonment of the 'pattern', at the 'short' end to begin with, raised spectres of disorder, of a speculative raid on the market, and a situation demanding capitulation of the Treasury to the market. It further raised the possibility of an abandonment of the $2\frac{1}{2}$ per cent. anchor and the collapse of a cheap-money debt structure with its securities designed to satisfy each type of investor with capital security and low returns. A fluctuating market would inevitably render the handling of the regular series of refunding operations technically much more difficult and would place the Treasury very much in the hands of the Reserve Board. In short, the Treasury had a vested interest in the pattern. Since, in many respects, the Reserve Board (if not all the Reserve Banks) shared the apprehensions and basic ideas of the Treasury, the latter was able to get its way in many cases. The historical conse-

quence was to force the Reserve System to experiment with such a market: out of such experimentation have arisen new ideas about general monetary policy and new techniques which have themselves enhanced the power of the Reserve Board. But in spite of substantial agreement between the two, the conflict continued—partly due to suspicion, partly due to divided views in the Reserve System itself, and partly due to reluctance of the Treasury, after so many years, to relax its decisive grip on the cost of its own borrowing. Conflict was intensified by the fact that the Treasury itself was inclined to disregard the inflationary consequences of its policy, or to regard them as of little importance, while the Reserve System was vitally concerned with such consequences and was, by Statute, in some way responsible for them.

We must, to conclude this chapter, distinguish two separate points of dispute which run through these years. Firstly, there was the perennial question as to whether the more or less complete elasticity of the supply of reserve dollars should be maintained as a long-term policy or, if not, whether some restrictions on the marketability of government securities should be imposed upon the banks and others. The latter alternative accepts the logic of the position, admits inflationary dangers, and in effect demands the substitution of controls for a market. Secondly there was the more short-run question of how to manage the market if 'logic' was not accepted—of how much and at what time interest rates shorter than $2\frac{1}{2}$ per cent. should be changed or be allowed to fluctuate. This question produced a game of strategy in which the Reserve System played against the market on one side and the Treasury on the other. This game will be dealt with later on: on its play rests most of the technique of credit restraint that was being developed before the 'Korean' emergency. During the reconversion period this game was beginning, while the former perennial question remained largely academic. Only later, when continued inflation appeared to be slipping

beyond control, did the Reserve Board (but not the Treasury) revert in some degree to more orthodox views and submit a series of proposals designed to permit widely fluctuating rates on private debt without at the same time upsetting the Treasury. Later still the two questions merged together somewhat as the Reserve System began to discover that some general credit restraint was *almost* (but not quite) possible without ever letting go of $2\frac{1}{2}$ per cent. When this discovery was made, and the need for quick restraint arose, the Reserve Board promptly asserted its independence, and openly flouted the Treasury, in an episode characterized by *Fortune* magazine[1] as 'The Battle of the Billions'.

[1] October 1950.

X

OFFICIAL VIEWS DURING THE RECONVERSION

UNLIKE some central bankers, the Federal Reserve authorities are accustomed to providing some kind of public vocal leadership both in their own specific field and in the general economic life of their country. The Board does not shun publicity, it seeks it. Should there be certain matters it does not wish to publicize, then they are the more easily suppressed or obscured behind an unusually frank exterior. The publication of detailed statistical information on a lavish scale is an indispensable adjunct to such vocal leadership. In consequence, the kind of viewpoints, or records of action, which in this country we are accustomed to getting at second or third hand in corners of the Annual Economic White Papers, from oblique references in the annual sermons of bank chairmen, or between the lines of the financial press, are to be obtained in the U.S.A. by the simpler process of reading the Board's publications or the speeches (and evidence) of its officials. There may indeed be certain views which those officials either keep to themselves or communicate to a chosen few in private, but if the Governor of the Bank of England is rarely to be heard making a significant utterance about the Bank outside his inscrutable headquarters, an Eccles, McCabe, or Sproul appear to regard it as their duty to make regular and unequivocal pronouncements upon matters of monetary moment. Our Governor is to be seen flitting shyly between international meetings of the monetary elite; Mr. Sproul makes a downright speech at the annual convention of the American Bankers' Association. Neither, it should be remembered, is the doctrine of official solidarity so highly developed in the U.S.A.: high officials of the Reserve

System are not averse, within reasonable limits, to speaking their personal piece.

As regards the printed word, there could scarcely be a greater contrast between, for example, such documents as the Annual Reports of the Board of Governors or of the Reserve Bank of New York, not to mention the monthly publications of those institutions, and that epitome of uninformative brevity, the Bank of England's Annual Report —whose inadequacies can never really be made good by such comment on monetary affairs as appears in the government's Economic Surveys.

Thus, in the U.S.A., thanks to an atomistic system of banking, to an extreme public dislike of money secrecy, and to a Legislature which can command public officials, and private citizens, to testify before its Committees in public, curiosity is more amply rewarded and, at cost of some confusion, the democratic process extended into an unusual field.[1]

The leadership of the Reserve System is not the only monetary authority in the U.S.A., nor is it the only one to operate in public. The chief officers of the Treasury are almost equally vocal. It is to the published views of the Treasury and Reserve Board, and to comments upon them, that this chapter is mainly devoted: their views are known to have differed at various times (if not always) throughout the post-war period, but this quarrel between the two institutions, whose close co-operation in practice (if not in thought) was vital to monetary stability, seldom boils up above the surface. Instead there is a constant rumbling.

We begin with what might be called the stagnationist viewpoint current at the closing stages of the war. E. A.

[1] So far from extending the democratic process, the nationalization of the central bank, on British lines, may achieve the reverse. It adds the sanctity of official secrecy to an already secretive institution which is not staffed by professional Civil Servants but by bankers and technicians. The bank may thus constitute an extremely powerful vested interest inside the administrative machine without ever having to defend its views in open discussion—and is actually inhibited, constitutionally, from doing so.

Goldenweiser puts this view in a speech dated 14 November 1944.[1] Unlike Mr. Eccles at a later date, he is more impressed by the anti-deflationary virtues of the 'liquid asset' situation than with its inflationary vices; this is natural enough since he subscribes to the view that the absorption of war workers and servicemen into peacetime production on a scale sufficient to maintain 'full employment' sets a problem which will 'subject the effectiveness of our institutions to a crucial test'. To solve this problem he advocates a standard type of 'full employment policy'—high and increasing wages, agricultural support, increased social services, and a guaranteed minimum living standard for all, better trade unionism amongst 'lower-income' groups, a 'broad policy of public works', anti-monopolist enforcement, more progressive taxation, tax incentives to private investment, compensatory budgeting, a properly organized capital export programme, some kind of Central Planning Agency, and a liberal monetary policy; one refers to it as a stagnationist policy simply because it anticipates a much more rapid return to under-employment than has in fact been the case, and largely ignores the many problems of inflationary pressure, and of the possible or desirable rate of capital accumulation, that have since loomed so large.

In the special case of monetary policy, Mr. Goldenweiser described the maintenance of government bond prices as one of the 'financial cornerstones' in view of the widespread diffusion of bond ownership and the necessity to maintain confidence. But, he added, this did not mean that short-term rates could not move up and down. In a fashion typical of the Keynesian economists he said, 'this country will have to adjust itself to a $2\frac{1}{2}$ per cent. interest rate as the return on safe long-time capital, because the time has come when returns on pioneering capital can no longer be unlimited as they were in the

[1] 'Post-war problems and policies', *Federal Reserve Bulletin*, 1945, pp. 112–21.

past'. To compensate for unconditional support of 2½ per cent., he recommended the retention of existing selective credit controls, and their extension to real estate and commodity markets. Finally, he suggested that something, he did not say what, might have to be done to curb excessive bank earnings from large holdings of riskless government securities. Mr. Goldenweiser, then Director of Research and Statistics for the Reserve Board, was of course speaking only for himself and putting forward something of a perfectionist dream at a time when such dreams ought to be, and usually are, put forward: but one cannot ignore his views, even though they may be more to the left perhaps than those of the Board itself.

In March 1945 Mr. Eccles, Chairman of the Board, issued a statement to the Press.[1] This was devoted to his proposal that a special capital gains tax should be imposed upon traders in securities *and* in real estate properties who acquired their holdings after the 1st of January 1945. The Chairman was tackling an immediate problem rather than a wide range of long-term post-war problems, and was extremely apprehensive of the effect of the 'liquid asset' volume upon capital values—both on inflationary grounds and upon grounds of social justice (evasion of tax burden and hardship to returning soldiers, &c.). He did, however, propound a more general view that deficit financing of the war had been excessive: 'had the public and hence the Congress been willing to deal with inflationary causes, deficit financing would have been held to a minimum by far higher taxes and by far greater economy and efficiency in war expenditures. Some of us have urged that course from the outset. . . .' He evidently anticipated a prolonged post-war period of inflationary pressure, mentioning that 'the further creation of inflationary forces should be ended by greatly reducing public expenditures and by maintaining such taxes as are necessary to produce a balanced budget'. This apprehensive view, coloured by the pro-

[1] *Federal Reserve Bulletin*, 1945, pp. 222–4.

gressive emergence of the pattern-playing process during the year, appears in various numbers of the *Bulletin* during the summer—with references to excessive deficiteering and the undesirable downward trend in long-term rates (aggravated by the failure of the attempt to exclude the banks from participation in the 7th War Loan). The reprinting by the *Bulletin* of the British White Paper on War Finance and, earlier in the year, of the Canadian White Paper on Employment and Income, are significant of the editorial view. During the summer and autumn, too, publication was commenced of a series of papers, entitled 'Post-war Economic Studies',[1] the first two collections of which (August, November, 1945) were entitled 'Jobs Production and Living Standards' and 'Agricultural Adjustment and Income'. Number 3, entitled 'Public Finance and Full Employment' appeared in December. There is no need to examine these capable studies in any detail. Suffice to say that the views expressed in them and the policies propounded were fully in line with Mr. Goldenweiser's speech of November 1944.

By September 1945 the *Bulletin* was mainly concerned with the inflationary danger, coupled with (one step farther off) threat of depression, represented by 'inadequate resources in some parts of the economy and excessive resources in others'. This complex problem presented greater difficulties than those of war. Meanwhile, it was 'essential that action taken with respect to taxes, public works, extension of credit in this country and abroad, and inventory and price controls, should be so directed as to avoid the sort of price spiral which developed after the first World War'.[2] By October the *Bulletin* definitely no longer subscribed to the 'stagnationist' view—regarding the reconversion as potentially deflationary, but the

[1] Written by members of the Board's research division and by members of the staff of several Federal Reserve Banks. The papers were not officially endorsed by the Board.

[2] *Federal Reserve Bulletin*, 1945, p. 851.

general outlook as inflationary—' . . . But in the course of producing new goods (to satisfy deferred demand) more money income will be created and the over-all demand for goods by business and consumer groups may continue for a long time to be in excess of available supplies on the market.'[1]

Three further statements by high officials can now be quoted. Firstly, one by Under-Secretary Bell of the Treasury, being an address to the Association of Stock Exchange firms on 19 November 1945; secondly, a speech given at Indianapolis by Secretary of the Treasury Vinson on 27 November 1945; and thirdly, the statement of Chairman Eccles on 17 January 1946, made on the occasion of the 100 per cent. margin enforcement (referred to in Chapter VIII, § 1). Both Mr. Bell and Mr. Vinson defended 'cheap money' on simple grounds of orthodox employment theory. Both were extremely optimistic about the future. Mr. Bell congratulated his department on skilful handling of the debt expansion, with particular reference to the 'tailoring' of securities to fit each class of investor. This contributed to stability in the market and ensured the maximum collection of savings at the lowest possible cost. The debt charge, over $5 billion per annum, represented an average rate of 1·94 per cent.—in contrast to the '4½ per cent. war' of 1917–18. The latter rate would, if applied to the debt of 1945, mean an interest charge of over $12 billion. Mr. Bell considered the war had been well financed, leaving both business and the banks in a healthier condition than ever before. While defending cheap money, he looked forward to budget surpluses and some reduction of the debt.[2] Mr. Vinson himself spoke on fiscal policies, drawing attention to the tax reductions of November 1945,[3] and the assistance to reconversion given thereby. Future revision of the tax system should promote

[1] *Federal Reserve Bulletin*, 1945, p. 987.
[2] *Treasury Annual Report*, 1945–6. 'Exhibits' section.
[3] Ibid.

the twin objectives of 'encouraging business enterprise and promoting mass consumption'.

Mr. Eccles's statement of 17 January 1946[1] has already been referred to (Chapter VIII, p. 113), but further quotation is of interest for comparison with the views of, for instance, Mr. Bell. 'As I have frequently sought to emphasise in the past', said the Chairman, 'the primary source of the inflation danger which overhangs the domestic economy on all fronts is the vast accumulation of currency and bank deposits at the disposal of the public as a result of the fact that far too much of the cost of the war was financed through the creation of commercial bank credit and not enough was financed out of taxes and the savings of the public.' 'Price controls, rationing, allocations, etc.' were 'vitally necessary for holding the line. . . .' Later—'in addition, it is important to point out that so long as the public debt continues to be monetised through the purchase of government securities by the banking system, the supply of money will continue to increase, thus tending further to reduce the interest rate on savings and investment funds. The resultant pressure of an increasing money supply and of lower interest rates is bound to have a further inflationary effect upon all capital assets and to increase the difficulty of holding down the cost of living.' . . . 'this process needs to be stopped not only by bringing about a balanced budget, but also through measures to check further unnecessary expansion of commercial bank holdings of government securities.' . . . 'only by a vigorous comprehensive attack along the entire economic front can the battle be successfully waged . . . credit curbs [i.e. 100 per cent. margin rule] are at best supplementary and not basic measures for reaching the underlying causes. . . .' Mr. Eccles still wanted his special capital-gains tax as an adjunct to the control apparatus, but he clearly was demanding:

(*a*) Disinflationary budgeting.

[1] *Federal Reserve Bulletin*, 1946, p. 121.

(*b*) Higher short-term interest rates.

(*c*) Possible new powers over bank security holdings.

On (*a*) he was supported by Messrs. Vinson and Bell (who are not, be it remembered, personally responsible for budgetary policy), but on (*b*) he presumably was not, although he might simply have been referring to forthcoming debt-retirement (but the tone of his utterances suggests otherwise).

Fiscal policy, meanwhile, had been set out in Mr. Truman's first budget message to Congress, delivered in January. The message forecast debt-retirement and envisaged the prevention of inflation as the major task of the next eighteen months (the stagnationist view is left behind). Hence there must be no further tax reductions, no large expansion of public works, and a retention of controls. Nevertheless, depression is always a possibility and passage of the Wagner Full Employment Bill is urged in order to give the Executive the necessary responsibility and powers to take proper measures should the possibility become a reality. In presenting his budget[1] message Mr. Truman also provided some kind of 'economic survey' in 'national income' language in order to explain the inflationary situation (i.e. in terms of a 'gap') and, presumably, to give some idea of the Administration's ambitions under the prospective Full Employment Bill.

The *Bulletins* of the first six months of the year 1946 generally trace the developing inflationary situation and explain in detail the processes apparent in the government securities market during the early part of the year. Viewpoints are provided by Mr. Eccles, in May, and by the Board's annual report for 1945 (these reports appear in late spring). Much comment was being made at this time concerning the setting up of the Bretton Woods institutions and the passage of the Anglo-American financial agreement through Congress. Both the Reserve Board and

[1] *Federal Reserve Bulletin*, 1946, pp. 109–18.

the Treasury speak out in support of these two, but that important field does not concern us.

On 8 May Mr. Eccles made his further, even more emphatic, pronouncement, on the question of inflation, to the Banking and Currency Committee of the Senate[1] which was at that time deliberating upon the Price Control Act. This statement, made at a time of widespread labour stoppages and public disquiet, is redolent of a crisis atmosphere and makes free use of a continuous military metaphor. Mr. Eccles merely stated that controls should remain, and be extended if possible (because price controls were weak without rationing and allocations), while the rest of his remarks were directed in trenchant fashion against current labour troubles. Delayed production hastened an inflationary outburst, no one responsible for that delay 'ever has the right to inflict such injury upon the general public'. He welcomed the reduction in 'our enormous money supply' achieved by debt-retirement as 'all to the good'. 'Balancing the budget, and having the largest possible surplus', was necessary, but inevitably a slow process. He confessed that 'we' could not deal quickly enough with the money supply and that therefore the solution rested squarely upon increased production. On interest rates he remarked, 'the idea advanced in some financial circles that increased interest rates would be an effective remedy reflects, in my opinion, a failure to evaluate correctly both the causes of, and the appropriate weapons against, the unprecedented inflationary pressures today. Higher interest rates would make for serious complications in the government bond market and would greatly increase the cost of carrying the national debt. No reduction in buying power and no increase in production would result—and these are the basic causes of the problem.' The reasoning behind this statement, and it would be grossly unfair to try to find too much, seems curious. Mr. Eccles does not reject outright any policy of

[1] Ibid., p. 573.

'reducing the money supply', but it is not clear what such a policy might be. It might mean credit restriction of some kind, or, again, since it apparently includes fiscal surpluses, it may simply mean a rearrangement of available purchasing power in the interests of a proper (not inflation-induced) equilibration of the savings–investment equation. Taken in conjunction with Mr. Eccles's known preoccupation with the liquid asset problem, one may conclude that the phrase in question means both these things. But it is obscure. Further, Mr. Eccles's assertion that a rise in interest rates 'would not reduce buying power' is odd. He might be correct, if the word 'power' is emphasized, but to assert that a substantial depreciation of the value of government securities would have no effect upon actual spending seems dubious. That it would do nothing to increase production may be readily agreed. The thoughts behind this forthright utterance are puzzling to say the least. Before considering the annual reports, what had the Treasury to say during these months?

Secretary Vinson, before the Senate Finance Committee on 23 April 1946,[1] again emphasized how well the debt expansion had been managed and pointed out the great advantages of protecting the small investor against capital losses. Debt-retirement was going ahead, with the Treasury exercising due solicitude for the market in deciding which maturities to retire for cash. Quite what this 'solicitude' can mean when in fact the market was automatically supported and that support being exerted to the amount of $2·5 billion from February to June, is not very clear. When the Reserve Board discontinued the ½ per cent. preferential rediscount rate on 24 April 1946, the Treasury took the opportunity to comment upon the market with considerable hauteur. It issued a statement to the Press on 24 April 1946.[2] The Treasury had been fully informed of the proposed change and assured by the Board that this would not be allowed to disturb the security

[1] *Treasury Annual Report*, 1945–6. See 'Exhibits'. [2] Ibid.

markets. Mr. Vinson stated that the Treasury 'is concerned to see that reconversion . . . should not be disturbed by uncertainty in the money markets', and further drew attention to the debt-retirement achieved 'without disturbance'. Discontinuance of the ½ per cent. rate was not in the least likely to cause disturbance, and what disturbance could possibly arise given the ⅜ per cent. anchor is difficult to imagine. One suspects that the Treasury is being coldly treated and is taking the opportunity to emphasize that prevailing monetary policy is really Treasury policy and the Reserve Board its (willing or unwilling) slave.

On 25 June 1946 Mr. Vinson resigned (upon appointment to the Supreme Court), to be succeeded by Mr. John Snyder, a banker and government administrator from Missouri. Mr. Snyder stated, upon assuming office, that he had 'true friends and counsellors to aid me in decisions on future policy on monetary and fiscal matters' —namely, Justice Vinson, and Under Secretary Gardner. But it was 'presumptuous for me to state in detail at this time the various fiscal and monetary measures which the government hope to employ'. Evidently Mr. Snyder had, at that time, as always, firm ambitions about the nature of his office. His statement did not so much as mention the Reserve Board.

To complete the list of excerpts from Treasury declarations, it is expedient to quote from the general introduction to the report for the fiscal year. Putting the best face possible on the events of the first quarter in the government securities market, the report states:

> The maintenance of stable interest rates during the transition has contributed to the underlying strength of the bond market and has eased the problems of reconversion, not only for the government but also for the industrial and business enterprises of this country . . . [it has] promoted business confidence and has been of great importance in attaining a high level of employment and production during the reconversion period. No anti-inflationary purpose would be served by raising interest rates at the present time.

With most of this statement one can hardly disagree, but its opening phrases are odd. The 'maintenance of stable interest rates', had, after all, not merely contributed to the 'underlying strength' of the bond market, it had caused an inflationary boom in that market which ran counter to every consideration of current monetary policy. Co-operation with the Reserve Board is only very rarely mentioned by the Treasury and only rather less rarely is it mentioned by the Reserve Board. Relations do not appear at all cordial, but disputes were not at that time carried on in public.

In its annual report for the (calendar) year 1945, the Reserve Board set out the problem of anchored interest rates and inflationary pressure in succinct fashion. By way of introduction, it said: 'The predominant purpose of Federal Reserve policy is to contribute, in so far as the limitations of monetary and credit policy permit, to an economic environment favourable to the highest possible degree of sustained production and employment.' Traditionally, it was the case that manipulation of interest rates had been undertaken in furtherance of this aim, but the Board 'denied the assumption' of a return to 1929 methods as 'inconsistent with the limitations of its powers under present day conditions, which power, if used to fight inflation, can only be effective if over-used'. This sentence is typical of Federal Reserve pronouncements in that it leaves entirely open the vital question—'do you mean that interest rate manipulation is impracticable only because of complications due to the national debt, or is it in any case no longer considered a useful weapon?' Generally, the Board seemed to incline to the view that it would not in principle object to fluctuating interest rates on private securities and loans, but that the conditions of the public debt rendered such fluctuation impossible. In putting such a view forward, the authorities may simply have been placating conservative critics by using the public debt as an excuse for their unorthodoxy, but this is doubtful. As

will be seen later, the Board itself (but not necessarily the Federal Reserve Banks) was not in principle opposed, even in these years, to credit restriction via direct reduction of bank reserves, &c., and put forward various suggestions whereby such restriction would be made possible without disturbance to the market in government securities.

Later in its report for 1945 the Board summarized the current monetary position, advocated disinflationary budgeting, and urged 'full production' in similar, if less trenchant terms, to those of Chairman Eccles already quoted. It also explained, carefully, the consequences of maintaining short-term rates at too low a level relative to the long-term rates as, quite apart from the monetization process at present entailed thereby, accentuating undesirable speculation in capital values and reducing interest incomes (notably for insurance companies and other savings institutions) to too low a level.[1] The Board did not suggest that investment in new capital might be stimulated to an excessive degree—such an argument seldom, if ever, appears in the Board's publications, but presumably lies behind the more 'monetary' façade of the general arguments used. Constructively, the Board stated that it desired the sale of government bonds by the banks and an offsetting increase in their holdings of short-term securities. It desired such a development both for the reasons outlined above and again because it would lower the reliance of the banks upon their government bond holdings as a source of high earnings[2]—thereby inducing more liberal lending policies. This two-edged argument achieves consistency when it is realized that the Board, in traditional fashion, is concerned to stop the 'bad' (speculative) use of credit based upon a needless monetization of debt

[1] An argument used in 1939, it will be remembered, by the Advisory Council, but rejected by the authorities at that time.

[2] Member bank net profits after tax reached new peak of 780 millions in 1945.

while equally concerned to encourage the liberal accommodation of 'commerce, business and agriculture'.[1] This difficult distinction between 'good' and 'bad' credit (as in 1929) discloses what is the essentially managerial view of monetary policy, and throws light on previous remarks concerning the Board's 'in principle' views upon interest-rate policy. This view is that the monetary authority, under a 'managed' (i.e. not 'full gold') currency system, should seek to maintain the availability of the money supply generally unimpaired throughout the trade cycle—unless hyper-inflation, most unlikely in a mature deflationary-biased economy, should occur—while preventing the money supply from *running ahead*, or lagging behind, via speculative expansion and contraction, of the 'real' needs of the economy. To put such a view into practice is no less difficult, possibly more difficult, than any other, and extreme rigidity of interest rates may simply add to the difficulty, but close attention to it as a policy helps one to thread one's way through some apparently inconsistent arguments. The point about bank earnings is a good example of this. Further discussion of monetary policy in general, however, is out of place at the moment.

Continuing, the report admitted that the solution of the immediate market problem consisted in raising short-term rates—to a point where the 'convenience' liquidity of short-term securities and their (slightly) greater safety should outweigh the remaining margin between the short-term and the longer-term rates. The Board conceded that this solution was impracticable owing to the 'cost to the Treasury', but at the same time did not seem to regard debt-retirement as a proper alternative—it being either ineffective or else simply a postponement of the problem. In any case the retirement of short-term debt might only achieve a switch from monetization of short-term securities by banks and others to monetization of long-term debt

[1] Equally based upon monetization of debt, unless fiscal surpluses are sufficient.

—which would, if anything, be worse. It was to this longer-term problem (in both senses of 'longer term') that the Board now gave attention. What, that is to say, was to be done if, granted the pattern-playing process and the monetization of Treasury bills and certificates should cease, wholesale 'encashment' (i.e. sales to Reserve Banks at support prices) of *bonds* were to commence? Some sales of bonds might be necessary for legitimate reasons, but such sales could equally well be a cause of speculative excess. The Board rejected the notion of voluntary restraint, tried already once before (1928–9), as impossible with a banking system of the American type—analogies with the U.K., or more often, Canada, are pointless. Removal of the short-term anchor would do little to solve problems of *bond* support, while removal of the latter was rejected for the reasons already put forward at frequent intervals in this study—more particularly, the collapse of the present debt structure, increased cost, depreciation of bank investments, and a general deflationary shock to the whole economy. These rejected proposals in fact exhausted the possible solutions that could be put forward within the then existing powers of the Reserve Board. If the problem was to be solved at all, rather than allowed to work itself out as best it could, additional powers were therefore needed and the Board put forward some suggestions. These suggestions were elaborated later on and became a subject of controversy in academic and banking circles outside Washington. Increased powers are not easily obtained from Congress, except in acute emergencies, and, even then, may be ill-considered and inadequate; it is therefore wise to conduct a 'softening-up' campaign well in advance of a foreseen emergency in order to accustom legislators to the idea and to allow time for lengthy discussion.[1]

The Board advanced three proposals. Firstly, that there should be a legal maximum, decreed by the Board, upon

[1] Mr. Truman's 'Fourth Point', mooted perhaps many years in advance of real necessity (from the U.S. viewpoint), is an example of softening-up.

the ratio of long-term government securities to total deposits of member banks. Or, secondly, that the banks should be required to hold a minimum percentage of short-term securities. Or, thirdly, that existing cash-reserve requirements should be raised (above the existing statutory maximum to which the Board was enabled to raise requirements). These proposals will merely be noted for the present, and will be discussed later when they become more pertinent. For the present practical problems the Board expressed itself in favour of fiscal surpluses, retained controls, 'selective' credit restriction, and, for the debt, a maximum effort to increase the sales of non-marketable securities. It foresaw a prolonged period of inflationary pressure and substantially increasing production provided the monetary situation was not allowed to deteriorate markedly. Unlike the Treasury, it should be noted, the Board does not enthuse about the virtues of 'stable money'—which was, in large degree, a Treasury policy anyway—but devotes a great deal of space to explaining and discussing the problems arising from it. The Treasury was not responsible for solving the problems created by its policy. The Reserve Board, and the Bureau of the Budget, were.

To conclude this chapter, and conclude our survey of the official views during the reconversion period, we can briefly comment upon both the changes of view during the period and the post-war viewpoints arrived at. Firstly, of course, the mentality of the 1930's had disappeared abruptly. The full-employment policy of Mr. Goldenweiser's speech of November 1944 had been entirely rearranged to meet the new conditions—or, if that is an overestimation, had been put on one side and temporarily almost forgotten. It was not deflation that one had to fight, but its forerunner, inflation. One maintained certain features of the former programme, or rather they retained themselves, namely low interest rates, easy housing credit, agricultural support (though temporarily idle), an export

surplus, and a high level of Federal expenditure relative to gross national product. The high-wage policy, however, was 'played down', the budget almost balanced and a large surplus planned, ambitious expenditures postponed, and direct controls retained as long as politically feasible. In the monetary field one cannot talk so precisely about policies or changes of policies. One can note, perhaps, the anxiety of Mr. Eccles about the liquid-asset situation and the somewhat curious theoretical (and practical) mixture shown by his speeches. One can note, too, the (contrasting) *joie de vivre* of the Treasury, whose officials seemed in no way dissatisfied. But we have seen enough of the monetary situation to realize that it was novel and experimental. One tackled problems as they arose, did one's best to keep ahead, considering next year's difficulties, for one had no rules to go by—only responsibilities and the power to wreck the economy. It is against such a background that we have to judge the statements of Mr. Eccles or the sometimes rather equivocal words of the report.

PART III

INFLATION

JULY 1946–JUNE 1948

XI

GENERAL SURVEY

§ 1. *Decontrol. Fiscal year July* 1946 *to June* 1947

THE general survey begun in Chapter IV, reasons for which were put forward at the beginning of that chapter, must now be continued. The present chapter, divided into two sections, covers the period from the first abolition of controls to the end of the inflationary movement in the summer of 1948. The first section is dominated by the decontrol shock and by the slight recessionary reaction to that shock. The second section, July 1947 to June 1948, is dominated by a continuing inflationary process and by general uncertainties and discontent.

When Mr. Truman vetoed the Price Control Bill on 30 June 1946 (Chapter IV, p. 53), controls and rationing collapsed altogether, for a month or more, while Congress prepared another Bill for presidential signature, and the Administration regarded the rapid rise in prices with the air of 'this time, anyway, we were right'. Public protest was immediate. Food prices rose rapidly, due both to the level of demand and to the removal of subsidies (but the widespread black markets disappeared, of course). Meat prices, in particular, shot upwards. The situation generally was aggravated by commodity speculation and a scramble to build up stocks before prices rose yet farther—but they could not rise indefinitely and amidst talk of 'demand and supply being brought into balance' there arose murmurs

of a quick 'bust' and of the need for business restraint. Meanwhile Mr. Truman appointed the new Council of Economic Advisers (Messrs. Nourse, Keyserling, and J. D. Clark) under the recently signed Employment Act. This Act was a pale reflection of the Wagner Full Employment Bill and its provisions somewhat vague. Subject to the maintenance of free enterprise, competition, &c., the Federal government was enjoined to direct its efforts to a maximum of employment, production, and purchasing power. The President was to report annually on the economic state of the Union and put forward his proposals for achieving the 'maximum of employment'. . . . He was also, with the advice of the Council of Economic Advisers, to prepare an anti-depression programme for future use when required. This Act is important as a demonstration of hope, but gave no specific powers to the Executive, or even specific responsibilities. Its most important consequence has been the series of Economic Reports made by the President and the Council of Economic Advisers to Congress. These reports have suffered from certain afflictions, but they have led to the setting up of the Joint Committee (i.e. of Senate and House) on the Economic Report and, hence, detailed Congressional investigation of these problems.

Early in August a new Price Control Act was signed. This Act restored price controls (but not food subsidies) and established a 'cost plus reasonable *1946* profit' principle as regards price standards. But it also set up a three-man board to supervise the Office of Price Administration and to abolish controls as and when it saw fit. This simply made confusion worse confounded and encouraged speculative buying as the new system was not expected to last. In September, while the resumption of price controls nominally checked the advance of prices, Wall Street slumped badly and in doing so administered a sobering shock to commodity speculation and inventory scrambling. But the reimposition of control, combined

with excess slaughtering of animals in July, caused an intensely irritating 'shortage' of meat (i.e. it went back under the counter or remained on the hoof) in late September and October. With Congressional elections due in November this was intolerable and, therefore, food price controls (save on sugar and rice) were once more abolished. The general situation was manifestly out of hand and, given the existing legislation, the remaining controls simply an irritant. Spurred, perhaps, by the Republican victory in the November elections, the Administration ignored protests from the Congress of Industrial Organizations and, on 11 November 1946, abolished controls altogether (for all practical purposes). In consequence, the price indexes advanced rapidly again. But already the inevitable had happened. The round of wage increases put through the previous winter and spring had been followed by a brief period of industrial peace, but another coal strike broke out in November and the government had once again to take over operation of the mines. But henceforth Labour had to reckon with a doughty adversary—the 80th Congress, whose Republican majority eventually compelled Mr. Truman to accept (against his veto) the Taft–Hartley Act. It could indeed be argued that majority opinion held the power of organized labour in the basic industries, greatly enhanced by full employment, too great to enjoy much longer the privileges of the Wagner Act.

But, notwithstanding this administrative and political confusion, the trend of production continued, as will be seen, to be satisfactory. Consumption demand remained intense, accentuated by the shortage of, e.g., automobiles, although assuaged by the high price of food. If the 'back-log' of demand for non-durable goods was almost worked off, the back-log of investment (war-time postponed, or newly induced) and of consumers' durable goods had scarcely been scratched, while current (full-employment) demand was greater than ever before—a significant rise in living standards being within reach. If increasing pro-

duction failed to satisfy these demands, it satisfied certain types of demand, while the spectacular rise in commodity prices foreshadowed some speculative reaction once the 'pipe-lines' were adequately filled.[1] In the new year it appeared that retail stocks of non-durable goods were back to normal and, for the first time since the war, there were department store 'sales'. Imports of raw materials increased during the winter, the durable consumer-goods industries (whose complete reconversion was only now being achieved) were increasing production rapidly, and food prices eased somewhat in the new year. Some easement of inflation ('This insane . . . un-American . . . spiral' as H. Ford II called it) was expected. But how much of an easement? The inventory position was, in volume, satisfactory, but therefore vulnerable to any change for the worse on the part of sales or prices. In this kind of situation price expectations change extremely rapidly with consequential sharp reactions upon inventory policies. Production (and prices) continued to mount steadily in the third quarter of the fiscal year but thereafter production (and some prices) declined generally until July (and more than seasonally). The reaction of the last three months of the fiscal year seems to have been due to, firstly, a shift of demand intensity away from non-durable consumption and, secondly, of some shift of price expectations (coloured perhaps by the behaviour of wheat which rose from $2·28 to $2·67 in March, in spite of a December–January relapse, but eased thereafter). This short inventory reaction was severe enough to make people think, in June, that the peak of the post-war boom had been seen. But it was a mere bubble on the surface. With wages steadily moving up, consumer expenditure continued to grow and fixed investment plans remained unaffected. Stocks, where necessary, were quickly run down or

[1] The first signs of the American post-war inventory cycles which, since 1949, have had such a disruptive effect on the balance of payments of many countries.

stabilized and production in the aggregate soon picked up again. All that had happened was that certain trades were affected by a decline in orders from, e.g., department stores whose stocks were allowed to run down after a March peak. These trades were, in particular, the textile trades. This was itself due to a balancing of supply and demand and a break in retail sales of clothing, &c. But, quite generally, the conscious building up of stocks almost ceased and the resulting temporary cutback in orders caused an equally temporary cutback in production and some hesitancy in prices. The durable-goods trades suffered the lesser relapse—save that steel output was forced down by sporadic strikes during wage-contract negotiations. But the 'readjustment' to normal demand for non-durable goods might well have been much more severe had not exports reached their post-war peak in the first half of 1947—at an annual rate of $15·5 billion, exceeding imports by over 10 billions per annum. It is possible to diagnose a 'shift to profit' as a causative factor in this minor set-back. Shift to profit—corporate or agricultural—there certainly was, but 'personal savings' declined rapidly at the same time. Certainly the lag of wages behind prices no doubt eased the pressure (and enabled exports to reach the figure they did without an even steeper rise in certain prices), but it is more apposite to say that it was not so much the height of retail prices—relative to income receipts—that caused the boom to break for a few months, but rather a technical market reaction to the violent movements which followed reconversion and decontrol—satiation of consumer requirements over a wide price range and cautious wholesale buying which set in as soon as the price-spurt was exhausted. But let us leave the surface.

The employment picture remained one of great tightness in the 'labour market' up to the fourth quarter of the fiscal year 1946–7, when the tension eased slightly. The 'civilian labour force' dropped seasonally in the winter but rose to 62·6 millions in June 1947, 2½ millions above

the 1946 peak—due mainly to re-entry of veterans into the labour force rather than to demographic factors. Unemployment fluctuated between 1·9 and 2·6 millions, or from 3 to 4 per cent. of the labour force. Over the year all types of employment, including agricultural, expanded, seasonal movements apart. The construction industry showed the largest relative gain, with mining a poor second. Generally the service, trade, &c., 'industries' tended to lag behind the rest—due both to a further reduction in government employees and, possibly, to higher earnings obtainable in manufacturing and other 'production' industries.[1] The most notable development was the sharp expansion in the construction industry—the principal post-war bottleneck.

EMPLOYMENT IN NON-AGRICULTURAL ESTABLISHMENTS (SEASONALLY ADJUSTED)

Fiscal year 1946–7

(*Thousands*) *Source: Survey of Current Business* (*Revised series, May 1950, p. 22*)

Category	*June '46*	*June '47*	*change*	%±
1. Manufacturing	14,535	15,163	+628	4·3
2. Mining	881	946	+65	7·4
3. Construction	1,636	1,985	+349	21·3
4. Transport, Utilities	3,964	4,146	+182	4·6
5. Trade, 6. Finance, 7. Service, 8. Government	20,391	21,085	+694	3·4
TOTAL	41,407	43,325	+1,918	4·6

Within manufacturing industry, the durable-goods industries[2] expanded their labour force much faster than did

[1] Commercial banks, among others, had some difficulty retaining their clerical staff—many of whom would transfer to industrial non-clerical work if wages were sufficiently high.

[2] Iron and steel, machinery, transportation equipment, non-ferrous metals and products, lumber and products, stone, clay, and glass products.

the rest. The Federal Reserve indexes of factory employment (seasonally adjusted) show an increase of 10½ per cent. over the year for durable-goods industries and one of 2·8 per cent. for the rest, though the latter figure is slightly influenced by the relatively severe setback in those industries in the summer of 1947 (up to March, their gain was 5·6 per cent.). With the exception of the aircraft and shipbuilding industries (the latter falling substantially), all the durable-goods industries showed gains of 8 per cent. or more. In the non-durable range, the chemicals industry showed a marked gain, while textile, leather, and rubber industries remained stable or declined during the last quarter of the fiscal year 1946–7.

Concurrent with the expansion of employment, the earnings of factory employees advanced throughout the year:

AVERAGE WEEKLY EARNINGS IN MANUFACTURING INDUSTRY AND WHOLESALE TRADE

Fiscal year 1946–7

(*$ per week*) *Source: Survey of Current Business*

	June	*Sept.*	*Dec.*	*Mar.*	*June*
Durable-goods industries	46·32	48·36	49·57	50·30	52·99
Non-durable-goods industries	40·28	42·34	44·24	44·89	45·31
Building construction	55·16	58·44	60·25	61·18	62·79
Wholesale trade	47·44	49·28	50·84	50·22	52·50

Average hours worked per week were as follows:

Source: Federal Reserve Bulletin

	June	*Sept.*	*Dec.*	*Mar.*	*June*
Durable-goods industries	39·8	40·3	40·8	40·7	40·6
Non-durable-goods industries	40·2	40·3	41·1	40·1	39·8
Building construction	38·2	38·7	38·4	38·0	37·8
Wholesale trade	41·4	41·8	42·3	40·8	41·6

Some allowance must be made for seasonal and other changes in hours worked (revealed above), but both the higher earnings in, e.g., the durable-goods industries and the building industry,[1] and their relatively more rapid advance, give corroboration to the suggestion that the larger expansion of employment in those industries was in some degree due to the higher 'prices' offered by them in the 'labour market'. Generally the first months of the fiscal year saw the end of the 'round one', which is followed by a period of relatively stable earnings until late winter, when round two sets in and earnings increase sharply (in spite of some sporadic reduction in hours worked).

With an increased labour force, more complete reconversion and fuller pipe-lines, not to mention some possible increase in capital intensity, a substantial increase in industrial production was achieved—until the reaction in the second quarter of 1947. The index of industrial production was 172 in July 1946, rose more or less steadily to no less than 190 in March 1947 (the 190's were considered very good before the 1950–1 boom), but thereafter declined to 184 in June and 176 in July. The durable-goods index moved similarly from 202 to 225 and down again to 219 in June and 207 in July, while that for non-durable goods rose from 157 to 175 and back to 168 and 163. All the durable-goods industries behaved similarly to each other with the exception of 'transportation equipment other than automobiles' which declined markedly throughout. The general decline in the last quarter was due both to labour difficulties and steel shortage as well as the cessation of inventory accumulation. In the non-durable-goods industries the decline of the last three months was not shared by the 'petrol and coal products' or 'chemicals' groups, nor by the 'paper and pulp' group, but was, after

[1] The 1941 level of employment in the building industry was 1,800,000. This fell to 1,113,000 in 1945. The task was to rebuild and increase the pre-war labour force in face of initial leap ahead by other industries which absorbed available labour.

March, severe in the textile, leather, and rubber groups (172, 122, and 239 fell to 142, 101, and 207 respectively). Elsewhere the output of metals generally increased, but somewhat erratically, while the output of coal reached a typical index number of 155, periodically reduced by labour troubles (notably in November to December 1946, April 1947, and July 1947).

In face of intense demand, fortified by rising wages, the above increase in output was achieved in conjunction with sharply rising prices (decontrolled). The rapidity of the rise in prices during this period was due not so much to the intensity of home demand—though that was the underlying cause—but to the shock effects of decontrol and to the world scarcity of industrial raw materials and food, the prices of which were in many cases determined in free commodity exchanges. The shock effect of decontrol, besides freeing the commodity markets, caused, apparently, a general increase in the 'mark-up' and an end to cost absorption by manufacturers. The shock was transmitted almost immediately to retail prices, due both to the fact that foods had to reach a short-run free equilibrium price at the same time as the subsidy was removed, and to the low general level of stocks built up under controlled prices. The cost-of-living index, however, was to some degree held down by the continuation of rent controls and the relatively moderate rise in domestic fuel and light costs. Post-war distress demand from abroad, for American food and raw materials, simply added to the pressure upon free prices as well as to basic inflationary forces in the U.S.A. Prices advanced rapidly until the second quarter of 1947, when the first breaks occurred.

Breathless though the rise in prices may have been, it was not sufficiently distorting to produce serious deflationary reactions in, e.g., the capital-goods industries. The rise in building costs was alarming, but fortunately, in the then conditions of demand for plant and machinery, for consumers' durable goods, and for exports, the construc-

tion bottleneck could not itself produce a general deflationary shock. Instead, building was to some extent deferred, notably private residential building, and proved a welcome standby in the recovery from the 1949 recession. In the meantime it would seem that all, or more than all, of the

SELECTED PRICE MOVEMENTS, 1946–7

Monthly averages *Source: Survey of Current Business*

	Wholesale 1926 = 100					*Chemicals and allied products*	*Retail 1935–9 = 100*	
Month	*All*	*Foods*	*Textiles*	*Metals and products*	*Building materials*		*Cost of living*	*All*
June 1946 .	112·9	112·9	109·2	112·2	129·9	96·4	133·3	147·7
July . .	124·7	140·2	124·0	114·0	132·7	98·4	144·1	156·3
Sept. .	124·0	131·9	125·7	114·2	133·8	98·4	145·9	164·3
Dec. .	140·9	160·1	134·7	134·7	157·8	125·7	153·3	172·7
Mar. 1947 .	150·0	167·9	140·5	141·1	177·5	132·2	156·3	177·2
June . .	147·7	161·8*	139·9	142·0	174·1	120·8†	157·1‡	178·8
	31	43	27	27	34	25	18	21

* The index number for meat rose from 110·1 in June 1946 to 208·6 in June 1947.

† Index drop in second quarter of 1947 due mainly to heavy drop in 'oils and fats' (231 in March, 139 in June, having been 102 in June 1946).

‡ Held down by stable *rents* and only moderate rise in 'fuel and light'. 'Food' rose from 146 to 191 and 'clothing' from 157 to 186.

increase in construction expenditure *during* the year was attributable to increased costs. The distorting effect of the rise in food prices was not so serious, especially if any subsequent collapse was prevented by Federal farm support. In so far as high food prices diverted consumption from other goods they were not at this time so objectionable, nor, in so far as the consequential steep rise in living costs was an important factor in demands for *general* wage increases, was it a distorting factor. The generality of wage increases is a vital anti-distortion palliative. Nevertheless, in spite of these qualifications, distortions had occurred and the price structure could not, without considerable passage of time, be regarded as normal.

The national income and product figures for the whole inflation period are naturally reflective of the rapid rise in prices as well as a genuine increase in the real national

product.[1] Gross national product for the fiscal year was $223 billion,[2] a new record $ level, the seasonally adjusted quarterly totals at annual rates rising from 206 billions per annum in the second quarter of 1946 (last proper reconversion quarter) to $220 billion per annum in the last quarter of 1946 (first proper decontrol quarter), and to $232 billion per annum in the second quarter of 1947. Personal consumption expenditures continued to rise steadily from 152 to $164 billion per annum,[3] and, during this fiscal year, did so faster than the rise in disposable personal incomes. Personal savings declined in consequence to a typical post-war 'low' of $6·1 billion for the fiscal year and behaved erratically during it. But regardless of money expenditure we have already noticed that the volume of non-durable consumption, other than food, may have fallen behind supply in the second quarter of 1947, while the volume of durable consumption was curbed by inelasticity of supply in, e.g., the automobile industry. In the public sector, demands upon the national product reached their low point in the first quarter of 1947 at $27·4 billion per annum, but climbed again thereafter in consequence, principally, of a steady rise in 'state and local' expenditure which continued throughout, and in part offset the initial post-war decline in Federal purchases. The decline in Federal purchases was further offset, or even replaced, by the rapid rise in net foreign investment, from 5·5 to $10 billion per annum (post-war peak), which appears also to have been a principal factor in the depletion of agricultural stocks which gathered momentum throughout the year—besides being an additional factor in the demand for manufactured goods of all kinds and non-farm raw materials. Private domestic investment, which can be

[1] The 'constant dollar' figures (*Survey of Current Business*, Jan. 1951) are only available for calendar years, and record an increase of less than ½ per cent. for 1947 over 1946.

[2] Revised series, as are subsequent components: *Survey of Current Business*, July 1950.

[3] All annual rates quoted are seasonally adjusted.

regarded as filling in a much larger 'gap' left by the disappearance of Federal expenditures on the scale of 1944 and not filled by extra consumption or exports, achieved its greatest success in the 'equipment' category, which rose from 12·7 to $16·8 billion per annum. Construction expenditure showed a substantial rise over the previous year (naturally) but failed to expand as markedly during the year (11·4 to 12·6 billions per annum). The accumulation of business inventories declined rapidly after decontrol and further in 1947, due as we have seen to a number of factors, prominent among which was the satiation of demand for certain non-durable goods. Food stocks and other agricultural inventories were severely depleted for the reverse reason, i.e. excess demand and phenomenally high free-market prices.

In accordance with familiar ideas about the redistributive effects of the inflation, we find that whereas in the second quarter of 1946 'compensation of employees' amounted (at adjusted annual rate) to a sum equal to 55·6 per cent. of the gross national product, the percentage had declined to 54·3 per cent. in the second quarter of 1947. Conversely, corporate profits net of inventory valuation adjustment rose from 9·9 to 11·1 per cent. of G.N.P.[1] In so far as seasonally adjusted quarterly figures can be used to measure changes of 1 per cent. or so, the redistributive effects indicated simply bear out one's expectations.[2] A rather more accurate measure of the lag of wages (manufacturing industry) behind prices, after the initial shock of decontrol, is provided by the diagram on p. 174; although this is no direct measure of income distribution, it is of interest in the short period we are considering. Since fiscal and monetary affairs are due for special consideration later, we can now pass on to the fiscal year

[1] For the year 1939 net profits (corporate) were 8 per cent. of national income; for the year 1941 net profits (corporate) were 14·1 per cent. of national income.

[2] See table on p. 173.

1947–8—the last of the immediate post-war inflation periods.

§ 2. *The pace slackens. Fiscal year 1947–8.*

During this second year of 'decontrol' the economic climate continued to be inflationary, but although the continuation of the spiral caused as much, if not more, anxiety, both in Washington and elsewhere, the actual rise in prices during the year was relatively moderate. The various factors, noted in the previous section, which combined to force an abrupt and steep rise in prices during the first year of decontrol, were in large degree no longer present. Raw material supplies had improved, much immediate post-war demand for consumer goods had been satisfied or choked off, profits were satisfactorily high, exports commenced to decline, the pressure upon the construction industry was eased both by the relatively high costs of that industry and by continued production, consumers' durable goods once more became available in adequate quantitites (automobiles still partly excepted), and the general level of industrial production quickly regained and surpassed the 190 (1935–9 = 100) mark reached in March 1947. If monetary policy continued basically 'easy', with various tactical manœuvres designed to disguise the fact, fiscal 'policy'—or, perhaps, the automatic effects of inflation upon the tax structure and existing pattern of Federal expenditure—was strongly disinflationary, this fiscal year producing a large surplus. Nevertheless the inflation continued, due fundamentally to the constant struggle between labour and employers over their relative shares of the national product. Some increase in productivity, which might have enabled higher wages to be paid without at the same time squeezing profits, was quite insufficient to offset the rise in wage costs, though perhaps sufficient to offset the moderate further rise in world raw-material prices. The wage-price spiral was aggravated further by the continued rise in food prices—

a consequence mainly of the poor European harvest of 1947 which compelled the prolongation of distress purchases from the U.S.A. aided by Federal grants to western Europe. This continuation of the spiral and the fact that the shocks of 1946–7 had already induced a feeling of caution, produced a widespread feeling of uncertainty heightened by the spectacular behaviour of, e.g., wheat prices, by the complete deadlock between the Administration and the Congress, and the feeling that the boom was dependent upon a series of props whose strength and duration could not be predicted. In a sense any period of prosperity is dependent on 'props', but it makes a difference to entrepreneurial feelings whether these props are regarded as something fortuitous and temporary or whether they can be looked upon as strong buttresses. In short, although the pace of inflation moderated, the boom was still a boom and in no longer-term sense a period of stability. Much of the backlog of investment remained to be worked off, much new post-war investment demand was coming forward, while the comparative success of Labour ensured a continued high level of personal consumption—though a rise in the level of personal savings could soon be expected.

The 'recession' of the second quarter of 1947 was, we have already forecast, floated off upon a tide of rising wages and general demand which permitted some readjustment in inventories with only minor damage to the level of industrial production. In the third quarter of 1947 production recovered rapidly and price expectations seem to have swung round again to the inflationary tack. These feelings suffered some setback in August due to the British convertibility crisis of that month which, it was thought, might have rapidly adverse effects upon American exports, but, in September, food prices advanced sharply once more, passing the peak of the previous autumn. This price movement, together with further general price advances attributable in the main to rising wage costs, and

the definite appearance of a food crisis in Europe, caused widespread exasperation and public demand that the spiral should cease. In response to general clamour, and to arrange interim foreign aid pending the commencement of the European Recovery Programme in 1948, Mr. Truman summoned the 80th Congress into Special Session for late November. Ignoring requests that the Administration should fight inflation by reductions in Federal expenditure, by more orthodox monetary policies, and by a strong line with Labour, Mr. Truman invited the Congress to enact what, for it, was an utterly unpalatable programme of controls. It is probable that the Administration neither expected to get its way, nor even desired to do so, but loaded the Congress with 'socialistic' demands in the hope that something useful might be enacted and that in any case it could be shown that the Administration *had* a programme which the elected representatives of the people refused to look at. This skirmishing was to be repeated the following summer and was part of a political strategem—'blame the Republican Congress'—which, in conjunction with, among other things, the Taft–Hartley Act, was to achieve some success in the 1948 elections. Mr. Truman demanded:

1. The resumption of consumer credit regulation (expiring Nov. 1947).
2. The regulation of commodity speculation.
3. Commodity allocation controls.
4. Selective consumer rationing.
5. „ price controls.
6. „ wage ceilings.
7. Consideration of new powers for the Reserve Board over the reserve requirements of commercial banks.
8. Control over transport facilities and the disposal of cereal crops, to enable wheat, &c., to be shipped to Europe.
9. The strengthening of rent controls.
10. Interim aid for Europe.

The Congress granted Mr. Truman his interim foreign

aid, but nothing else. The controls proposed were, it was held, mere suppressives which could probably not be operated effectively in peace-time and only prolonged the underlying disease. Speculators in commodity markets were an essential part of such markets. The proposed banking controls revealed disagreement between the Reserve Board and the Treasury. General price and allocation controls were far too socialistic. In short the whole plan, so it was thought, was an attempt to use the inflation as a means for increasing the powers of the Federal authorities over private corporations and individuals; to use an inflation which, moreover, was itself largely the result of excessive Federal purchases of goods and services in competition with private enterprise, excessively liberal housing (and other) credit, and, originally, too tender an attitude towards wage demands. The Congress preferred to let the inflation continue—if it had to be stopped then let the monetary authorities revert to orthodoxy, let Federal expenditure be cut, or the labour laws be changed, but there must be no increase in the Federal powers. In retrospect it would seem that Congress, for whatever reason, was in the main justified. Perhaps neither side was really anxious to do very much, but it is doubtful if the situation required, in November 1947, the reimposition of controls or whether it would have been in any way improved had they in fact been reimposed. The index of industrial production advanced to 192 in December: with such a satisfactory ending to the year, heightened by record Christmas sales, the pace of inflation was irritating but not catastrophic.

The year 1948 opened with an optimistic tone. It was realized that some readjustment had been painlessly achieved during 1947 and that the situation did not as yet require any further 'readjustment' consequent upon inflation-induced distortions. Except for agricultural prices —for which Federal support would be forthcoming in event of a serious fall—there were few weak spots in the

price structure. Building costs were unduly high but could be brought down relatively painlessly by an easing of lumber prices; meanwhile the level of construction contracts gave no cause for anxiety. Only in certain luxury trades was any weakness of demand visible. Much discussion went on in fiscal and monetary circles concerning the checking of inflation, but business generally appears to have taken the view that the moderate inflation could continue for a further year without serious damage to the economy. Only the Federal budget estimates for 1948–9, announced by Mr. Truman in January, which demanded a $2 billion increase in expenditure, caused anxiety among the orthodox. Nevertheless, typical of this period, general predictions were conflicting and a sharp break in agricultural prices in February brought about a temporary reversal of New Year optimism. It was thought on the one hand that this readjustment was salutary, that it would increase consumers' demand for manufactured goods and ease the pressure of wage demands, but on the other that a general downturn could not be far off. Such general uneasiness, aided by fears of a more restrictive credit policy, may very well have acted as a restraining factor upon inventory policies and, in consequence, upon prices. Meanwhile industrial production continued at capacity level.

In March and April, in spite of some signs of a slackening of consumers' demand, expectations swung definitely back to optimism. The situation had changed once more, due principally to the $5 billion reduction in taxes forced through, over a Presidential veto, in April, and to forecasts of a sharp increase in military expenditure consequent upon the progressive deterioration of relations with the U.S.S.R. Actual budget estimates at this time were somewhat conflicting, the Congress forming its own estimates for the Legislative budget and forecasting a much larger surplus for 1948–9 than Mr. Truman. The favourable prospects for the legislation of the European Recovery

Programme brightened the outlook for foreign trade and reinforced the optimism of spring. In late April the optimism gave way to renewed apprehension of inflation. Fresh wage demands in basic industries were rejected, but it was not thought that this managerial defiance could last for long, Taft–Hartley or not. The 80th Congress, so critical of the Administration's fiscal policy in the previous November, now followed up its illogical reduction of taxes by outdoing Mr. Truman in enthusiasm for defence expenditure, demanding that this programme be both larger and undertaken more speedily. In May the 'third round' of wage increases was commenced by General Motors who granted an increase of 11 cents per hour, and the resistance of previous months speedily gave way. Prospects for business investment now appeared even greater than those of the previous year and in spite of a certain cautious feeling that the boom was 'getting older', price expectations turned rapidly upward. By June the outlook was one of confidence mixed with the usual inflationary fears. Granted the current level of investment, the rise in Federal expenditure, the provision for strategic stockpiling, the new Farm Support Bill, and the spread of wage-round No. 3, no weakness was foreseen: indeed, any that might occur might be absorbed by increased Federal spending. Inflation was again the main worry. Wages and prices in the steel industry rose in June and the cost-of-living index rose above 170, while wholesale prices broke through the record set up in 1920. At the same time the Berlin crisis broke over Europe and the foreign economic commitments of the United States could not, it was seen, be weakened by dollar inflation without serious damage to the western position in the now fully operative 'cold war'. Such considerations, superimposed on further general public agitation over the alleged resumption of the spiral in a Presidential election year, prompted Mr. Truman to undertake an audacious finale to his war with the 80th Congress. He called it back into special session in the

worst heat of a Washington summer and confronted it with an anti-inflation programme and most of his own election platform as well. That session belongs properly to a later chapter and it is time to consider what lay behind this year of political deadlock and gusty expectations. Generally it is an easier year to handle than the previous one, due both to the moderation and to the generality of the inflationary process. We are spared quick redistributive effects, sudden shocks, and distortions: this was a year of steady progress in which we find the aggregates make more sense as explanatory of the whole process.

Employment increased over the year, additional manpower being obtained both by a reduction in unemployment and by utilization of a labour force swollen by new entrants (either from schools or from the mass of normally 'unoccupied' people). The June 1948 total labour force was nearly 1 million higher than that of the previous June, and unemployment, at 2·2 millions, was 350,000 down. The level of agricultural employment appears to have declined moderately. More detailed indication is given by the figures of 'Employment in non-agricultural establishments':

EMPLOYMENT IN NON-AGRICULTURAL ESTABLISHMENTS (SEASONALLY ADJUSTED)

Fiscal year 1947–8

Source: Survey of Current Business, Revised series, May 1950.

(*Thousands*)

Category	*June '47*	*June '48*	*Change*	% ±
1. Manufacturing	15,163	15,237	+74	+0·5
2. Mining	946	1,001	+55	+5·8
3. Construction	1,985	2,180	+195	+9·8
4. Transport and utilities	4,146	4,152	+6	+0·1
5. Trade	9,173	9,510	+337	+3·7
6. Finance	1,630	1,719	+89	+5·5
7. Service	4,810	4,800	−10	−0·2
8. Government	5,472	5,583	+111	+2·1
TOTAL	43,325	44,182	+857	+2

The pattern of the marginal increases in employment is noticeably different from that of the previous year. Manufacturing employment remained almost constant, the slight increase merely restoring the level of such employment to that existing before the setback of mid-1947 (the total reached 15,328,000 in March 1947 while the 1948 peak was 15,443,000 in January), but the whole monthly series confirms a slight average increase in the fiscal year 1947–8, of the order of 100,000, over the previous year. Employment in the construction industry continued to increase, though at a reduced rate, as the industry's capacity and costs became more in line with current demand. Otherwise, in contrast to the more abnormal features of 1946–7, the 'Trade', 'Finance', and 'Government' sectors again began to absorb a substantial share of the increase in aggregate employment. The indexes of factory employment indicate stability of employment in the durable-goods industries—the index only rising by ½ point over the year—while the non-durable industries recovered from the 1947 setback, the index rising nearly 6 points to 138–9 (1939 = 100). Within the durable-goods sectors, declines during the year in electrical machinery, transport equipment (other than automobiles), and non-ferrous metals and products, were offset by increases in the iron and steel, lumber, furniture, stone, clay, and glass industries. In the non-durable range the textile and clothing industries recovered lost ground, while the chemical and petrol-coal product industries continued their advance and rubber its decline. The earnings of industrial workers continued to increase in approximately the same relative fashion as previously, but the advance was generally slower and more steady.

While earnings in the durable-goods industries did not increase their lead over those in non-durable industries, those in the building industry continued to advance faster than in the manufacturing industry and to widen the already considerable gap between them. Earnings in

building trades were now, on average, 26 per cent. above the June 1946 level, while those in steel were 23 per cent. up, and in textile industries generally under 10 per cent. up. During this period it seems that the advance in earnings was due more to the bargaining power of trade unions than to relatively greater scarcity of labour in certain sectors—although the building industry continued to attract workers by more advances in wages.

AVERAGE WEEKLY EARNINGS IN MANUFACTURING INDUSTRY AND WHOLESALE TRADE

Fiscal year 1947–8

Source: Survey of Current Business

Category	*June*	*Sept.*	*Dec.*	*Mar.*	*June*
1. Durable-goods industries	52·99	54·06	56·48	55·23	56·13
2. Non-durable-goods industries	43·31	46·78	48·72	48·66	49·37
3. Construction	62·79	65·11	67·06	66·97	70·42
4. Wholesale trade	52·50	52·78	54·08	54·56	55·61
Hours: 1.	40·7	40·6	41·7	40·9	40·5
2.	39·8	40·2	40·8	39·9	39·8
3.	37·8	37·9	37·9	37·1	37·9
4.	41·6	41·2	41·6	40·9	41·1

In keeping with the further moderate increase in employment and some slight increase in productivity, the level of industrial production increased slightly during the year with sporadic interruptions due to strikes. From the low point of 176 in July 1947, the seasonally adjusted index rose to 190 in October, reached 194 in February 1948, and was maintained at 192 in June—an extremely encouraging background to the uncertainties and waverings noticed at the beginning of this section. This stability at what, apparently, was maximum capacity, was common to both durable and non-durable-goods industries, the former recovering to 223 in October and the latter to 176. Some weakness appeared in the production of textile, leather, and rubber products in the first half of 1948 after exceptionally high production during the winter,

but, as yet, nothing in the nature of a general weakness, even comparable to the setback of 1947, had appeared.

While earnings advanced typically by 6–8 per cent. during the year, wholesale prices advanced by up to 12 per cent. and retail prices by 8–9 per cent. In June 1947 wages were achieving some success in chasing prices but, during the fiscal year 1947–8, lost ground slightly. Increased wages were quickly passed on in higher prices, while some further increase in profit margins may have taken place. Raw-material prices generally did not increase more than 15 per cent. although fluctuations were very wide in isolated cases, but in so far as that 15 per cent. rise was achieved in free commodity markets it would indicate that increased wage and material costs were wholly responsible for the further rise in prices rather than any increase in 'mark-up'. The increase in raw-material prices was itself due, in some degree, to increased wages, but was more a symptom of continued world excess demand than of excess demand in the United States itself.

SELECTED PRICE MOVEMENTS, 1947–8

Monthly average *Source: Survey of Current Business*

	Wholesale. 1926 = 100						*Retail. 1935–9 = 100*	
Month	*All*	*Foods*	*Textiles products*	*Metals and products*	*Building materials*	*Chemicals and allied products*	*Cost of living*	*All*
June 1946	112·9	112·9	109·2	112·2	129·9	96·4	133·3	147·7
June 1947	147·7	161·8	139·9	142·0	174·1	120·8	157·1	178·8
Sept. .	157·4	179·2	142·4	150·1	183·4	122·3	163·8	184·9
Dec. .	163·2	178·4	148·0	151·5	191·0	135·0	167·0	188·4
Mar. 1948	161·4*	173·8†	149·8	155·9	193·1	136·1	166·9	188·6
June .	166·2	181·4	149·6	158·8	196·8‡	135·8	171·7	193·5
%+(1947–8) .	12½	12	7	12	13	12	9	8
%+ June 1946 to June 1948	47	60	37	41½	51½	41	29	31

* Cereal and meat prices fell sharply in Feb. 1948, meat rising again thereafter.
† Wheat reached its peak price of $3.15 in Jan. 1948.
‡ Lumber index was 313 in June 1948, other components not unduly high.

It will be seen from the preceding table that the distorting movement of 1946–7 which followed decontrol was not continued into 1948 and that the rise in retail prices was relatively moderate. But equally there was little correction of 1946–7 distortions—over the whole two-year period the advance in food prices and in cost of construction materials was considerably greater than elsewhere. It is this fact that lends plausibility to widespread expectations of 'readjustments' and to constant protests concerning the cost of food (and, indeed, of other farm products). The price structure was not regarded as normal and, in consequence, price expectations became highly volatile and inventory speculation widespread. These feelings were heightened by the erratic behaviour in the prices of certain raw materials. Thus, while the underlying conditions of demand were strong, while production and employment were at peace-time record levels, the state of confidence was continually assailed by price-uncertainties, by doubts about foreign trade, and by the constant wages struggle, all of which was a quite natural result of the powerful shock administered to the American economy by post-war decontrol and by the exceptional demand for American exports.

Gross national product for the fiscal year, at $245 billion, exceeded that for the previous year by 22 billions or nearly 10 per cent., but, considering the rise in price indexes, much of this must have been the consequence of higher prices. Personal consumption expenditures continued to increase but at a slightly declining rate, while personal savings first stabilized and, in the last quarter, reached $10·5 billion—the beginning of the sharp increase which characterized the onset of the 1949 recession. Compared with 1946–7, durable consumption expenditures increased by 15 per cent. while non-durable consumption increased by under 10 per cent.—with retail prices up nearly 10 per cent. over the year, the main volume of additional consumption was, as was to be expected, in

durable goods and in services. In private domestic investment there was a substantial advance in fixed investment—the total being 27 per cent. above that for 1946–7, the greater advance being achieved in new construction which had risen (by the last quarter of 1947–8) very markedly above the last quarter figure of 1946–7 (very much more so than did new 'equipment'). Taken in conjunction with the advance in durable consumption, these figures indicate a rapid improvement in the principal inflationary sectors. Inventory accumulation by businesses during the year picked up moderately in the autumn of 1947, while the heavy depletion of agricultural stocks continued into the winter and ceased early in 1948. It would seem that after the adjustment in stocks which characterized the 'recession' of mid-1947, further accumulation (by value) merely made up certain depletions, adjusted itself to increasing production, and in part represented higher prices. In short, the inventory cycle was temporarily quiescent—both on account of the moderation of inflation and of the steady performance of final demand which came up to the expectations of entrepreneurial buying and producing plans.

The growth in domestic consumption and investment did not take place without some marked change in the relative size of the two other constituents of gross expenditure. 'Net foreign investment' declined very rapidly. In spite of price advances, the total for the fiscal year, at $5·9 billion, was 1·3 billions below the 1946–7 figure and the decline was rapid during the winter and spring. This was in part due to a decline in exports, in part to higher imports, but mostly due to the relatively larger financing of the export surplus by outright gifts financed by the Federal government. Thus government purchases, on behalf of the Federal government, rose significantly in the third and fourth quarters of the year, although the total Federal purchases for the whole fiscal year show only a very slight increase on those of the previous year. (Almost

all the increase in total government purchases (3·1 billions) is accounted for by the steadily mounting expenditure of State and Local governments.) Thus, although net foreign investment declined so markedly, the export surplus on goods and services for the calendar year 1948 was only $1 billion below that for the calendar year 1947. The general conclusion is, therefore, that the decline in the export surplus gave some small relief to the general inflationary pressure without aggravating, so far, any weakness in home demand—the latter being sustained throughout the year and, in the public sector, steadily increased.

The redistributive effects, noted in the previous section, for the year 1946–7 did not, in so far as they are properly revealed by the seasonally adjusted quarterly figures, continue very markedly until the summer of 1948—although farmers increased their share steadily throughout. The various shares of gross national product on a percentage basis are shown in the table below. The change from the second quarter of 1946 is well marked, but thereafter it seems that 'employees', subsequent to the decontrol shock, managed for a time to maintain their share as did other income categories. In the summer of 1948 profits appear to have risen abruptly, due, one suspects, to an increase in productivity not offset by higher wages or lower prices[1] and, in conjunction with fiscal disinflation, may have been a powerful member of the influences which enabled the unprecedented volume of investment to be carried out without greater inflationary pressure than was in fact evident.

Before turning to the special field of monetary policy and debt management during the period of inflation, it is as well to look briefly backwards over the general survey of this chapter. We have sought to follow the 'real' background against which the monetary authorities worked,

[1] This may also have been due, in part, to the relative stability of raw material prices which enabled prices based on historical material costs to rise into line with current costs.

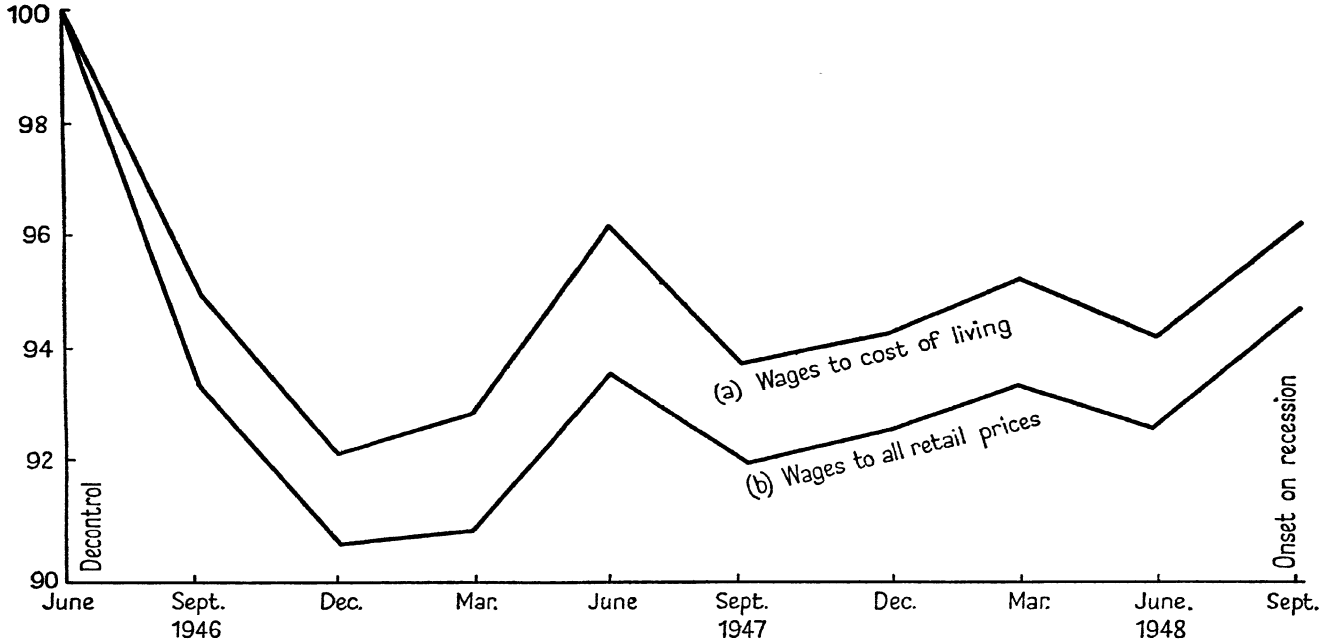
with the aid of certain broad ideas as to what, in such circumstances, is likely to happen. It is not our purpose to draw detailed conclusions or to suggest original hypotheses. It has simply been necessary, in order to understand monetary and fiscal policy, to digress like this and to wander somewhat glibly through a series of vast aggregates and generalized statistics. It has been extremely difficult to do so, as the pitfalls are legion and the platitudinous road broad and easy, but it is difficult to accomplish the task without far greater knowledge, and without far greater detail than is to be expected within the limits of a work on central banking.

PERCENTAGE SHARES OF GROSS NATIONAL PRODUCT. 1946, 1947–8

(SEASONALLY ADJUSTED QUARTERLY TOTALS)

Source: Survey of Current Business

Category	*Second quarter 1946*	*Second quarter 1947*	*Fourth quarter 1947*	*Second quarter 1948*
1. Compensation of employees .	55·6	54·3	54·4	53·5
2. Corporate profits net of inventory valuation adjustment	9·9	11·1	10·8	12·6
3. Personal business and professional	10·2	8·4	8·3	8·6
4. Farm	6·5	6·3	7·0	7·2
5. Personal rents . . .	3·9	3·0	2·7	2·9
6. Net interest . . .	1·4	1·5	1·5	1·6
7. Other (depreciation, &c.) .	13·2	15·4	15·3	13·6



The movement of weekly earnings in manufacturing industry relative to: (*a*) the cost-of-living index, and (*b*) the index of all retail prices: U.S.A. 1946–8.

Source: *Survey of Current Business*

Price indexes are converted to a date base of June 1946 = 100. Figures of average weekly earnings (Department of Labour), approximately corrected for changes in hours worked, are converted to index numbers, June 1946 = 100. These numbers are then expressed as a percentage of the price indexes.

XII

THE FEDERAL ACCOUNTS AND THE SUPPLY OF FUNDS FOR THE REDUCTION OF MARKETABLE PUBLIC DEBT

WE saw in Part II that the reconversion of the market was achieved, and some degree of initiative regained, with the aid of funds raised in the Victory Loan. Those funds could be so utilized for the obvious reason that fiscal deficits on the war-time scale had been abolished; but that almost the entire sum raised in November–December 1945 could be used for the retirement of marketable debt was due to the equally obvious fact that the Federal accounts rapidly went into surplus, or else into a deficit small enough to be financed by borrowing from the government trust accounts and other sources. In the two-year period June 1946 to June 1948 the retirement of marketable debt continued steadily; in the main this was achieved by further drawing down of the Treasury cash hoard, and, when this source of funds was exhausted, by utilization of the fiscal surplus. But, during the period of fiscal surplus and, to some extent, before that period began, the process was further speeded up by use of funds borrowed from the trust accounts, of the net proceeds of non-marketable public issues (savings bonds and notes), and initially by use of funds subscribed to the Bretton Woods Institutions. That is to say, all sources of current savings, compulsory or voluntary, at the disposal of the authorities were used to retire marketable debt, in addition to the remainder of the hoard previously accumulated. This is perfectly usual practice but, as we have previously seen, the method of retirement can be significantly varied in accordance with the exigencies of current credit policy.

The budget surplus and the social security surplus can perhaps be described mainly as 'built-in'—they appeared as consequences of the existing progressive tax structure, the condition of practical full employment, the rise in the gross national product, and the more deliberate avoidance of increased Federal expenditure. The social security surplus would no doubt have appeared regardless of inflationary processes; but the existence of a progressive tax structure at a time of rising incomes added buoyancy to the Federal revenue, while the fact that certain items of the budget[1] were fixed in terms of 1945–6 dollars (or of the dollar current at date of appropriation votes) imparted an element of stability to Federal expenses. Further, the early post-war budgets were heavily weighted with temporary expenses arising out of the war (United Nations relief to Europe, Veteran's Administration, &c.) and with defence expenditure, which, until mid-1948, declined in volume if not in dollars. Thus, while the increase in total receipts followed automatically from the conditions of inflationary prosperity, the Administration was able to achieve a substantial surplus simply by avoiding any rapid increase in its ordinary peace-time commitments. Until the spring of 1948 this policy, if policy it can be said to be, was followed with considerable success. Then, however, the size of the surplus was too plain for Congressional comfort, whereupon taxes were lowered by $5 billion—mostly at the upper end of the progressive scale. Simultaneously, expenditure on defence and other projects began to increase. The timing of these fiscal changes was remarkably appropriate, being very conveniently operative as the recession of 1948–9 developed. These changes, in co-operation with 'built-in' effects of unemployment relief, agricultural support, and the tax system, produced the quickly required deficit whose presence later became the subject of much controversy. Before proceeding to an account of the 'sources of debt retirement', we may glance at the magnitude of

[1] e.g. interest charges. Foreign credits.

fiscal disinflation in the national income accounts. The table below, since it gives calendar year totals, does not reflect quite the speed or timing of the fiscal disinflationary effort, but illustrates well enough:

(*a*) The contrast between 1939 and 1946–8.
(*b*) The contrast between 1946 and 1947 as regards the impact of the 'spiral' upon the public sector.
(*c*) The effects of reduced taxation, &c., in 1948.

GROSS SAVINGS

Calendar years 1939, 1946, 1947, 1948

$ billions *Source: Survey of Current Business, July 1949*

	1939	*1946*	*1947*	*1948*	*% 1939*	*% 1947*	*% 1948*
1. Personal savings	2·7	10·3	5·1	12·0	25·0	12·6	25·6
Undistributed profits	1·2	8·1	12·0	13·2	11·2	30·2	28·2
Depreciation charges	6·9	9·4	10·7	12·2	63·8	26·7	26·1
Other private savings*	1·9	1·4	−2·0	1·0	17·3	−5·0	2·2
Total gross private savings	12·7	29·2	25·8	38·5	117·3	64·6	82·1
2. Government net surplus on income and product accounts:							
1. Federal	−2·2	2·8	13·5	9·2	−20·5	33·9	19·6
2. State and local	+0·3	2·0	0·6	−0·8	3·2	1·5	1·7
3. Total	−1·9	4·8†	14·2	8·4	−17·3	35·4	17·9
3. Total gross savings = gross investment‡ (home and foreign).	10·8	34·1	40·0	46·9	100	100	100
4. '3' as per cent. of gross natural product	..	..	..	..	11·8	17·0	17·9

* Includes inventory valuation adjustment, accidental damage, and capital outlay charged to current expenses. † 14·2 per cent. of gross savings.
‡ Gross private domestic investment plus net foreign investment. Public investment is not included as a separate item in the American national accounting.

On 30 June 1948 the gross Federal debt, at $252·3 billion, was 17·1 billions below the total at 30 June 1946 (269·4). The marketable debt, at $160·3 billion, was reduced during the same period by no less than 29·3 billions from the June 1946 total of $189·6 billion. Where precisely did the money come from?

In the fiscal year 1946–7 the actual budget surplus was very small ($754 million), but the budget itself, apart from transfers to trust accounts (1·4 billions), included certain items of 'expenditure' which were purely nominal for that

year—i.e. could in fact be 'borrowed from the recipients' by the Treasury. These items were the subscriptions to the International Monetary Fund[1] and the International Bank for Reconstruction and Development, and veterans' bonuses issued in the form of 'leave bonds'.[2] Thus, ignoring the small budget surplus, we have available for the retirement of marketable debt (the above procedure did not reduce the debt *total*) from the above source a sum as follows:

1.	Non-interest-bearing notes issued to I.M.F./ I.B.R.D.; increase in amount outstanding .	$2·1 billion
2.	Armed Forces leave bonds, increase in amount outstanding	$1·8 „
		$3·9 „

Secondly, the social security and other trust funds took up new special issues during the year to the value of $5·0 billion. Thirdly, although savings notes were heavily cashed during the year, redemptions exceeding sales by 1·1 billions, savings bonds showed a net increase of 2·2 billions. From non-marketable public issues the Treasury thus obtained a further 1·1 billions net. There was thus available for retirement of marketable debt with sums borrowed elsewhere:

[1] The I.M.F. subscription was $2,750 million: 950 millions was charged on the budget, 1,800 millions was 'paid' out of the Exchange Stabilization Fund by amendment of Gold Reserve Act (*Annual Report of Treasury, Fiscal year 1945–6*, p. 384). All I.B.R.D. subscriptions were in this period a charge on the budget. The government was not *bound* to finance the 950 million I.M.F. subscription and I.B.R.D. subs. by taxation, it was authorized to borrow up to $4,125 million for the purpose, it *preferred* to make it a budget expense.

[2] A usual and fairly simple piece of Treasury sleight-of-hand. Money for I.M.F./I.B.R.D. and veterans was raised by taxation in 1946–7. The beneficiaries were not given cash but special government securities redeemable on demand or after a certain date. The Treasury did not then keep the money but retired other debt with it: when the I.M.F./I.B.R.D. and veterans cash their securities the Treasury pays them either by raising money on the market or by using its budget surplus or trust surplus (if any of either). What appears on the 1946–7 budget as an expense is in fact 'saved' and spent later on when it does not appear as an expense at all.

	$
1. 'Unspent budget expenditure' . . .	3·9 billion
2. Net increase in savings bonds and notes, &c., outstanding	1·1 ,,
3. Increase in special issues to trust funds, &c. .	5·0 ,,
TOTAL	$10·0 ,,

Finally, there was the remainder of the Victory Loan hoard. 'Deposits in special depositaries'—almost entirely War Loan accounts—were drawn down 12 billions during 1946–7 to a level of just under 1 billion. Due to slight offsetting increases in other Treasury cash holdings,[1] the net reduction in the general fund for the year was 10·9 billions. In all, therefore, $20·9 billion of marketable debt was retired.

During the fiscal year 1947–8 certain of the above sources of funds were not available, but were to some extent replaced by the substantial fiscal surplus achieved in that year. Firstly, the government had to redeem nearly $1 billion worth of the special securities issued to the I.M.F. and I.B.R.D. the previous year, and over 1·2 billions of the armed forces leave bonds similarly issued. Secondly, there was no longer any large Treasury hoard to be drawn down—over the year, in fact, the balance in the general fund was at a working figure. However, the Treasury was able to borrow a further $2·84 billion[2] from

[1] Either in deposits at Federal Reserve Banks, minor in this case; or in Treasury gold and currency holdings—up 850 millions.

[2] If special issues were up 5 billions in 1946–7, why were they only up 2·84 in 1947–8? The answer seems to be this: the social security trusts, &c., actually showed a surplus of 3 billions or so in *each* year (see *Federal Reserve Bulletins*), but 'special issues' are also issued to the Post Office savings administration and (important in 1946–7) to the Federal Deposit Insurance Corporation which are not included as 'trusts, &c.' in Treasury statements. Both these items together showed a substantial cash advance in 1946–7, but a slight deficit in 1947–8—hence the decline of new special issues in 1947–8. The 'built-in' disinflationary effect of social security funds (3 billions a year, 1946–8) is thus unaffected by the erratic behaviour of new special issues.

the trust funds and nearly 1 billion by the issue of a ne non-marketable security known as an investment boı which was sold to institutional investors in the summer 1947. In addition, although savings notes were on balan redeemed to the extent of 1·07 billions, savings bon outstanding increased by 1·91 billions. Finally, there w a budget surplus of 5·42 billions; but this figure w lowered from the more useful ('real') figure of 8·4 billio by the transfer of 3 billions to the new 'trust fund' the Economic Co-operation Administration during fisc 1947–8—a transfer which, by Congressional insistenc was counted as expenditure in 1947–8, though it was fact spent in 1948–9. As a consequence of this interr transaction the trust funds (including E.C.A.) showed *cash* surplus of 2·71 billions (3 billions less certain oth deficit items). The E.C.A. did not invest its funds special issues and the Treasury used the above ca surplus of the trusts for the further reduction (alb temporary) of the marketable debt. There were th available the following funds:

A. From sales of non-marketable securities:

	$	
1. Special issues	+2·84	billi
2. Savings notes	−1·17	,,
3. Savings bonds	+1·91	,,
4. Armed forces leave bonds	−1·23	,,
5. Investment bonds	+0·96	,,
6. I.M.F./I.B.R.D. issues	−0·99	,,
TOTAL	$+2·32	,,

B. From cash surpluses arising out of budget, &c:

	$	
1. Budget surplus	+5·42	billi
2. Trust fund cash surplus (E.C.A)	+2·71	,,
3. Clearing account (net)	−0·51	,,
TOTAL	$+7·62	,,

C. Therefore total funds available for marketable debt reduction (*A*+*B*)		$ 9·94 billion
Less marketable debt actually retired	1947–8	8·35 „
= rise in Treasury general fund . . .		1·59[1] „

Having examined the forces of fiscal and 'social security, &c.' disinflation, and shown 'where the money came from', we may now follow 'where the money went': we turn, that is to say, from fiscal to monetary policy.

[1] Actual figure was 1·62: errors due to rounding.

XIII

CENTRAL BANKING DURING DECONTROL: THE MIXTURE AS BEFORE

DURING 1946–7 the monetary authorities continued to administer the medicine of early 1946 without significant variation. The fact that the debt-retirement programme could continue on its initial scale for a more or less definitely foreseeable period with more or less pressure being placed upon bank reserves, enabled the authorities to deal with familiar routines and turn their more experimental natures towards future problems and to the propagation of those problems amongst the banking, business, and political leaders of the nation. With both Wall Street and consumer credit well under control, there was nothing of a spectacular nature which the Reserve Board could do during the period of rapid price inflation which followed decontrol. Sooner or later certain problems must arise: firstly, the debt-retirement programme would slow down or halt and there might then be a recurrence of the pattern-playing process which would pose questions as to what short-term rates ought to be, or whether the marketability of bonds, &c., might have to be restricted: secondly, if inflation further persisted and the liquidity of the member banks became markedly affected by increases in loans, the retirement of short-term assets, and the purchase of bonds from the public, there would come a time when, so far from 'going long', the banks would be forced to sell Treasury bonds or, worse still, would refuse to monetize such bonds for the public, entailing heavy support by Reserve Banks who would thereby be at the mercy (direct) of non-bank investors as well as of banks themselves. The appearance of *bond*

support, as opposed to 'certificate or bill support' might be, in moderation, a very welcome development *always provided* that fiscal disinflation proved adequate—but what if fiscal policy proved, through political difficulties, a broken reed? Or if, for many purposes proved, by its very nature, to be no proper substitute for monetary policy? This was the nemesis which increasingly loomed in front of central bankers—namely, that they would be left, by default, responsible for stopping inflation while yet in some degree responsible for debt management. Meanwhile, the immediate inflation had to be permitted and the authorities simply continued the previous treatment fortified by active propaganda.

Thus the directives issued by the Open Market Committee to its Executive Committee remained unchanged throughout the year. After announcing, in the middle of the 'pattern' crisis earlier in 1946, that the account would be managed to maintain 'about the present general level of prices and yields of government securities'—an indication of 'interim' policy—the Committee decided on 10 June 1946 to maintain an orderly market in Treasury securities and a general level of prices and yields which would support the 'Treasury issuing rates of $\frac{7}{8}$ per cent. for one-year certificates and $2\frac{1}{2}$ per cent. for 27-year bonds restricted as to ownership'. The guarantee of the $\frac{3}{8}$ per cent. bill rate (a guarantee which was made by the Board and was separate from such directives as the above) remained. The Committee was satisfied that the Treasury's programme of debt-retirement achieved the desired purpose of restraining the bond market.[1] At further meetings of the Open-market Committee (3 October 1946, 1 March 1947, and 5 June 1947) no change was made in the directive, but the printed report of both the latter two meetings records discussions having taken place with the Treasury with a view to changing short-term rates. The Treasury was loth to let go and, partly in order to enhance the

[1] *Annual Report of Federal Reserve Board*, 1946, pp. 103–4.

System's bargaining power, the Board voted on 23 April 1947 to pay 90 per cent. of Reserve Bank earnings to the Treasury (technically by means of a tax on Federal Reserve Notes). This meant that a rise in the bill rate would in fact cost the Treasury almost nothing.

Meanwhile the programme itself was carried out, during the fiscal year, as follows:[1] between 30 June and 30 December 1946 $13 billion of marketable securities were retired for cash, namely, one issue of 0·9 per cent. notes partly refunded into ⅞ per cent. certificates on 1 July, five issues of ⅞ per cent. certificates maturing at the beginning of the next five months and partly refunded into new certificates, and one issue of 1½ per cent. notes which was retired outright (over $3 billion) for cash on 15 December. The Treasury Bill issue remained unchanged. By 30 December 1946 the Treasury hoard had been reduced to $2 billion (allowing 1 billion for working purposes). However, by use of resources indicated in Chapter XII, and by taking advantage of the seasonal tax inflow of the second quarter of the year, the speed of debt retirement, although slower than in 1946, was satisfactorily maintained, a reduction of another $8 billion in the marketable debt being achieved in the first six months of 1947. Five issues of ⅞ per cent. certificates, maturing on the first of each month except May, were partly refunded, and one issue of 1¼ per cent. notes, maturing on 15 March, was retired outright for cash. Further, in April 1947, the authorities began to reduce the weekly bill offers—almost all the outstanding Treasury bills being held, it will be recalled, by Reserve Banks—and by 30 June 1947 the bill issue had declined from $17 billion to 15·8 billions.

The effect of this extensive process upon the activities of member banks during this period can be described as unchanged from that of the few concluding months of fiscal 1945–6. That is to say, in spite of continued pressure upon their reserves and continuous severe reduction of

[1] *Annual Report of the Treasury*, 1946–7.

their holdings of genuinely short-term government securities, there is little or no observable reaction either upon the willingness of the banks to grant loans to their customers nor, and this one might have expected rather than a tightness on loans, was there any noticeable desire on the part of the banks to sell Treasury bonds in order either to switch into loans or to obtain new reserves offsetting 'retirement effects'. On the contrary, the banking system continued to make gradual additions to its bond portfolio throughout the year—additions quite consistent with a continued growth in time deposits, although the average 'length' of the portfolio declined with the passage of time. But, in keeping with the initial effects of debt-retirement on the bond market, and with the slight tendency towards the monetization of bonds by the public for genuine (i.e. not speculative) purposes, the price of Treasury bonds, with some temporary fluctuations, did not vary significantly over the year.

During the first decontrol year, non-bank investors on balance sold few Treasury bonds to the banking system: selling by 'others' being largely absorbed by purchases on the part of mutual savings banks, while insurance companies maintained a steady portfolio. This was, as it turned out, no evidence of 'firm' bond ownership by saving institutions but meant, simply, that opportunities for switching out of government securities were absent—given the volume of new issues, mortages, &c., and the inflow of new savings. 'Monetization', at this time, took the form of 'liquidation' of short-term securities achieved by dispersal of the Treasury hoard. A tendency in the first half of 1947 for the demand for bonds to become excessive, under pressure of demand from the banks, was partly offset by sales from the government trust funds. Not until late in 1947 was the long campaign of attrition waged by the authorities (and, involuntarily, by the public) at last rewarded by a rapid flow of Treasury bonds into Federal Reserve Banks.

The process of debt repayment may now be analysed further. During the latter half of 1946 the government securities retired, amounting to $13 billion, were owned as follows:

	$
Federal Reserve Banks	3 billion
Commercial banks	7 „
Non-bank investors	3 „

(The above figures are estimated from the *Federal Reserve Bulletin* of July 1947 and the Treasury Report for 1945–6, the latter being used in order to subtract the March to June 1946 figures from the Federal Reserve March to December figures. The figures are estimates from Treasury survey and from member-bank returns.) The 13 billions was financed as follows:

	$
Reduction in war-loan balance	10·3 billion
Sales of other government securities	2·7 „
	13·0 „

Since $10 billion of the securities retired were held by the complete banking system, it follows that only 0·3 billions of the Treasury hoard was directly released into the hands of the public. The remaining 2·7 billions used to retire securities held outside the banks (i.e. 3·0—0·3) simply represents a (disinflationary) shifting of deposits between bank customers. That is to say, what is taken away by social security contributions, small savings, and taxation is put back by cash redemption of marketable securities; there is thus no effect (other than, conceivably, an effect on circulating currency) on the level of bank deposits. However, in addition to dispersing $0·3 billion as a consequence of debt-retirement, the Treasury also dispersed another 0·4 billions from its hoard as a result of ordinary expenditure.[1] As a result of Treasury action, therefore, in

[1] The apparent paradox of paying back more debt than one can afford is due to the arbitrary dating of the period. Sums like 300 or 400 million

these six months about $700 million was added to bank deposits against which reserves were required, and at the same time no less than $3 billion of reserves were extinguished by the retirement of securities held by the Reserve System; the latter result is, of course, overwhelmingly more important than the former. It will also be remembered that the retirement of debt held by the banks, since it can effectively be regarded as financed from war-loan accounts, did not release reserves—the effect of retiring debt held by the Reserve System being, therefore, at a maximum. In face of this onslaught the member banks appear to have viewed a reduction of over $9 billion in their liquid investments in six months with complete equanimity and increased their loans to customers by $3·4 billion—pressure upon reserves being met, when necessary, by sales of short-term securities to Federal Reserve Banks (they sold between $2\frac{3}{4}$ and $3\frac{1}{4}$ billions, depending on one's estimate of their ownership of the whole 7 billions of retired securities held by all commercial banks).

In consequence of the rapid price inflation of this period which entailed a sudden increase in the demand for loans for inventory financing—as well as a gathering post-war demand for real-estate loans, consumer loans, term loans to finance capital expenditure, and for general working capital consequent on reduced liquidity due to expenditure on fixed investment—the total loans outstanding at member banks increased by $3·4 billion in six months. Since loans for the 'purchase or carrying of securities' declined 1·9 billions, the actual increase in loans to 'commerce, industry and agriculture' (including real estate and consumer loans) was 5·3 billions. For the six-month period, deposits subject to reserve requirements rose by $4 billion as follows:

are very small. Also the desire to retire as much marketable debt as possible (including a very large note maturity in Dec. 1946) may account for it.

	$
1. Net increase in loans to customers	3·4 billion
2. Dispersal of Treasury balance to the public	0·6 „
3. Other factors (gold inflow, bank purchase of other investments)	0·6 „
4. Less increase in currency in circulation	0·6 „
	$4·0 „

N.B.

'2', '3', and '4' are estimated for member banks on an 85 per cent. basis; '1' is obtained from member bank call reports.

Reserve requirements rose, in consequence of the above, by $566 million, making the total pressure upon member-bank reserves approximately as follows:

	$
1. Increase in deposits subject to reserve requirements (as above)	0·566 billion
2. Drain of currency into circulation	0·6 „
3. Retirement of government securities held by Reserve Banks	3·0 „
	$4·17 „

This pressure—some of which was due to a seasonal outflow of currency—was met by:

	$
1. Reduction in excess reserves	0·55 billion
2. Sales of securities to Reserve Banks	2·57 „
3. Gold inflow	0·28 „
4. Reduction in Treasury balance at Federal Reserve Banks	0·44 „
(5. Reduction in non-member deposits at Federal Reserve Banks[1]	0·33) „
	$4·17 „

[1] The above residual can be changed slightly by altering one's assumptions concerning the amount of debt retired at Federal Reserve Banks which had to be met by drawing on member rather than non-member reserves.

This sequence is completely familiar: the weight of pressure on bank reserves came from the debt-retirement programme rather than from ordinary banking business, while the pressure was easily met, in the main, by further sales to the Reserve Banks. The sequence continued in the first six months of 1947 with some modifications—due to the almost complete exhaustion of the war-loan balances—and the tables will not be repeated.

The effect of this exhaustion was to ease the pressure on bank reserves that had previously arisen from the expansion of bank loans, &c. Coincidental with this development, the renewed inflow of gold at a substantial rate partly offset additional pressure upon bank reserves arising from the retirement of securities held by Federal Reserve Banks, while the impact of Treasury operations upon the monetary situation was affected by the operation carried out at the end of February in connexion with the United States subscription to the International Monetary Fund. This involved the (partial) monetization of $1,800 million, transferred from the Exchange Stabilization Fund where this sum had been 'in existence' since January 1934, it being part of the devaluation profit on the monetary gold stock. Since this sum had been held in gold dollars created by writing up the gold stock in 1934, it had never appeared anywhere as a bank deposit and was, in fact, new money. Details of this operation are given in the Appendix to this chapter. However, $7·9 billion of marketable securities were retired during the first half of 1947, 7 billions of which represented the proceeds of sales of special issues, savings bonds, leave bonds, I.M.F. notes, &c., and the remainder was obtained by further reductions in the now quite diminutive Treasury hoard. Of the securities retired, $4·9 billion were held by the banking system, but owing to offsetting influence of the drawing down of the remaining war-loan balances (itself partly offset by a rise in the Treasury account at Federal Reserve Banks) the net contractive effect of these operations upon net member-bank

deposits was only about $3 billion. That the effect was contractive on 'net' deposits (i.e. those subject to reserve requirements) is itself a new development—it is simply due to the fact that retirement of bank-held debt was now increasingly financed by the withdrawal of deposits (via, mainly, the fiscal system) from the public. In addition, during this period, the banks were net sellers of government securities to the public to the extent of over $\$\frac{1}{2}$ billion. Counteracting these contractive effects, member banks increased their loans and 'other' investments by over 2 billions and received additional deposits from an inflow of currency from the public and of gold from abroad. The net result of Treasury contraction and member-bank expansion of net deposits was a small reduction in total net deposits of under half a billion.

In these circumstances the need to obtain additional reserves was sharply reduced, and in fact now *confined* to the pressure exerted by retirement of securities held by Reserve Banks. But in this period the return of currency from circulation and the increase in gold certificates[1] provided the majority of required reserves (amounting to over $2 billion). Thus sales of securities to the Reserve System came to only $\$\frac{1}{2}$ billion during the six months, a very marked diminution in 'pressure'. It seems that the operations of the Treasury and Exchange account[2] directly contributed to the easement of the above pressure—a contribution in conflict with the monetary policy of the time which cannot have been welcomed by the Reserve authorities, but which may also explain the commencement of the reduction of the Treasury bill issue in March. The redemption of Treasury bills meant the conscious concentration of the authorities on the maintenance of

[1] The form in which the American gold reserve appears as a central bank asset. Gold certificates are given by the Treasury to the Reserve Banks in payment for imported gold or newly mined domestic gold.

[2] These operations alone can explain why the banks obtained the reserves they did. The effective gold inflow, i.e. increase in gold certificates, was much larger than the increase in the gold *stock*.

'pressure', whereas the previous retirement of certificates, notes, and bonds only, had exerted pressure automatically. Owing to the very large bill holdings of Reserve Banks, a failure to reduce the bill issue meant that 'pressure' would speedily diminish—for if gold inflows supplied members with fresh reserves and the exhaustion of war-loan accounts also had *its* effect, sales of certificates to the System would diminish rapidly and, in consequence, so would the proportion of certificates, notes, &c., subsequently redeemed, which was held by Reserve Banks.

However, regardless of the above problems of the maintenance of 'pressure', one important consequence of disinflationary fiscal operations had emerged, possibly temporarily, during these six months: namely, credit expansion in the 'private sector' had ceased and been replaced by a shifting of funds, via the Treasury, from 'savers' into the hands of others. Aggregate credit expansion had, of course, ceased early in 1946 with the completion of the Treasury hoarding programme, but expansion of private deposits had continued throughout 1946 either in consequence of distribution of the hoard or as a result of rapidly expanding bank loans. During the second half of 1946, distribution of the hoard was 'neutral' on private deposits, while increasing loans brought a substantial net expansion. During the first half of 1947 the latter expansionary influence itself slowed down somewhat and was offset by fiscal disinflationary reduction of private deposits. The fact that 'net' deposits of member banks fell slightly was, however, heavily influenced by the seasonal inflow of revenue into the Treasury during the first quarter of the year and, to some extent, by the slight inventory 'pause' of the late spring and summer. In short, one would not expect the same position to be ruling four months later unless fiscal effects were sufficient to offset further expansionary influences.

To conclude this chapter, some reference must be made to the change in the banking position (see Tables VIII and

IX, Appendix to Part III). Expansion of loans, reduction in holdings of government securities, and the elimination of war-loan balances had had their effect. The first two had reduced liquidity while the last, in so far as it had reduced total liabilities, had somewhat offset the first two. The increase in time deposits on the other hand, by nearly $2 billion, had slightly reduced the liquidity needs of member banks as a whole.

More important than the above changes in aggregates was the change in their composition. Member-bank loans were themselves less liquid, on 30 June 1947, than they were a year previously, owing to the reduction in security trading loans and the growth in, for example, real-estate loans, as well as the growth in commercial loans (much of which, in early post-war years, consisted of term loans). On the other hand, the government security portfolio was scarcely less liquid, even in principle, than before. Holdings of short-term securities had not declined as much as war-loan balances, while holdings in the 1–5-year range had increased both absolutely and proportionately. But this type of analysis is necessarily artificial, since the arbitrary classification of securities by maturity did not mean very much in the circumstances of the time. What can be said is that the banks might not now be driven quite so hard to acquire new assets yielding more than short bonds or certificates, while they could also look forward to an increasing supply of such short-term securities as average 'length' of the national debt shortened with the passage of time. Since they held large quantities of such bonds, their liquidity would slowly increase without any loss of earnings. Provided the Treasury did not alter its policy of refunding 'short', then this increase in liquidity might offset any reduction due to debt repayment. This became a serious problem in later years.

Since the efficacy of debt repayment, in restraining the banks, depended rather upon the psychological effects of pressure upon their reserves rather than, as yet, a general

reduction in banking liquidity, one is simply reduced to reiterating that the reduction of the floating debt can only, at this stage, have reduced an incentive to sell such debt aggressively rather than have a positive restrictive effect. That is to say, it was a step towards neutrality.

More significant is the change in the ratio of capital to risk assets. By June 1947 this ratio had returned to the pre-war figure of 25 per cent. (Chapter III, p. 47), in spite of a rise in capital accounts which enabled a slight increase to be achieved in the reserve capital ratio. This development was to continue and become a significant element in banking psychology. Bank capital is not easy to raise and any realization of book losses on, e.g., government securities, is increasingly distasteful to a bank whose capital/risk assets ratio is suffering a decline which can only be retarded by the added retention of higher earnings.

APPENDIX

TREASURY GOLD AND THE I.M.F. SUBSCRIPTION

WHAT in fact happened was that the expansionary influence on bank reserves was immediately offset by repayment of Reserve Bank investments. However, that was so much less available for genuine 'pressure':

1. United States subscription was $2,750 million.
2. Of this about 1,000 millions was payable in gold
   1,750 millions was payable in dollars.

The Treasury used, for payment, 1,800 millions of unmonetized gold in the exchange account (devaluation profit of 1934), and 950 millions of ordinary revenue.

3. Of the 1,800 millions of gold, 1,000 millions was paid, in gold, to the I.M.F.

This the Treasury retained, unmonetized, until it should be called by the Fund.

4. This left, for cash subscription, 800 millions in gold + 950 millions in dollars.

The Treasury paid this to the Fund and then borrowed it back again by issuing to the Fund special non-interest bearing notes.

5. What it did with the 950 millions is of no concern, as this sum is already ordinary money.
6. Treasury then issued 800 millions of gold certificates to Reserve Banks and thereby built up its account at Reserve Banks by that amount, thus monetizing that much gold. It did this in late February 1947.
7. On 1 March 1947, about 500 millions of maturing certificates owned by Reserve Banks were paid off with, in effect, the proceeds of monetizing the above gold.
8. The remaining 300 millions was eventually dispersed, by reduction in the Treasury account at Federal Reserve Banks. Since there was an ordinary *outflow* of gold in January and February of about 300 millions, the net effect of all this on bank reserves at the time was '*nil*', or 'less pressure than otherwise', whichever way one likes to look at it.

XIV

ABANDONMENT OF THE 'PATTERN'; THE FIRST EXPERIMENTS IN A NEW MARKET POLICY, JULY–OCTOBER 1947

IF 1946–7 was, for the monetary authorities, a year of straightforward procedures undertaken against a violently inflationary background, 1947–8 was a year of experiment and development—for during that year there appeared almost all the problems previously foreseen but deferred either by previous retirement programmes or by the unprecedented liquidity of the banks and public which gave sufficient 'slack' to the monetary system for a year's decontrolled inflation to be absorbed without the appearance of any degree of tension. 1947–8 divides itself into three distinct periods. The first, which lasted until 31 October 1947, witnessed an unprecedented degree of co-operation between Reserve Banks and the Treasury in a joint attempt to check a resumption of the 'pattern-playing' process, and offset the effects of gold inflows, without the help of debt-retirement. Funds available for the latter were sharply reduced (seasonally, in the main) and pressure upon bank reserves negligible. In those circumstances the authorities resorted to the raising of short-term interest rates and to a more determined use of the marketable government bonds held by the government trust funds. They also attempted a new funding operation by the issue of a non-marketable investment bond.

Precise analysis of the periods into which 1947–8 is divided is both extremely complex and, in view of the degree of mechanical explanation hitherto practised, unnecessary. We can therefore resort to less exacting methods of inference.

In the new fiscal year, the authorities faced a situation

rather more delicate than hitherto. Whereas earlier in the post-war period the main anxiety was constituted by a situation in the market for government securities which, given certain mainstays of policy, threatened an over-supply of money more or less regardless of demand, certain of the authorities now became increasingly anxious about the demand itself. That is to say, there was a shift of emphasis away from 'over-supply' and on to positive checking of the whole inflationary process. But during the summer of 1947, both problems shared the limelight: thus the measures adopted were designed both to prevent a further rise in the price of Treasury bonds (in the manner of 1945–6) and, if possible, to exert some restraint against the rapid rise in bank loans—a restraint considered necessary not because of any danger to the banks but because of the general economic danger of continued inflation and the seeming failure (at that time at least) of fiscal policy to check it. Further, the problem of over-supply, hitherto conquered by retirement programmes, was given a new lease of life by the now considerable influx of gold. It is a curious anachronism that a country which was pursuing a 'managed money' policy of extreme boldness, not to mention inflexibility, a policy heartily endorsed by the United States Treasury, was nevertheless driven to permit gold imports to swell bank reserves automatically. The best that could be done was to devise a series of extremely short-term measures.

To deal first with over-supply. The authorities had foreseen a resumption of the bond-market boom for the following reasons—firstly, there was nothing so far to indicate that the banks would regard their depleted holdings of under-twelve-month assets as near to the minimum and, in any case, those assets were greatly increased during the first half of 1947 as the maturity or 'first call' date of certain existing short bonds fell below twelve months. That being the case, given war-time short-term rates, there was nothing to prevent a resumption of the earlier processes.

Secondly, the flow of new savings on to the market was still sufficient to absorb new issues or old ones offered on the market to finance expenditure on equipment or stocks without the market becoming so overburdened with securities that the banks could not absorb the consequential offerings of government bonds at existing prices. There had in fact been quite a marked revival in bond prices during early 1947. The average of Treasury-bond prices (over fifteen years average) rose from 103·87 in December 1946 to 104·61 in March 1947 and averaged 104·08 in June. Municipal and corporate bonds behaved similarly, in fact slightly firmer.[1] Thirdly, the funds available for debt-retirement were small and gold inflows had, as seen in the previous chapter, already seriously affected the efficacy of retirement. Lastly, since holdings of medium- and long-term bonds by the Reserve System remained negligible,[2] offsetting operations in the market remained impossible.

In face of this situation it was at last decided that the 'war-time pattern' would have to go. Failure to abandon it now would mean handing back to the speculative investor (which, by now, meant most of the market) the small degree of tactical initiative gained by the authorities during the period of 'Victory Loan funding'. Given the degree of inflation since decontrol, and the prospects of further inflation, an untenable rate structure was clearly ridiculous and the responsibility for further encouraging a renewed inflation of security prices was one from which, presumably, the Treasury shrank. Indeed, the Treasury was now fully aware of the dangers. The year 1947, and part of 1948, was a period in which co-operation between the two departments was at its best. Mr. Wiggins, himself a banker, who became Under-secretary to the Treasury during the winter of 1946–7, was closely associated with the co-operative effort, the firstfruits of which were the

[1] Municipals reached their peak in July, corporates in May.

[2] See Table 4, Appendix to Part III.

reduction in the bill issue and the commencement of sales of Treasury bonds by the trust accounts during the first six months of the year (designed to depress bond prices). At last, in the first week of the new fiscal year, the Open Market Committee voted to terminate the fixed buying rate on Treasury bills of $\frac{3}{8}$ per cent. and the repurchase option upon them.

The announcement accompanying this action[1] pointed out that the old rates 'no longer serve their original purpose and tend to distort conditions in the money market and securities market'; certificates of indebtedness had largely replaced bills on the market as the cash-adjusting medium of the banks, and, due to the unloading of bills on to Reserve Banks, the latter had 'gradually ceased to become a market instrument'. Elimination of the old war-time system in the bill market would 'serve a useful purpose in restoring the bill as a market instrument and giving added flexibility to the Treasury's debt management programme'. 'Under the new policy', the Treasury bill would be free to find its own level relative to certificates, *but* 'the Federal Reserve System will continue to purchase and hold Treasury bills, as well as other government securities, in amounts deemed necessary in the maintenance of an orderly government security market, and the discharge of the System's responsibility with regard to the general credit situation of the country'. The last quoted sentence is notable for its concluding clause, which offsets the opening, familiar phrases and was presumably designed to inject uncertainty via ominous ambiguity. The Open Market Committee's directive was therefore changed, the operating clause concerning the market being revised to run—'support the current issuing rate on certificates and $2\frac{1}{2}$ per cent. on 27 year bonds restricted as to ownership'.[2]

With the termination of $\frac{3}{8}$ per cent. the bill rate moved almost immediately to 0·75 per cent. Commencing on the

[1] *Federal Reserve Bulletin*, 1947, p. 776.

[2] *Annual Report of Federal Reserve Board of Governors*, 1947.

1st of August, the coupon rate on new certificates was gradually raised, reaching 1 per cent. (for twelve months) with the 1st of October issue. By 31 October the bill rate was nearly 0·9 per cent. Market forces tended, naturally, to raise these rates and the System's open-market account was handled to permit the above upward adjustments. In line with the co-operative spirit, the raising of the certificate rate was done by offering new securities of ten- or eleven-month life at $\frac{7}{8}$ per cent. rather than by a direct twelve-month offer. The 'twelve-month rate' thus moved up 'notionally' until on 1 October a twelve-month 1 per cent. certificate was issued. This unusual procedure was undertaken in order to space out maturities in 1948. Monthly maturities of certificates were disliked by the Reserve System: constant announcements of refunding terms,[1] and constant 'holding' of the market to ensure their success, inhibited the small degree of flexibility towards which the System was working. That the Treasury concurred in this is evidence of amicable relations—for monthly certificate maturities were of use to the Treasury in keeping a stranglehold on the Reserve System. Simultaneously with the above developments, the Treasury stepped up its sales of bonds from the trust accounts—the government trusts held over $5 billion of marketable issues, mostly bank-ineligible bonds, out of a total investment portfolio of nearly $33 billion on 30 June 1947. Proceeds of such sales went into new special issues and thus became available for retirement of maturing marketable issues or other expenses. Finally, as evidence for the coherence of Treasury policy, there was some tendency to offset gold inflows by holding the balance at Reserve Banks at a higher level than was becoming customary.

During the three months up to 31 October, $800 million of certificates and notes were redeemed for cash, but this only represents the small fraction of each maturing issue

[1] The certificate, it will be remembered, is a short-term *bond* and is floated as such.

whose owners demanded cash payment. Debt-retirement, in the sense that full exchange of new for maturing issues is denied the holders, ceased for the time being (save for a bond retirement in October which will be referred to later). At the same time the Treasury seems to have drawn down the remainder of its war-loan balances ($500 million). Meanwhile the trusts reduced their bond holdings by nearly $1 billion.[1] 'The departments' (as they would be called in the United Kingdom) sold all but the very shortest bonds, but the great bulk of their sales comprised the medium- and long-term (i.e. over twenty-year) issues ineligible for bank purchase. Treasury bonds were bought during this period by all other classes of buyer save insurance companies, and even they appear to have lengthened their holdings. Thus commercial banks, as of old, again bought 5–10-year securities while others switched into longer issues and also purchased such issues on balance. But whereas previously this kind of market activity, spurred by bank (and other) sales of short-term securities to Reserve Banks, had led to a rise in long-term bond prices, the pressure of funds (new or old) on the market was this time absorbed by the Treasury and the funds themselves returned to the market. The sums involved were not large but the policy was effective enough given the supply and demand for securities on the private-bond market and equity market. Such a policy, of course, did nothing to prevent the banks lengthening the average maturity of their investments, but in the circumstances it prevented an inflation of bond prices arising from such lengthening. The episode is worth mentioning as an interesting example of a practice that was not then familiar in the U.S.A.

[1] The bond holdings of United States agencies and trusts began to decline significantly in May 1947—a reduction of 800 millions occurring in May–June. In July 600 millions were sold, in Aug. another 300 millions, and in Sept. 150 millions. The average yield on 'fifteen-year and over' fell from 2·24 to 2·19 from Dec. to May 1946–7 and rose to 2·24 in Sept. and 2·27 in Oct.

In consequence of the above departmental operations and of a flow of new issues amounting on average to over $500 million a month, bond prices declined significantly (if fractionally) from their spring peaks. In October the authorities followed up their success by selling a long-dated non-marketable security restricted, broadly speaking, to savings institutions (including banks but with stringent qualifications). This $2\frac{1}{2}$ per cent. investment bond '1965 or after' was redeemable by the holder at a pre-determined redemption value (below par) fixed by the Treasury for each month 1947–65, but could not be called by the Treasury until 1965. This issue raised $970 million[1] and can mainly be regarded as a refunding operation since an issue of $4\frac{1}{4}$ per cent. bonds, amounting to $760 million, was retired outright for cash on 15 October. But, naturally enough, subscribers to the investment bonds were not large holders of the maturing issue save in the case of banks, and the effect of the new loan was to relax yet again the pressure of new investible funds on the long-term market, or, equally, the pressure of new bank money arising from any resumption of 'lengthening' by the banks. Since the supply of new issues was maintained at 700 millions in October and the supply of savings remained steady, 'competition' between the government and the public was effective. In October, first corporate, and later government, bonds began to decline in price.

[1] Ownership of 'investment bonds' (*Treasury Bulletin*, Jan. 1948):

	$
Commercial banks	175 million
Savings banks	3 ,,
Mutual savings banks	118 ,,
Insurance companies	314 ,,
Government agencies and trust accounts	100 ,,
Others	259 ,,
	$970

The Treasury was disappointed with the response to this issue, and the experience may have coloured subsequent thinking on the question of 'funding'. The offer may have come too late, the market being by then rather weak compared to the previous July.

High-grade corporate bonds (average) fell from 120·5 on 4 October to 119·7 on 25 October, while Treasury bonds (average of over fifteen-year issues) fell similarly from 103·92 to 103·24. Since, as we shall see, credit expansion (via bank loans) had been resumed during the summer and the pace of inflation showed as yet little sign of slackening (once the pause of early summer was over), the market was clearly in delicate shape.

During the first half of October, indeed, the bond market hovered uneasily above an abyss of unknown potentialities. The *New York Times* reported on 1 October that the municipal and corporate bond market was 'sloppy' and 'heavy', new issues were not 'going well'. By 11 October small price falls became widespread, both in the corporate and government list, and expectations became confused. Prices moved down irregularly on narrow trading and, reported the *Times*, investment bankers could not tell, within appreciable limits, at what level to price the new issues 'on their shelves'. To a market accustomed to stable cheap money, with daily price movements quoted in thirty-seconds, the above feeling of 'indigestion' is the typical response to any tightening of conditions. Prices do not at once recede violently, instead trading becomes restricted, the 'underlying' stength disappears. With a fall in the good-class private bonds, there is almost immediately a reaction upon government bonds —the two markets are closely connected—and all prices, once the 'indigestion' deteriorates further, recede together. It can be said that the authorities, aided by the supply and demand for private bonds, in fact attacked the rate curve from both ends—the stronger attack being on the long end. At the short end, the raising of the bill rate was itself of little consequence; at $\frac{3}{8}$ per cent. the bill was, in effect, only a central bank asset, not a market instrument. The action of 1 July simply removed an anachronism. It may, of course, have injected some uncertainty. However, the effective short-rate being the certificate rate,

one could expect a reaction on, at least, bank-eligible bond prices once the certificate rate was effectively raised. This latter occurrence took place on and after 1 October when the 1 per cent. certificate was first traded. The average 9–12-month rate was still 0·87 per cent. on 27 September, but was 0·93 on 4 October and 0·98 on 25 October. Remembering the technical attributes of the 'pattern', this must have produced weakness in the market for bank-eligible Treasury bonds and contributed to the generality of subsequent declines and to the upward shift of the whole rate curve. Consciously or unconsciously the authorities were systematically obliterating the 'pattern' from the mind of investors. In these circumstances, and faced with a rapid expansion of bank loans, the authorities proceeded to renew their efforts by bringing, once again, strong pressure to bear upon bank reserves via debt-retirement—for the fiscal position now allowed it.

To complete this first phase of the year, however, we must return to more general matters. In spite of the fact that credit expansion via the security markets was blocked, temporarily, by official action, expansion through the medium of commercial bank loans proceeded easily and quickly. After the June 'trough' in production had been passed and prices resumed their advance, the demand for new bank loans returned to the level of the previous autumn. Since the total of security trading loans had by now reached a post-war normal after an eighteen-month decline, and since debt-retirement was at a very low level, the expansion of bank loans reacted fully upon the level of deposits: the average of total net demand deposits at member banks rose from $75·57 billion in the second half of June 1947 to 79·73 in the second half of October.[1] The rise in deposits was almost entirely the result of increased loans, but the inflow of gold itself had a 'direct' effect. The $4·7 billion of new net deposits were based mainly upon fresh reserves obtained from gold imports (the summer of

[1] Time deposits rose 360 millions.

1947, it will be remembered, was the summer of the 'convertibility crisis', and, more generally, of the interim between early post-war loans and gifts and the later Marshall Plan phase of American foreign largesse). However, owing to currency outflows and to a larger Treasury balance at Federal Reserve Banks, a small volume of sales of short-term securities to Reserve Banks took place (certificates and, especially in October, notes). These other movements of reserve money were, however, generally subsidiary—and fluctuating—and the increase of $1 billion in gold certificates during these four months must be accounted the base upon which credit was further expanded. Required reserves in the second half of October averaged $750 million above those for the second half of June, while excess reserves were generally 200 millions higher.

This process of 'gold inflation', besides engendering a feeling of alarm concerning the ease of new credit and its inflationary general effects, had two important consequences. Firstly, it postponed the slump of the bond market which both the departmental operations and the rise in short-term rates were likely to produce. Since reserves flowed into the banks automatically there was little need for them to sell any securities at all (in order to expand loans), nor was there, in secondary consequence, any incentive to sell bonds either because of the now greater attraction of bills or because of nervousness of bond prices. What small extra reserves, over and above those provided by gold, were required, were again obtained by sales of 'shorts' in small amounts. Secondly, the re-emergence of this fortuitous gold factor reinforced the need to concentrate debt-retirement upon Reserve Bank investments if any restraint were to be placed upon commercial banks, via pressure upon their reserves, at a time when fiscal disinflation was proving inadequate. Debt-retirement should, in such circumstances, be so directed as to cancel the effect of gold inflows and, in addition, place pressure upon bank reserves over and above any

pressure that might arise solely from bank lending policies. The conscious direction of retirement policies, together with a market policy of some tactical flexibility within '$2\frac{1}{2}$ per cent.', would ensure the retention of initiative by the authorities. We can now pass to the next period.

XV

THE COLLAPSE OF THE GOVERNMENT-BOND MARKET AND THE PROBLEMS OF SUPPORTING IT, OCTOBER 1947–FEBRUARY 1948

THE developments of summer and autumn of 1947 represented, in retrospect, a premature attempt to achieve what is now referred to as 'flexibility', within the narrow range of security prices postulated by the $2\frac{1}{2}$ per cent. ceiling yield on Government bonds and any tenable level of short-rates. Thus on 6 October the Open Market Committee had met to ratify decisions taken earlier, with regard to short-term rates, and issue a new directive to its Executive Committee. This directive was significantly different in type from any previous one during our period. Specific mention of prices and yields was dropped and reference to the outside world brought in. The System's open-market account was in future to be managed 'for the maintenance of stable and orderly conditions in the government securities market, and for the purpose of relating the supply of funds more closely to the needs of commerce and business'.[1]

This attempt, and it is not asserted that a carefully considered policy lay behind it (rather was it a series of *ad hoc* expedients), had failed, in spite of great inter-departmental co-operation, for at least three reasons. Firstly, the pace of inflation, and its accompanying demands on the money factories, together with the degree of post-war confusion as to what was or was not normal, was still such as to preclude the working of the more refined and subtle methods of influencing lenders and borrowers which the sensitivity of the market demanded. Secondly, the ownership of

[1] *Annual Report, Federal Reserve Board of Governors*, 1947.

government securities of all maturities was still too speculative, too much an effect of the 'pattern' and its vicissitudes, for the market to settle down under conditions of moderate uncertainty without a thorough shake-out of bond ownership, a period of rigid official dragoonment, and the gradual inculcation of a market psychology of some self-reliance. 2½ per cent. needed reinforcing by strong deeds. Thirdly, the market for government bonds was, speculative factors apart, still far too susceptible to institutional selling of a more or less secular character: the notable example being that of insurance companies who had, up to October 1947, scarcely begun to reduce their swollen holdings of government bonds to a percentage of their assets regarded as normal but were ready to do so wholeheartedly just as soon as demands upon them from the private sector, at sufficiently attractive yields, exceeded the flow of new premiums.

GOVERNMENT SECURITIES HELD BY LIFE INSURANCE COMPANIES

Source: Directorate of Investment Research, Life Insurance Assoc. of U.S.A.

End of year	*$ billions*	*% of total assets*
1941	7	21
1946	20	45[1]
1948	15	30[1]
1949	13·5	27[1]

The next four months, and the remaining four months of the fiscal year, witnessed what was to be the culminating phase of post-war inflation and, equally, the zenith of fiscal monetary disinflation. But on the purely monetary side it was characterized by official attempts to grapple with a market dominated by the three factors mentioned above. Outside the field of specific action the Reserve System

[1] Reduction in percentage 1946–9 partly due to expansion of total assets, part to reduction in holdings of government bonds.

continued to exert a maximum of 'moral suasion' and to increase the tempo of its campaign for drastic legislative reform. We will consider first, very briefly, the continuing process of debt-retirement and pass on to the market.

With the funds made available from sources described in Chapter XII, the authorities now began a far more deliberate retirement of Federal Reserve investments than hitherto. Not only was the reduction of the bill issue recommenced but, effective from 27 November, the Treasury and Reserve System came to a definite agreement whereby surplus funds would be used to retire Reserve Bank investments via the expedient of the latter demanding cash redemption of their maturing certificates, &c.—unless the situation warranted a return to the previous 'hit or miss' method. From the end of November onwards, therefore (if we include bills, the date is the end of October), the substantial repayment of debt which the fiscal position now permitted represented, in the main, repayment to Reserve Banks and only in minor proportion to commercial banks and others. From 6 November to 11 December (6 weeks), Treasury bills were retired at the rate of $100 million per week (effectively all held by Reserve Banks), while in the New Year much larger sums were paid to Reserve Banks in repayment of maturing certificates, and a further reduction of $1,400 million made in the bill issue in the period 15 January to 8 April.[1] Thus from 1 November to 31 June, out of a total of $6·8 billion retired, no less than 4·9 billion were held by Reserve Banks. Fundamentally this policy was similar to that of the previous year but its aims were once again becoming more precise. Generally one maintained pressure upon bank reserves and gradually attacked banking liquidity, but it was more realistic now to regard this use of the fiscal surplus as one means, among several possible ones, of offsetting various other forces which were automatically supplying reserves to the banks, most of which forces

[1] *Treasury Annual Report*, 1947–8.

became stronger in later 1947 and the first half of 1948 than ever before. In this further attempt, or series of them, to attain neutrality, the System simply used whatever weapons came to hand and, after the budgetary pause of the summer, reverted to a determined use of Treasury funds for central banking purposes, while retaining the trust account bond portfolio as a useful aid in handling the bond market. But to attain a position of monetary harmlessness (selective controls, moral suasion, and proposed legislation apart), within the possible limits of government-security prices, was extremely difficult under the conditions mentioned above. For nearly a year after October 1947, the Treasury bond market was at or near the opposite extreme to what it was during the reconversion. In such conditions 'the market' was, in a sense, non-existent, since it consisted of the Reserve Bank of New York lifting all residual offerings of Treasury bonds off the market at stated prices, without which the market would have collapsed. In the search for neutrality, some sort of mid-way between the two extremes was to be desired—but not to be attained just yet.

What we have now to describe is a period of heavy movement, of large churnings round of securities, and a resort to somewhat cruder expedients, or their cruder use. The developments of summer and autumn, and the renewed burst of inflation which coloured the second half of the year, had as we have seen, induced some uncertainty in the bond markets. During November this uncertainty increased, not due to debt retirement (which merely offset gold flows and the bond purchases of Reserve Banks), but due to the fact that there was a steady trickle of institutional selling of long-term government bonds (other outlets being more attractive) and a feeling that higher interest rates were on the way (an eleven-month 1 per cent. certificate was issued on 1 November and a thirteen-month 1⅛ per cent. note on 1 December). The Reserve authorities were then faced with a situation which had not arisen

since 1942. Were they to support the bond market? The answer to this was still unquestionably 'yes'—particularly must they support the bank-ineligible market. If the public *must* monetize the public debt, they must, failing a stronger fiscal policy and/or additional controls, while bank reserves supplied in the process could be offset by drastic use of Treasury funds.

But mild and reluctant support was not enough. For what was soon uncovered was not a slow monetization for 'genuine' investment purposes but a condition of incipient panic. This uneasiness affected all investors who held any proportion of their Treasury bond portfolios as, in effect, liquid short-term assets, and who were suddenly faced with the prospect that a long-term or medium-term Treasury bond *was* in reality such and not a short-term security with a long-term yield. This feeling broke on the market at a time when many bond-holders were still showing a book profit on their holdings. The incentive to sell while the profit remained, or before a loss emerged, was thus extraordinarily strong and soon affected the commercial banks as well as other investors. The banks were at last beginning to get somewhat low in genuine money-market assets, while at the same time the demand for loans was extremely strong—stronger than at any time in the post-war period: rather than sell more short-term securities they therefore turned to Treasury bonds, which they could still sell without loss, and thus evade the effects of a diminished hoard of genuine liquid assets. As nervousness, however, increased, they began to 'go short' as well as switch from bonds into loans (but hardly until the New Year). Bonds began to be dumped on to the market at growing speed. The System was thus faced with all-out market support, at par or above, or else with braving a storm of unknown proportions were 'par to be broken' and the selling movement spread far beyond what could reasonably be called the speculative market element. A panic liquidity movement out of government securities was now,

as since the 1930's, an extremely dangerous prospect—both for the soundness[1] of financial institutions and for the 'credit of the government' upon which the management of a low-interest debt vitally depended. It might prove a deflationary shock of great force, nobody could predict how far it would go. The answer was 'support' and offset the inflationary consequences somehow. The only criticism one can, I think, legitimately make, is that the authorities were somewhat overtaken by events and tended to act with some clumsiness, which possibly stampeded the market further than was avoidable.

Before considering the facts further, one must expose the inflationary possibilities of bond support. Firstly, although the banks might stampede with the rest, their liquidity could very quickly be restored by swapping long for short with Reserve Banks, after which their attitude towards expanding their loans would be as before with, possibly, the added incentive of reduced earnings on their (now shorter) investments. Secondly, and more dangerous, was the large-scale unloading of Treasury bonds on to Reserve Banks by non-bank investors. There was little likelihood that such sellers would buy short-term securities in exchange on a sufficiently large scale, or, if they did, would hold them for very long. The proceeds of such sales might either lie idle or be invested elsewhere, in either case supplying new reserves to commercial banks. Moreover, higher yields on 'private' bonds and mortgages (a corollary of uneasy conditions and lower prices on Treasury bonds) would inevitably tempt insurance companies and others to move out of Treasury bonds yet farther and aggravate the whole process. Such a movement did occur, and continued after the panic had subsided, Reserve Banks in a sense supporting *all* bonds, monetizing the debt, *and* supplying new reserves to the commercial banks which the latter were by no means bound to hand back in payment for more purchases of bills

[1] See pp. 23–24 and 47–48.

or certificates from Liberty Street (or bonds for that matter). Under such conditions, aggravated by continued gold imports, the most drastic use of the fiscal surplus was necessary, combined with all possible sales of 'shorts' (to banks or others), the use of the government trust funds in reverse to that of the summer, and, as a last resort, the use of what little power remained to raise legal reserve requirements. When such an armoury ran out the situation was clearly intolerable and, in 'real' inflationary circumstances, 'pumping the monetary bicycle pump' with a vengeance. Fortunately the latter situation did not arise until inflationary forces outside the monetary system had almost run out. At the time, however, the danger seemed very real, and converted many of the System's officials, tirelessly led by Chairman Eccles, to drastic schemes of secondary reserve requirements, and half-formulated ideas of surgical operations on a public debt which would emerge from the knife partly 'floating' and partly non-marketable—and lacking entirely any marketable bond. Very notably, however, the New York Bank, manager of the System open-market account, remained unconverted and was passing on to a less spectacular and more typically 'central banking' technique (see Chapter XVII).

To return to the market: besides permitting its bill holdings to be repaid, at $100 million a week, by the Treasury, and, in co-operation with the latter, continuing to jack up short-rates, the System began to purchase bonds in November. The average price of Treasury bonds, fifteen years and over, which had fallen throughout the latter part of October, was apparently held at $101\frac{7}{8}$[1] or a yield of 2·37 per cent., while the 7–9-year index was pegged at a yield of 1·77 per cent. whence it had risen from 1·53 per cent. (average) in September. At first, purchases in support of the market were not heavy. The bond holdings of Reserve Banks increased by only $260 million in November while the trusts bought a further 200 millions. Total hold-

[1] September average 103·95.

ings of government securities by the System remained constant, the only notable shift in debt ownership, apart from the above, being a large-scale exchange of notes for the now more attractive bills between Reserve Banks and commercial banks. But in the first three weeks of December the situation progressively worsened as it became obvious that the System was 'holding a line' and, in some sense, inviting possessors of book profits to realize them. Further, commercial banks joined insurance companies and 'others' (including mutual savings banks) in the selling wave. Sales to the System ran at $200 million a week until the third week when the speed accelerated to 300 million. The initial idea of rather 'reluctant' buying to steady the market over an awkward period was clearly no longer realistic. Instead, a speculative raid was developing, aided by a bond-to-loan movement by the banks. This 'raid', as well as being due to circumstances entirely within the government-securities market, was also caused by the now much wider spread between government and other bond yields. The flow of new issues continued at over a billion dollars in December, apparently without difficulty, savings being supplemented by the liquidation of government bonds on the part of institutions and others who found such issues increasingly attractive. Even after the shock of late December, the flow of these issues did not decline more than seasonally.

The speed of liquidation somewhat caught the System napping, for a reduction in support prices *now*, to eliminate 'speculative' selling profits, would clearly be a drastic shock, akin to a 'revaluation' of bonds. Nevertheless, it was decided to cease handing out profits and reduce support prices on Treasury bonds much closer to par, changing the rate curve into a shape more appropriate to very uncertain conditions regarding the maintenance of bond prices. This decision was announced after the close of business on Christmas Eve. The possibility that this decision might have to be made had been foreseen several

weeks earlier, but the Open Market Committee was apparently apprehensive that such a move might induce a temporary 'strike' in the short-term market. In its directive of 9 December 1947,[1] therefore, the Executive Committee was ordered to support existing prices until the Treasury's $1\frac{1}{8}$ per cent. certificate had been floated on 1 January, and thereafter to drop support prices sharply (not more than $100\frac{1}{2}$ on the bank-ineligible Victory $2\frac{1}{2}$'s was mentioned). But, in anticipation of the bond market deteriorating so much as to offset official apprehension about the Treasury $1\frac{1}{8}$ per cent. issue, the Executive Committee was empowered to lower support prices prior to the New Year if bond selling were to increase rapidly.

After mulling the Christmas Eve decision over their Christmas dinners, many investors, and especially bankers, decided that par was by no means sacred, whatever the System might say, and resolved to put the declaration of vigorous support, which accompanied that of the reductions in prices, to the test. The results were spectacular. The market stampeded, the open-market account buying over a billion dollars of bonds between Christmas and 31 December, at an average yield of 2·45 per cent. for 'fifteen year and over' and a yield of 1·99 per cent. for 'seven to nine years'. The selling continued in the New Year, $1,700 million in January, and 1,100 millions in February, after which the market recovered—immediate liquidation by panicky investors, sleepless bankers, or anxious insurance companies, being complete and confidence in the determination of the System having been established. Meanwhile the Government trusts had helped by buying a further $700 million of bonds in December and another 200 millions in February, restoring their holdings to the level prevailing before the sales of the previous summer. Throughout March the bond portfolio of the System was generally steady, a loss of very short bonds—due to retirement—being met by small

[1] *Annual Report of Board of Governors of Federal Reserve System*, 1947.

purchases, early in the month, while some sales seem to have been achieved later as prices rose above support levels. Changes in ownership of Treasury bonds, and changes in price, over this first period of heavy support, are shown below. No Treasury bond was allowed to fall below par. The bank-ineligible Victory $2\frac{1}{2}$'s (1967–72), a key issue, fell to $100\frac{9}{32}$ from a September figure of $102\frac{26}{32}$, while the longer of the bank-eligible issues were held just above 101 (the 2 per cent. 1952–4 fell to $101\frac{7}{32}$ from (30 September) $102\frac{31}{32}$).

CHANGE IN OWNERSHIP OF UNITED STATES GOVERNMENT BONDS

31 Oct. 1947–28 Feb. 1948

$ *millions*	*Source: Treasury Bulletins*
Government agencies and trusts	+1,092
Federal Reserve Banks	+4,877
Commercial banks	−3,256
Mutual savings banks	−378
Insurance companies	−1,475
Others	−1,664
Total '+'	5,969
Total '−'	6,773

N.B.

Discrepancy in totals is due to conversion of 700 millions of 2 per cent. bonds into $1\frac{1}{8}$ per cent. notes on 1 Dec.—this issue was not owned by Government trusts or Federal Reserve Banks—and errors in the Treasury survey. Net market purchases and sales totalled approximately 6,000 millions.

Coincidentally with these shifts in the ownership of bonds, the following changes took place in the ownership of bills, certificates, and notes.[1]

CHANGE IN OWNERSHIP OF UNITED STATES GOVERNMENT BILLS, CERTIFICATES, AND NOTES

31 Oct. 1947–28 Feb. 1948

$ *millions*	*Source: Treasury Bulletins*
Federal Reserve Banks	−6,140
Government agencies and trusts	+50
Commercial banks	+875

[1] Although notes can have a term as long as five years, no such issues existed at this time, or until Dec. 1949. Such notes as did exist were, for practical purposes, no different from certificates.

Mutual savings banks	+200
Insurance companies	+477
Others	+867
Total '+'	2,460
Total '—'	6,140

Discrepancies, apart from small survey errors, are accounted for as follows:

Federal Reserve Banks lost approximately 3,560 by retirements. Therefore sold on the market 6,140 less 3,560 = 2,580. Investors other than Federal Reserve Banks lost about 600 millions due to retirements but gained 600 millions due to bond conversion on 1 December, making a net market purchase of approximately 2,460.

For practical purposes the shift of $6 billion of bonds was in part offset by a counter-shift of 2·5 billions of various short-term securities.[1]

What effect did the above processes have on the level of bank reserves? *Ex post*, the answer is easy. Reserve Banks supplied nearly $5 billion of reserves to the banks by their purchases of Treasury bonds, but removed approximately 6 billions either by open-market sales of 'shorts' or by the retirement of their maturing bills, certificates, &c. This left the member banks 1 billion short in reserves. This billion was obtained from gold imports and, over the whole four months, a net currency return flow of 500 millions. Minor offsetting influences reduced the total of reserves supplied autonomously to approximately 1 billion. Required reserves moved down 175 millions during the period, and total reserves 60 millions. Thus by the end of February, at least, the extensive operations of the winter had not resulted in the appearance, on balance, of substantial excess reserves. Such a conclusion is, however, vacuous: up to 24 December the supply of reserves

[1] TREASURY BILL AND CERTIFICATE YIELDS. *Monthly or weekly averages*

	Sept. 1947	*20 Dec. 1947*	*Feb. 1948*
Bills	0·804	0·951	0·996
Certificates	0·870	1·030	1·100
3–5-year bonds	1·280	1·550	1·630

arising from non-bank sales to Reserve Banks and from gold imports had been offset comparatively easily by debt-retirement and the pre-Christmas currency outflow, while purchases from commercial banks continued to support new loans. After Christmas the situation was quite different: heavy dumping of bonds on to the System and a rapid return flow of currency gave rise to excess reserve figures of over 1,500 millions which were only partly offset by the repayment of 400 millions to the System by the Treasury on 1 January and by open-market sales of 'shorts'. This condition continued into the month as a significant proportion of the sellers of bonds retained the proceeds in cash—either because they wished to go out of the government market altogether, or because of general uncertainty and expectations that short rates were to rise further—expectations which were heightened by the twelve-month $1\frac{1}{8}$ per cent. certificate of 1 January and raising of the Discount Rate to $1\frac{1}{4}$ per cent. The latter was raised, by the Board, on 12 January in order to bring the rate into line with the market and, thereby, discourage member banks from borrowing instead of selling certificates and bills.[1]

The authorities now decided not to await any developments but to drain off the continuous supply of reserves by extinguishing sufficient bank deposits and reserves simultaneously. Towards the end of January the Treasury account with the System was built up to nearly $2 billion while retirement of bills recommenced on 15 January. On 1 February $1,600 million of certificates held by the System were retired and during the month the Treasury account again built up to a high figure and the previous process repeated. In this way new reserves were progressively mopped up. Thus the banks, although more liquid as a result of some 'shortening' of their portfolios, found themselves unable to buy 'shorts' to the extent they sold 'longs', nor benefit from net non-bank sales to Reserve

[1] *Annual Report of Board of Governors of Federal Reserve System*, 1948.

Banks. Instead, their deposits and reserves were kept steady in consequence of official operations with the fiscal surplus, or, on balance reduced. Such success as the authorities had, depended on the seasonal revenue inflow in a year of heavy surplus, and upon very close co-operation between Reserve Banks and Treasury. Lacking such opportune factors the banks would either have become very much more liquid, with large excess reserves and increased holdings of 'shorts' in lieu of bonds, or would have had to be subjected, should Congress have acted, to a substantial increase in reserve requirements. It should also be remembered that these two months, besides being those of revenue surplus, were also part of the period when the demand for bank loans is seasonally slack. What was now in prospect was a recurrence of the market conditions of mid-winter, or their continuance, in a period not nearly so fortuitously advantageous to the System, a prospect which began to be very agitating. Meanwhile it was thought, and clear evidence for such matters is not possible, that the shocks of the winter, which involved many banks in small losses on bond accounts, *had* had a restraining influence upon the banking system, and in any case the volume of government securities in commercial banks had been further reduced. Furthermore, the disinflation of deposits was more drastic than previously: average net demand deposits in the second half of February were $2·5 billion below the peak figure of 80·7 for the second half of December,[1] while time deposits were up 370 million. More was to come. But nevertheless, while the demand for commercial loans fell sharply in the New Year, member banks continued to expand consumer and real estate loans. However, at least the central banking system was not, except in so far as it refused to allow the prices of Treasury bonds to go below par and involve bank investment accounts in substantial losses, actively *encouraging* the expansion of loans.

[1] But only slightly below the early November figure.

XVI

'CONTINUING RESTRAINT', MARCH–JUNE 1948

THE remaining months of the fiscal year saw the completion, by the end of the first week in April, of the 'restraining' operations connected with the fiscal surplus, and subsequently the use of a series of expedients and developments designed to maintain 'restraint' thereafter. There were growing fears of renewed inflationary demands upon the monetary system, particularly of renewed liquidation of bonds— temporarily somewhat reduced—which would themselves create unnecessary new bank reserves, while the fiscal outlook deteriorated under tax reductions and the probability of increasing federal expenditure (on defence). This outlook tended to produce some renewal of exasperation amongst the monetary authorities (whose legislative proposals were spurned by Congress and whose control over instalment credit (now rapidly growing) had lapsed the previous November). This exasperation was not assuaged by the apparent renewal of the perennial fight with the Treasury over short-term interest rates—though in all other respects co-operation remained exceedingly close and effective.

On 1 March a further $460 million of certificates and bonds held by the System were retired, while between that date and 8 April a further reduction of 700 millions was made in the bill issue. On 1 April 106 millions of certificates held by the System were paid off, but on 1 June—the next Treasury refunding date—the procedure was not repeated. Meanwhile, during the whole four months, 1,164 millions were paid out to non-bank investors who preferred not to take up the new securities offered. This figure was, in proportion to the total refundings (nearly $14 billion), slightly higher than usual and

reflected some speculation over short-term rates rather than an increased need for funds. All refundings were made into 1⅛ per cent. twelve-month certificates. Thus although Treasury bonds matured during the fiscal year to the value of $6·8 billion and others were approaching the one-year range, no attempt was made to 'fund' into any marketable security of more than thirteen months' life: to do so, during much of the year, would no doubt simply have been to sell to the System, unless higher rates were allowed (and even then confidence would have been dubious). The Treasury did, however, launch its investment bond of October 1947 and, just after the close of the fiscal year, permitted special subscriptions to series F and G savings bonds by savings institutions: this partiality of the Treasury for non-marketable securities when refunding 'long'—if it ever did such a thing—was to continue and will be referred to again. To return to retirement: although a further $1,160 million of securities held by the System were paid off in March and early April, the authorities did not in fact use this 'restraining' apparatus to the extent that was made possible by the size of the fiscal surplus—at least, not yet. Emphasis was now being placed on the difficulty of 'getting back' reserves once they had been released or supplied in support of the market, or for other reasons other than distress demand for them by member banks. This being so the practice of repaying all possible debt in the surplus season and promptly reborrowing (largely from banks) in the deficit season was not approved—particularly in the circumstances of 1948 when reserves were likely to appear all too quickly anyway. Tactically, in 1948, it was also extremely desirable to retain a *masse de manœuvre* of funds which could be used to apply pressure should selling of bonds reappear on a substantial scale. Thus the Treasury agreed, after discussions with the System, to retain part of its fiscal surplus in the form of deposits at commercial banks.[1] It also per-

[1] 'Deposits in special depositories', i.e. war-loan accounts or, as they are

mitted the payment of taxes into these accounts instead of into the Treasury account at Reserve Banks as previously.[1] These procedures enabled midsummer cash deficits to be met from tax and loan deposits, i.e. without affecting bank reserves, while also permitting further pressure upon bank reserves by transferring tax and loan deposits to the Treasury account with Reserve Banks and/or retiring more securities held by the System. This is a novel development. It is one of the best examples of effective co-operation between the two monetary agencies and reflects increasing concentration upon the need to keep the market as 'tight' as possible without periodic 'loosening' to accommodate seasonal Treasury deficits.

While this attempt to maintain pressure was in progress, required reserves moved up (March through June) by over $800 million. This was not due to an increase in deposits—net deposits indeed declined on balance—but to two increases of 2 per cent. in reserve requirements, at New York City and Chicago, effective 1 March and 11 June respectively, the decisions to raise requirements being announced on 23 January and 1 June.[2] This raised to within 2 per cent. of the statutory maximum of 26 per cent. (for Central Reserve City banks) against demand deposits, the only reserve requirements that were not already there (Central Reserve city requirements had been reduced below the maximum in 1942, owing to war-time pressure upon the money centres). These decisions were made largely, one imagines, as gestures, although it is plausible to suppose that the support of the government bond market eased the reserve position of the big money-market banks rather more than elsewhere.[3] The use of this

now called, 'tax and loan accounts', rose from 900 millions in Jan. 1948 to over 2 billions in May. Since July 1947 such deposits were subject to reserve requirements.

[1] See *Annual Report of Federal Reserve Bank of New York*, 1948, p. 28.

[2] *Annual Report of Board of Governors of Reserve System*, 1948.

[3] See account of policy decision: *Report of Board of Governors*, 1948, p. 85.

weapon was no more effective, in principle, than the use of the fiscal surplus, in offsetting the supply of new reserves, but both psychologically and otherwise may have effected a tightening at the nuclei of the banking system which was extremely desirable.[1]

The supply of new reserves was due, in March and April, to some continuance of non-bank sales to the System, but thereafter mainly to continued imports of gold (gold and currency flows providing a further 650 millions in these months). Over the four months ending 30 June, over $1,500 million of reserves were withdrawn from the banks via debt operations, while 2,600 millions were supplied by gold, currency, and Reserve System combined: total reserves moved up 600 million while excess reserves declined 200 million and were generally lower than during the market-support period of the winter. After the cessation of debt-retirement on 8 April, pressure was maintained by gradually building up the Treasury account with the System in the following two months and, while this account was reduced in mid-June, it totalled nearly 2 billions on 30 June and was held at that figure in July. A working balance in this account is about $800 million. On the occasion of the second increase in required reserves the authorities seem initially to have supplied reserves by disbursements from the Treasury account, applying pressure later by rebuilding that account sharply (either by use of cash surplus or by transfer from tax and loan accounts). This was done in order to obviate, to some extent, the nullifying effect of increasing reserve requirements in an officially supported market: better to provide the reserves autonomously first

[1] On the second decision the Board was not unanimous. Both Chairman-designate McCabe and Gov. Szymczak (senior member in length of service) voting 'no', their reasons (*Report*, 1948, p. 86) being that current Treasury refunding needs required the short-term market to be 'held', whereas, to be effective, a rise in reserve requirements needed a tight market and rising short-rates if bank sales of 'shorts' were not to be too easy. The action of the Treasury in holding on to 1⅛ per cent., at this time, was not helpful to the System.

and apply pressure later, rather than swallow $500 million of government securities straight off and be done with it.

This effort to hold on to bank reserves as tightly as possible went along with some signs that the raising of short-term rates was now beginning to have a useful effect. Particularly was the Treasury bill becoming, once again, a market instrument attractive to non-bank investors with temporary investible resources. This could be extremely useful: if floating debt could be placed in larger quantities outside the banks, then deposits would be reduced and, if Reserve Banks could sell bills, also reserves. The willingness of banks to expand their loans might well be affected if, as fast as they did so, deposits refused to rise owing to an offsetting movement of customers into bills and away from cash. The banks would find their government-security holdings going down (sold either to the System or to others), while their loans expanded and their deposits did not. The effect on the banking system (but not on the country as a whole) is similar to that of the familiar operations with the fiscal surplus. It *does* matter, in short, whether the public hold cash or bills. The System was almost in a position to manipulate the market, if the Treasury let it, in which it had not been since, perhaps, the 1930's. With a genuine short-term market restored, and bond support dried up (temporarily), the System could begin shifting about from short to long (it now had a balanced portfolio), and, with the possible aid of the Treasury in permitting some flexibility in short-rates, proceed to tighten the market much more severely than before. During these months, non-bank holdings of floating debt did not decline: particularly did holdings of Bills remain at a figure between $2\frac{1}{2}$ and 3 billion attained during the bond support period. Non-bank holdings of Treasury bonds (other than bonds very close to maturity) continued to decline during March, but thereafter remained almost static; insurance companies continued to sell, liquidating over $500 million worth over the period.

While the alarms of the winter faded out, the market witnessed another phenomenon which heralded future developments and indicated that the shake-out of the winter had had beneficial results. Investors began to watch signs of official manœuvres very carefully—with respect—and to adjust their own policies accordingly, whereas, previously, official intentions had in many cases been taken for granted. Upon one's guess as to official policy in the money-market depended one's success in making small gains or losses. In order to make money, or avoid losing it, in the vast money market then constituted by the market in United States government securities, required very sophisticated technical skill—a skill usually confined to a few specialist operators. But if almost the entire public debt is dealt in on money-market lines, and if there are a vast number of banks, savings institutions, industrial corporations, and individuals, who hold large blocks of money-market assets, the skill is likely to become widely disseminated. This is what happened in the U.S.A. (as forecast in Chapter III). What might almost be called a profession, called 'manager of a government security portfolio', has grown up (increasingly so since 1948). These people are judged, as to success or failure in their jobs, by their ability to show the highest possible earnings—with special emphasis on capital gains and losses. These constitute the 'operators' in the market, the largest operators being the big city—and especially New York City—banks who, besides operating on their own account, often manage (for a fee) the portfolios of their 'out-of-town' correspondent banks. With short-term rates of 1 per cent. or more, this business becomes very attractive and, since 1948, there has been an increasing tendency on the part of all investors to keep 'fully invested'. This is exactly what the System wanted. For the consequence of this development is that the market becomes extremely responsive to official tactics, there being a host of investors playing the part of arbitrageur, ready to reap the slightest advantage,

and a marked scarcity of large idle balances whose movements are upsetting and unpredictable. By 1950 the New York Reserve Bank was playing this 'sensitivity' with great skill: the aim being to play a game of strategy, with the operators, of such a kind as would tighten the market and restrain the banks.

Such a game, to be successful for the Reserve Bank, required that the authorities hold two aces. The first was the power to retain some doubt as to the level of prices at which the System was prepared to support the market, and the second was the ability to persuade or coerce the Treasury into permitting some flexibility in rates. The operators hold another ace, which restrains the Reserve Bank—namely, the power to exert liquidity preference to the limit, if pushed too far. If the Reserve Bank is deprived of its aces, then uncertainty disappears and the operators win by playing the pattern vigorously. The operators cannot be deprived of *their* ace unless official support of, and solicitude for, the market is abandoned.

In the early summer of 1948 the System was attempting to hold, and to use its aces, having in the previous winter somewhat purged the market of the effects of several years of rather uninterrupted wins by the operators. The main concern was to maintain uncertainty—for as soon as the market were to think that short rates were stabilized, then the rate curve established the previous winter would become completely inappropriate and 'playing' would begin. This would tend to raise bond prices sharply and encourage further liquidation of bonds by those who were attracted by new issues, mortgages, and the like. The System could absorb bills again and sell bonds, but not indefinitely, and a return to the *status quo ante* bond-support was obviously not desired.

The undesirable effects of renewed stabilization in the short-term market had been foreseen by the System since the New Year and proposals for a $1\frac{1}{4}$ per cent. rate put by the responsible officials to the Treasury. These discussions,

along with the more fruitful ones concerning use of Treasury cash balances in the coming months, had been going on before the Open Market Committee met on 1 March. But when it met again on 20 May no concession had been gained, for the Treasury announced as early as mid-May that its July (as well as June) maturities would be refunded at 1⅛ per cent., when the market had expected 1¼ per cent. Bond prices immediately rose above support levels while '1⅛ per cent.' had to be held for six weeks in order to ensure success of the Treasury issues. This episode is important simply because of the speculative sensitivity it reveals in the light of our remarks above, and of the ease with which confidence in bond prices could be restored. However, the Treasury quickly repented[1] and forced down the bond market by making an attractive offer of series F and G non-marketable bonds to institutional investors—a quick piece of 'funding'[2] analogous to its offer of 'Investment Bonds' the previous October. At the close of the fiscal year the prices of Treasury bonds were virtually unchanged from those of 28 February. Corporate bonds, on the other hand, had recovered well, in spite of a volume of new issues scarcely diminished from the previous year, and the spread between government and other bonds narrowed to a more typical post-war width.[3]

The fiscal year closed in inflationary alarm, due mainly to anticipations of the consequences of deterioration in the fiscal position and the resumption of price increases in the early summer. Member-bank loans expanded a further billion dollars in the first six months of 1948, while instalment credit advanced rapidly, and the outlook was not

[1] Had probably maintained 1⅛ per cent. for fear that a further rise might have adverse effects on liquidity-preferences: the Treasury is responsible for maintaining the credit of the United States Government. Upon discovering that confidence was unimpaired, it no doubt reverted to a policy more in line with that of the Federal Reserve.

[2] *Annual Report of Federal Reserve Bank of New York*, 1948. To which much of this is heavily indebted.

[3] See Chart of bond yields, Appendix to this part.

such as to give grounds for optimism that the reduction in bank deposits achieved by fiscal disinflation was a manifestation of a sufficient check upon the inflationary pressure inherent in, or anticipated in, the economy. In fact, however, the turning-point was very near. Since this turning-point will be dealt with in the chapters dealing with the 1949 recession, when an attempt will be made to relate the actions of the Board and Reserve Banks more closely to other events, we can now look back very briefly over the previous two years in the government securities market.

By 1948 the viewpoint of the System was not widely different from that expressed in the 1945 Report (see Chapter X), but its experience was very much greater. The result of experience was to clarify certain inconsistencies of view in the only way that proved possible—a division into two views. Thus, in 1948 more than in 1946, the System was divided between those who thought that credit restriction was desirable, but that legislative changes were necessary, and those who came to think that 'neutrality' was the immediately practicable objective, and one which could be attained by skilful use of the existing weapons, provided the Treasury permitted some flexibility in debt operations.

Thus, to look back from June 1948, one should judge the System—if one wishes to adhere to the neutralist objective—by remarking to what extent it had avoided being an engine of inflation—and by that is meant (here one must be careful) an engine that did more than simply accommodate, without difficulty, the monetary needs of an inflationary economy. Similarly one should judge the Treasury. Ignoring the 'selective' fields, one can say that the System had gradually attained a more tenable position. The long period of retirement of marketable debt, administered as it was, had undoubtedly removed a considerable mass of liquid assets (of low earning-power) from commercial banks, whose presence in those banks was a persistent invitation to debt-monetization (into bank

reserves and/or bank credit). The earlier period of debt-retirement had also, with the aid of the government trust funds and other tactical weapons, helped prevent a recurrence of the unfortunate market episode of early 1946 which resulted from the anachronistic nature of the interest-rate structure. Later, when bond prices declined and the System went into the market as residual buyer, it was helped by the new attractiveness of short-term securities (lately released from the 'pattern'), and by the uncertainty which it had managed to create, as well as being assisted primarily by the fiscal surplus, to offset the inflationary consequences of its action on the banking system. In short, it was able to avoid some of the worst consequences inherent in a 'stable-cheap-money' position. *But* its success had been due very largely to the excellent fiscal position, and, on the other side of the market, one could still say that the very low rate of return on government bonds which one could still sell without loss was a persistent invitation to financial institutions and others to shift out into other securities giving higher returns with scarcely any increased risk. The task in 1950, when inflationary pressures recurred and the fiscal position was (though not perverse) not nearly so favourable, was so to manage the market that the banking system was not driven to expansion (but allowed to expand at its own rate), and others not encouraged to sell government securities, while yet maintaining a market that was not 'all in one direction'. In those circumstances a spectacular break with the Treasury and emphatic assertion of independence proved impossible to avoid.

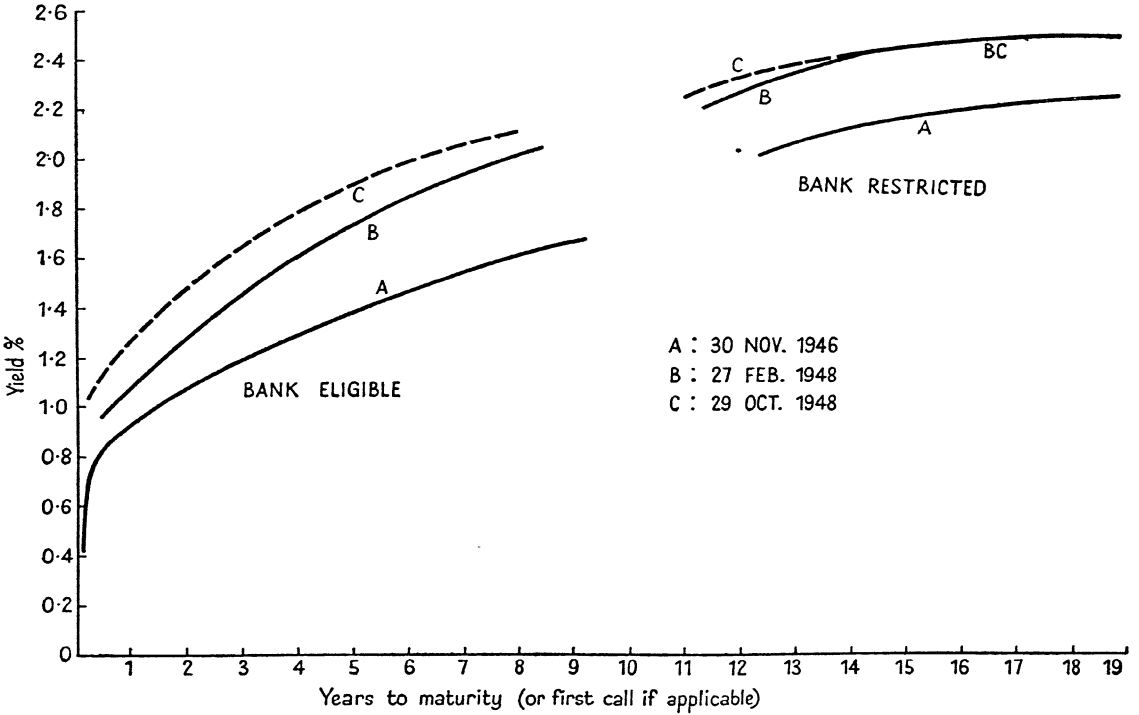


FIG. 4. Yield curves: U.S. Government taxable securities.
Source: Treasury Bulletins

XVII

THE SECONDARY RESERVE PLAN

IN the previous chapter we referred to the division of viewpoint within the Reserve System. This division is shown in the controversy over what were known as the 'secondary reserve proposals'—in which the President of the Reserve Bank of New York came out in flat disagreement with the then Chairman of the Board of Governors. The former was, I think, the leading exponent of what can be called a 'market restraint' policy, while the latter was the leading exponent of what can be called a 'banking control' policy. This chapter deals with this controversy as a peg on which to hang the views and opinions of the two years July 1946—July 1948.

The 'secondary reserve proposals' had their origin in the thinking of economists both inside and outside the System, were given sympathetic consideration in the Board's annual report for 1945, and again, rather more positively, in the report for 1946—'action along these lines will be needed to rehabilitate the traditional instruments of Federal Reserve policy—open-market operations, discount rates, and reserve requirements—and to assure a reasonable degree of financial stability in the future'. Legislative proposals, however, were not yet made. This sympathetic reaction of the Board to such suggestions found no counterpart in the views of President Sproul of the New York Bank as to the role of 'money management'. In a speech to the New Jersey State Bankers' Association on 6 December 1946,[1] he said, 'so far as inflation is concerned, ours is essentially a holding operation'—a sharp contrast to the aims implicit in the remarks of the Board

[1] Reprinted as a supplement to the Federal Reserve Bank of New York's monthly review, Jan. 1947—an indication of its importance as a declaration of New York policy.

quoted above. But Mr. Sproul went on to elaborate what the 'holding operation' might be. He declared that although the movements of interest rates that could be considered feasible in the contemporary market for government securities were extremely small, nevertheless it was equally obvious that the very considerations which led to the restriction of official manœuvres pointed to a much greater sensitivity to small changes in rates than had hitherto been known. He attributed to 'money management only a very secondary role in meeting the major problems of to-day', but declared that it *was* important for such management to work in the right direction. The war-time 'pattern' should be 'defrosted' and the market repegged on the initiative of the System. The advantages of regained initiative, which allowed the inculcation of 'uncertainty,' would go some way towards the success of a 'holding operation'. Mr. Sproul saw no difficulties for the Treasury in a 'floating' short-term rate, neither did he object to the policy of the Treasury, current at that time, of refunding 'short'. During the period of debt reduction, given institutional holdings of long-term marketable securities, he did not object to 'unfunding' of marketable securities provided the Treasury continued to push sales of non-marketable ones. Different types of debt operations were appropriate to different circumstances, in the same way as credit policy. His idea was 'a modest approach to the restoration of credit control'. These views are in conflict with those of the Treasury over short-term interest rates, but not significantly in conflict with it over the desirability of stable bond prices and generally cheap credit at that time. Mr. Sproul was not a 'restrictionist'.[1]

Exponents of the 'secondary reserve', however, tended rather to dismiss the controversy over short-term rates as

[1] This is not to attribute to Mr. Sproul a desire to maintain the 2½ per cent. 'peg' in Treasury bonds *at all times*. In the circumstances of 1950–1, the Reserve Bank of New York, under Mr. Sproul's leadership, led the fight for abandonment of the peg—though not favouring a major increase in the cost of borrowing.

extremely annoying but of secondary importance. These people were unquestionably 'restrictionists' and, as such, equally, if not more, unacceptable to the Treasury and to the Administration's supporters. Mr. Eccles and others admitted, to the full, the weight of argument in favour of raising short-term rates and permitting the System some flexibility of action: they, too, desired to stop the 'bicycle pump' mechanism, but beyond that they wished to help *stop* inflation by restrictive credit measures designed to have their effect without spoiling the Treasury's market. It can be imagined that any form of direct regulation of credit would be acceptable to this school of thought provided government securities were unaffected as to price and the regulation administratively feasible. Extension of selective controls to cover the entire credit system was clearly neither administratively feasible in the American credit system nor politically feasible. The only way out was to turn the work over to the commercial banks, who would be at liberty to ration by price or otherwise (or both). This would be achieved by saddling them with a very large supplementary legal reserve requirement to be held in the form of government securities or deposits at Reserve Banks. The proposals were thus of the nature of 'monetary reform' and were themselves totally distinct from traditional banking method—however much ordinary banking pratice and ordinary market habits might be allowed to persist alongside the new arrangements. The 'state of mind' behind such proposals cannot be one of 'disillusionment' concerning the efficacy or desirability of orthodox monetary policy; on the contrary they represent a return to it in extremely drastic form. The 'state of mind' simply recognizes, for one reason or another, that 'orthodox' fluctuations in interest rates on government securities —thought to be an inevitable concomitant of any worthwhile degree of credit restriction—cannot be permitted. The reasons are those of solicitude for the balance-sheets of financial institutions, budgetary interest burden, and

confidence in the credit of the United States Government —the latter being necessarily impaired by any repetition of the events in the market for Treasury bonds which took place after the 1914–18 war. 'Secondary reserves' do not of themselves obliterate this last problem but were later (if not in 1947) put forward along with a suggested debt reform—abolishing the marketability of all government securities save bills and certificates—which does.

We hinted in Chapter XIV that by mid-summer 1947 the monetary authorities did begin, or at least a part of them did, to regard the policy of neutrality, the holding operation, which constantly ran up against the Treasury, as an inadequate discharge of their statutory responsibilities. This feeling was accentuated by the prospective inadequacy of fiscal disinflation and growing alarm at renewed credit expansion. It led the Reserve Board, while continuing its 'holding operation', to adopt the secondary reserve much more wholeheartedly. Chairman Eccles first publicly advocated some such general scheme, without giving details, in a statement to the Banking and Currency Committee of the House, made in April 1947,[1] entitled, 'Methods of Restricting Monetisation of Public Debt by Banks'. In this statement, as in a speech made to the Conference of the New England Bank Managers six months before,[2] Mr. Eccles distinguished between monetization of the 'pattern-playing' type and monetization of the more ordinary type—i.e. a simple unloading of securities on to the banking system by the public. This second type either involved liquidation of government securities by non-bank investors, or the expansion of bank loans and 'other' investments. In either case bank deposits expanded upon a credit base enlarged by commercial banks, at will, by the simple process of selling securities to the System. Mr. Eccles granted the argument that the first type of debt monetization could be cured by raising short-term rates,

[1] *Federal Reserve Bulletin*, 1947, p. 402.
[2] Ibid., 1946, p. 1230.

but maintained that such a rise in rates would not achieve anything else. To restrict the second type, some such scheme as the Board recommended in the 1945 Report would have to be considered—for it alone would 'strike at the basic cause', namely, the extreme liquidity of banks and public engendered by the growth in the national debt and the maintenance of a 'stable and orderly market' in that debt. In September 1947,[1] in a speech to the National Association of supervisors of state banks, Mr. Eccles showed some anxiety concerning the economy being 'caught fast in a serious wage-cost-price spiral' and possible secondary effects upon the banking system. He admitted that the Reserve System could not effectively check the expansion of credit, but advised bank supervisors to encourage the maintenance of a high degree of liquidity, discourage certain loans based upon inflated values (real estate in particular), and require an increase in the capital reserves of those banks whose risk assets were growing as a proportion of total assets. Government securities he did not regard as risk assets.

In November 1947 Mr. Truman summoned the 80th Congress into special session for the first time, and this was the occasion for outright proposal of secondary reserve legislation by the Board to Congress—but without explicit Presidential support. Mr. Eccles gave evidence before the Joint Committee on the economic report on 25 November 1947[2] and filed a full description of the proposals, and their probable effects, with the House Banking and Currency Committee on 8 December 1947.[3] The plan was strongly opposed by the Federal Advisory Council, the Secretary of the Treasury, and, but not quite so emphatically, by the Reserve Bank of New York. The special session of Congress, and the hearings before its Committees, enabled something of a public debate to be carried on concerning the problem of inflation which,

[1] *Federal Reserve Bulletin*, 1947, p. 1207.
[2] Ibid., 1947, p. 1455.
[3] Ibid., 1948, p. 14.

while clarifying the issues involved, did not do much more than high-light a range of disagreement amongst the various authorities, advisers, and legislators.

The 'special' or 'secondary' reserve plan was as follows: the existing statutory cash reserve requirements for member banks would remain in existence and not be extended, under this scheme, to all commercial banks. But all commercial banks, it was proposed, should be required to hold, in addition to existing legally required reserves, a special reserve of up to 25 per cent. against demand and 10 per cent. against time deposits. This special reserve could be held in the form of short-term government securities (with original maturities of two years or less) or in the form of other cash assets—balances with Reserve Banks, balances with correspondent banks, vault cash, and cash items in collection. These other cash assets could only be used to the extent that they already exceeded normal working needs—which were defined as 20 per cent. against demand and 6 per cent. against time deposits[1] for all commercial banks. The power to impose these requirements was to be vested in the Open Market Committee and run for three years; the Committee would introduce the special reserve gradually, after an initial 10 per cent. and 4 per cent. requirement, as and when the credit situation demanded. The proposal listed the following as determining the timing or introduction of special reserves:

1. The volume and ownership of special reserve assets and of other assets readily convertible into them.
2. Gold movements, currency fluctuations, and other factors causing a change in the volume of bank reserves.
3. Conditions in the government securities market.
4. The general credit situation.

[1] Country banks, for example, held legal cash reserves of 14 and 6 per cent. but maintained other cash items—especially correspondent balances—to a greater degree than other banks. These could not be used as 'special reserves' unless the total exceed 20 and 6 per cent.

The Board had calculated the ability of commercial banks to withstand the proposed requirements: with an initial special requirement of 10 per cent. and 4 per cent. all banks would have ample special reserve assets, but with the full requirement of 25 per cent. and 10 per cent. there would be substantial deficiencies, particularly amongst larger banks. These deficiencies would have to be met by the sale of Treasury bonds to, and purchase of short-term securities from, the Reserve System unless, by the time the full requirement was ordered, the supply of special reserve assets had been sufficiently increased by Treasury 'unfunding'. The legal powers demanded by the System were thus sufficient to sterilize the short-term securities held by the banks and would force them either to sell bonds in order to obtain fresh reserves with which to expand their lending to the 'private sector', or else to refuse such lending. Moreover, the multiple expansion possible upon a given increase in primary reserves would be drastically reduced. As for the level of interest rates, the special reserve would isolate the market in short-term government securities from the market in other forms of debt and enable short-term rates to be stabilized without difficulty (since the banks would no longer be able to sell out either to 'buy longer' or expand loans). What would happen to the long-term market was not clear: it was not intended, apparently, to withdraw support from that market; on the contrary the maintenance of the prices of Treasury bonds more or less intact was one of the reasons for putting forward the secondary reserve proposal. But once deprived of the opportunity to obtain reserves by selling short-term securities, would the banks not do so by selling Treasury bonds to the System? And what if other investors liquidated bonds on a heavy scale? Such liquidation was the more likely as and when any credit stringency was felt in the private-debt markets and interest rates began to rise —and they could undoubtedly rise considerably without appreciably affecting the demand for funds.

Given the quantity of government bonds outstanding it was highly likely, not only that some such movement as the above would take place (was already beginning anyway), but that the scale on which it could take place was sufficient to offset the restrictive effects of the special reserve—both because of the direct expansion of credit involved thereby, and because of the necessary creation of bank reserves which it entailed. Whatever the general effects might be, it does not seem that the special reserve would 'restore the use of customary instruments', namely, 'discount rates and open-market operations', unless and until the ability of the American public and banks to turn government bonds into money was exhausted. Then, indeed, the supply of reserves would be dependent solely upon the willingness of the Reserve System to lend to member banks or to buy government securities on its own initiative in the market, or upon the willingness of the Treasury to increase the supply of secondary reserve assets by converting maturing bonds into short-term securities. The possibilities of this last factor were very serious, given the liklihood of divided opinions among the authorities and, far more important, the great difficulty that the Treasury would encounter in selling medium- or long-term marketable bonds to anyone at all at interest rates very appreciably below those obtainable elsewhere. The course of events can be outlined as follows, assuming, throughout, a strong demand for credit from the private sector.

1. A secondary reserve requirement is applied which is sufficiently large to prevent the banks selling short-term securities in order to expand loans, and greatly reduces the multiple expansion ratio.
2. If the banks do not sell bonds, in lieu of short-term securities, even though bonds are kept at par or above, and if Reserve Banks do not buy sufficient securities or member-banks borrow enough, stringency of private credit will force up private money rates and bank loan rates or induce heavy rationing.

3. Borrowers that are able to do so will turn to the security markets and pressure of new issues will raise private-bond rates sharply relative to supported government bonds. Demand for direct loans from, e.g., insurance companies will also rise. Such institutions, unless holding an 'institutional minimum' of government bonds, will shift out of such bonds into new issues, &c., and Reserve Banks will give to them what has been denied to the banks—new credit and new reserves being created.
4. Though a portion of such new reserves can be absorbed by the sale of short-term securities by the Reserve System—supplied to meet demand for secondary reserves—excess reserves remain and loan expansion can proceed.
5. If commercial banks *do* liquidate bonds, all this process is short-circuited. Unless the secondary reserve is extremely high on *new* deposits, stringency of credit must disappear unless bond-support is abandoned—a move sufficiently drastic in itself to obviate the need for secondary reserve requirements.
6. While the Treasury will have no difficulty selling new securities eligible as secondary reserves, sale of other marketable securities may be very difficult. A long-term marketable bond will hardly sell to anyone except the System, while further sales, or even the maintenance of existing holdings, of non-marketable securities may be difficult. With higher earnings on risk assets, the banks may also refuse a 5–10-year bond and thereby force the issue of secondary reserves in place of maturing bonds. Though mitigated, in 1947, by the fiscal surplus, such considerations will deter the Treasury from supporting the secondary reserve plan.

All these difficulties were indeed foreseen, if not at the time, then certainly later: the conclusion being that the

attractive 'isolation' of the public debt from the private debt of the country could not be achieved by 'secondary reserves' so long as any significant proportion of the marketable debt remained unsterilized. It thus became fashionable later to advocate that debt reform should be undertaken, which would render the whole debt, save the floating debt, non-marketable—and even the latter would only remain 'marketable' in a very restricted sense, the market being the banking system. Even this was somewhat of an illusion unless securities were not only non-marketable but non-encashable before maturity—only by, in fact, forbidding holders of government bonds from doing anything with them could the effects of higher interest rates elsewhere be offset.[1] Finally, whatever was done, securities do mature and, unless their life was legally extended (quite feasible) without opportunity of redemption, the 'isolation' would founder on the refunding reef.

The logic of the secondary reserve proposals is thus somewhat severe and the effects of not going the whole logical road would appear confusing—involving disruption in the credit machine to no particular purpose. *If* straightforward credit *restriction* was desired, one could legitimately say that a traditional use of existing powers would achieve the same ends (but with additional cost to the Treasury on floating debt) without the necessity of complex legislation and, subsequently, difficult administration, which would beyond question entail a centralization of monetary power in the Federal authorities to which many Americans are hostile. Moreover, the 'special

[1] By 1950, Governor Eccles publicly recognized these difficulties; *vide* his article 'The Defense of the Dollar', *Fortune*, Nov. 1950. Here he advocated increases in primary reserve requirements to offset autonomous reserve flows, plus a secondary reserve to restrain bank lending: not only that, he wrote:

'If the large institutional holders of government securities should undertake to sell their holdings for the purpose of making loans and other investments, it might be necessary to get authority to prevent such sales to the extent that the Federal Reserve, in order to support the market, may be required to purchase the securities.'

reserve' would penalize the banks while allowing other credit institutions a free rein. If, on the other hand, one did not want to restrict credit, but simply to discourage an expansionary urge inherent in the market situation without abandoning at least the 'long' end of the rate curve, then 'special reserves' were clearly unwelcome and utterly distinct to a policy of market restraint based on manœuvres within the market, and incompatible with such a policy. For this latter school of thought, changes in reserve requirements were of some psychological use but were primarily a means of offsetting some extraordinary autonomous supply of bank reserves which could not be mopped up in any other way. For these purposes, an increase in primary reserves was required, not a sterilization of short-term securities which banks already possessed.

Confronted with these serious objections, it is difficult to see why the Board put forward the proposal, or why it placed such high hopes upon its efficacy. For it would seem to create more problems than it solved. One can make two suggestions: firstly, there is reason to believe that, when the scheme was formulated, heavy institutional selling of Treasury bonds was not anticipated—it was thought that these bonds were firmly held. This was an error. Secondly, the proposals may have been something of an 'expository device' to foster proper understanding of the situation in which the System found itself. If people objected to inflation, then they must not expect the System to stop it unless either they were prepared, in effect, to enact legislation controlling the credit system from top to bottom, or unless they were prepared to permit a 'free market' in government securities. But it cannot be denied that the Board's advocacy of these proposals must reflect a belief that general credit restriction was desirable at that time, in spite of equally firm beliefs that higher production and fiscal disinflation were the proper answers to inflation, and that interest rates on the public debt could not, for a

number of familiar reasons, be allowed to rise significantly. The episode is an unfortunate one. It is difficult to understand the reasoning behind the statement that 'the plan, in effect, would divorce the market for private debt from the market for government securities'[1]—clearly the 'secondary reserve' as proposed would do no such thing. The suggestion goes oddly with an enumeration of the following other items of an anti-inflationary programme: increased productivity, wage restraint, price restraint, greater fiscal disinflation, regulation of instalment credit, less liberal housing credit, and renewed savings bond campaigns. It goes equally oddly with a strong statement of the case for bond support:

> Higher interest rates do not deter the lender, at some point they do deter the borrower. I doubt if anybody knows how high interest rates, especially short-term rates, would have to rise to discourage borrowers . . . bank customers . . . are hardly to be deterred by one or two points of increase in interest rates. . . . The Treasury would be confronted with a continuing puzzle . . . entirely at the mercy of uncontrolled factors in the market, if, indeed, conditions did not become so chaotic as to demoralize completely any refunding operations.

(Wholesale encashment of savings bonds was also feared.) Mr. Eccles actually referred to the 'non-bank' menace, but did not suggest how the 'special reserve' would overcome it or admit that it would increase it: his argument seemed to rest entirely on the restraint of *bank* lending, commercial bank lending, which might follow from 'secondary reserve' legislation, without reference to the offsetting repercussions of bond support. It should be noted, of course, that high reserve requirements do nothing to affect the liquidity of a bank from the 'solvency' viewpoint—if bankers wished to increase the proportion of loans to total assets the 'secondary reserve' would not deter them.

The proposals received short shrift from Mr. Snyder,

[1] Statement by Chairman Eccles, on behalf of the Board, to the Joint Committee on the economic report, 25 Nov. 1947.

whose open disagreement with Mr. Eccles created some public annoyance—why call a special session of Congress when the authorities themselves could not agree on what was to be done? The Treasury, after abandoning the war-time pattern, exhibited feelings of some satisfaction with its monetary policy. Announcing, for example, in its 1946–7 Report,[1] that the retirement of debt had been, on balance, more than concentrated on securities held by the banks—i.e. that some 'funding' had also taken place—it held that this 'contributed substantially to reduction in inflationary pressure' and was made possible by 'the large sums made available for trust-fund investment during the year, the remarkably good record on redemption of savings bonds, the continued successful sale of new bonds, and the restrictive debt-management and monetary policies of the Treasury and Federal Reserve System'. Thus, when giving evidence on 17 November 1947 before the Joint Committee on the economic report, Mr. Snyder pressed for a larger fiscal surplus, a savings drive, stricter supervision of bank loans (along with a 'voluntary restraint' campaign),[2] and the reimposition of control over instalment credit. On these points Mr. Snyder and Mr. Eccles were in agreement. But the former insisted that greater fiscal severity was preferable to either Mr. Eccles's secondary reserve plan or to any scheme involving higher interest rates. He was 'against it because I do not think it will achieve the ends he [Mr. Eccles] expects' and, with a quick and anxious glance at his own garden, he thought that 'you have got to guard carefully against taking any action that will have a worse effect in another field—debt management'. Fundament-

[1] Issued in the winter of 1947–8.

[2] On 24 Nov. 1947 the Bank supervisory authorities of the U.S.A. (Board of Governors of Federal Reserve System, Comptroller of the Currency, Federal Deposit Insurance Corporation, and Nat. Assoc. of Supervisers of State Banks) issued a joint statement. It began with the words 'our country is experiencing a boom of dangerous proportions', and continued, later, 'we are unanimously of the view that present conditions require the bankers of the country to exercise extreme caution in their lending policies'.

ally, I think Mr. Snyder opposed any form of *general* credit restriction, and was at this time feeling satisfied that the steps taken to stop, for instance, 'pattern-playing' were almost all that was required of a market policy. For the rest, he relied mainly on 'getting the debt out of the hands of the banks'. Mr. Snyder was not alone in his views on the special reserve. The National City Bank of New York commented in its monthly letter for December 1947:

> The authorities have shown considerable versatility in approach. They have injected uncertainties into the money markets, uncertainties which reinforce the banker's caution. They have displayed greater courage and determination in dealing with the situation than many observers had expected. Not least of their accomplishments has been the breaking of the dangerous boom in long-term bond prices.

This commentator was both hostile to the secondary reserve proposals and sceptical of their possible effects. Such views were reflected in a statement issued by the Federal Advisory Council (on which Randolph Burgess, a leading figure in 'National City', was an active member). The Council condemned the proposal on three counts;[1] firstly, impracticability (due to varying needs and balance-sheets of different banks); secondly, on anti-socialist or anti-centralist grounds—'would substitute the edicts of a board in Washington for the judgements of the boards of directors of 15,000 banks throughout the country as to the employment of a substantial part of the funds of their banks'; and thirdly, because existing powers were adequate. The President of the Advisory Council, Chairman Brown of the First National Bank of Chicago, expounded this position in evidence before the Joint Committee and, to dispel certain misunderstandings, denied that the Council disagreed with the bond-support policy.

[1] Reprinted: *Annual Report of Board of Governors of Federal Reserve System*, 1947.

Final criticism came from President Sproul, testifying early in December. He doubted whether the expansion of bank credit had so far been a major causal or aggravatory factor in the current inflation, but condemned 'secondary reserve' proposals mainly on the grounds that their imposition would cause grave market disturbance without in any way resolving the dilemma posed by bond support and would indeed make that dilemma worse. He followed up this statement with a speech to the New York State Bankers' Association six weeks later[1]—'I say we can t bring about deflation by general credit action (i.e. removal of bond support) unless we bring about such an indiscriminate reduction in consumers' disposable incomes as to threaten the kind of disaster we are trying to avoid.' Their objective was 'to prevent bank credit adding further to inflationary pressures and, if possible, to reduce somewhat the supply of money', and the present course being followed was the best one available. Reinforcing his previous views on the 'secondary reserve' or, equally on raising of primary reserve requirements, and their effects on the bond market, he pointed to the events of the previous few weeks (massive bond support):

> It should now be obvious [he said], if it was not five weeks ago, that the market would not absorb such unloading and the Federal Reserve Banks would have to take more vigorous support measures. It is quite possible, in these circumstances, that more credit would be put out than could be locked up by the new requirements. The result would be a further random distribution of Federal Reserve credit at a time when new measures were being taken to tighten reserves.

Meanwhile the Board had temporarily shelved its proposal and come to some general agreement with the Treasury. This agreement included previous points-of-no-dispute (already noted), reaffirmed support of the $2\frac{1}{2}$ per cent. long-term rate, and declared that policies of debt-retirement would be 'effective for the next few

[1] See National City Bank of New York monthly letter, Feb. 1948.

months' of fiscal surplus. On the question of reserve requirements, the 'special reserve' was shelved, but it was conceded that 'possibly stronger measures may be necessary when current debt-payment operations slack off'.

After this controversy both within and without the System, and conceivably connected with it, Mr. Eccles was informed that his chairmanship of the Board would not be renewed on the expiration of his term on 1 February 1948—though he would remain on the Board[1] and was asked to accept the Vice-Chairmanship. Mr. Truman signified this intention in late January 1948 and at the same time appointed Mr. McCabe to fill the unexpired term of Governor Ransom (deceased). Mr. McCabe was a manufacturer of paper and had been Chairman of the Board of Directors of the Reserve Bank of Philadelphia. After sending his name to the Senate for ratification as a member of the Board, Mr. Truman also signified that Mr. McCabe would be designated to fill the now vacant Chairmanship. The appointment was ratified on 12 April and Mr. McCabe took over the Chairmanship on 15 April. On 26 May Mr. Eccles wrote a characteristically tart letter to the White House[2] withdrawing from his prospective Vice-Chairmanship (a new office) in view of Mr. Truman's delay in designating him such. He remained on the Board.

Thus the 'secondary reserve' proposals ended, whether by coincidence or not, in the fall of Chairman Eccles after nearly fourteen years of leadership. Originally appointed by Mr. Roosevelt to reorganize the System, he had come to Washington from Utah where he was the owner of considerable banking and construction interests. He had come to Washington as a liberal, converted to that faith by the disasters of the Great Depression. Much of the great banking legislation of the 1930's is the work of Mr. Eccles and his must be accounted the dominating influence in

[1] His term as a Governor was not due to end until 1958.

[2] *Federal Reserve Bulletin*, 1948, p. 667.

the System during most of his long reign as Chairman. But in the post-war period, like many of his early associates, he became increasingly an isolated figure. The tenor of his utterances was that of a man fighting against public opposition for what he believed to be right, rather than that of the head of a central banking system pushing his views in co-operation with other administrative chiefs. He wanted to stop inflation and was dissatisfied with the measures adopted or acutely conscious of the lack of them. His anxiety led him to advocate a drastic, but ill-formulated, increase in central banking powers whose chances of overcoming political opposition he must have known to be slender. This advocacy revealed, publicly, his isolation and revealed him in conflict with his chief colleague on the operational side, Mr. Sproul. Although he spoke on behalf of the Board, his influence on that body was known to be such that he had to bear personal responsibility for it. Confronted with public disagreement between the monetary managers of the country, Mr. Truman evidently decided that Mr. Eccles would have to go, if he had not already made such a decision. But he did not remove this dynamic personality from the System, indeed, could not do so. Mr. Eccles elected not to resign from the Board but to continue as a Governor. The System did not lose his vigorous mind nor his outspoken manner. His dismissal could be regarded as strengthening the position of Mr. Snyder, but it does not appear that the Treasury in fact gained very much.

But, meanwhile, the debate was over. In his budget message for 1948–9, delivered in January 1948, Mr. Truman declared that 'our debt management policy is designed to hold interest rates at the present low level'. Low interest rates and stable bond prices had facilitated reconversion finance, had been a major factor in business confidence, and relieved the tax burden. 'The Treasury and Federal Reserve System will continue their effective control of interest rates.' Similar views are found in the

report of the Secretary of the Treasury for 1947–8 (though this document did not appear until a year or so after Mr. Truman's 1948–9 message).

> Stability in the government bond market during the post-war period has made a significant contribution to prosperity. This . . . will continue to be of utmost importance in maintaining prosperity. . . . Confidence in the credit of the United States Government—which is reflected in the condition of the market for our government securities—has become the keystone upon which rests the economic structure of the world.

This rather grandiose phraseology finds no echo in the Reports of the Board—not surprisingly considering that 'credit of the United States government' largely consisted of 'credit of the Reserve System' whose lavish provision created unpleasant problems whose solution was not the Treasury's responsibility. This is not, however, to deny Mr. Snyder and his associates the credit for successful debt-repayment programmes and their strong advocacy of other necessary anti-inflationary controls and policies. Perhaps the most able pronouncement of Treasury policy was that delivered by Under Secretary Wiggins to the American Political Science Association on 1 April 1948.[1] After pointing out the success of Treasury operations with trust funds and investment bonds the previous summer and autumn, Mr. Wiggins made the following points on the question of interest rates:

1. Correct or not correct, $2\frac{1}{2}$ per cent. was the rate used in war finance, and a depreciation (in the $ value) of the vast investment holdings of banks, businesses, and individuals would involve serious book losses, a threat to financial stability, and undesirable repercussions in the marketing of public debt and private debt. (e.g. wholesale liquidation of Treasury bonds, &c.)
2. Higher rates would increase the burden on the Federal budget.
3. With the contemporary dominance of government security

[1] See 'Exhibits', *Treasury Report*, 1947–8.

rates, a rise in those rates would upset the long-term plans of private business.

4. Nobody could predict the future financing needs of government. To destroy the 2½ per cent. basis now would multiply difficulties of future financing and make refunding much more difficult.
5. The term 'natural level' of interest added little to the discussion. The ruling rates merely reflected official policy. Who could say what a 'natural level' was? In the long run, however, he admitted the term might make sense. Too low a level leads to over-investment in the long run and vice versa. It was therefore necessary for monetary authorities to recognize these long-run consequences.
6. But it should be fairly recognized that maintenance of 2½ per cent. left no room for flexibility of credit control, as the short-run considerations must necessarily be dominant. This meant that long-run consequences must be offset by fiscal policy. Careful and appropriate budgeting was the solution. It was, for instance, 'crazy' to run a deficit at that time.
7. Some adjustments could be and had been made in short-term rates, but even this required great care and caution (presumably because the market might run away and force even higher short-rates).

This statement went most of the way with the views of, for example, Mr. Sproul at that time, but inevitably left room for dispute over short-term rates.

One attempt, therefore, to extricate the System from its position had failed. 'Banking control' was 'out' for the time being. 'Market restraint', in conjunction with 'fiscal pressure' and other expendients, was left a clear field in which to develop.

XVIII

SELECTIVE CREDIT CONTROL 1946–8

§ 1. *The Stock-market. Sensitivity of the Corporate Bond Market*

DEVELOPMENTS in Wall Street—whether in stocks or bonds—during this period, are generally of minor importance, subsequent to the slump of autumn 1946, which belongs properly to the reconversion period (see Chapter VIII, § 1). To be more accurate, their importance was not of a kind that is relevant to selective credit control, but was of direct concern to the System in its attempts to handle the government bond market and has already been referred to in the chapters concerned.

After the collapse of 1946, the Reserve Board decided that so severe a restriction on speculation as the 100 per cent. requirement was no longer necessary, although the general credit situation, and the possibility of a further boom in long-term bond prices, did not warrant a return to the normal 50 per cent. requirement. On 31 January 1947, Regulations T and U were relaxed to 75 per cent. The market did not respond, in spite of higher dividend payments, and little or no increase in stock-market credit on 'other securities' resulted. Outstanding credit on government securities declined rapidly early in this period as the speculative positions in government bonds, that had arisen from the 'pattern' crisis, were liquidated. While credit granted to dealers in 'governments' remained latterly at a working figure, credit granted to 'others' in the government securities market declined farther as margin speculation became increasingly confined to a small band of

sophisticated arbitrageurs whose energies were devoted to smoothing out anomalies in prevailing rate curves.

The volume of new issues for new capital (i.e. not refunding) increased steadily, but the proportion of new common stocks in the total declined markedly—due severally to the low interest rate on bonds relative to the increasing yield expected by purchasers of stocks, to the increasing equity/debt ratio produced by inflation in the financial position of many borrowers, and to the growth in state and municipal borrowing. (With regard to the second point, it may be remarked that further growth in the importance of insurance companies increased the ready market for new bond issues relative to equities.) While private bond yields remained close to that on Treasury bonds (see Appendix to this part, Fig. 5), the yield on industrial equities rose steadily from reconversion levels (Appendix, Table IX) as dividends rose but prices failed to respond. Consideration of this rise in stock yields will be postponed until Chapter XX, and the rest of this section is concerned with the private bond market.

NEW SECURITY ISSUES FOR NEW CAPITAL

30 June 1946–30 June 1948

$ millions *Source: Federal Reserve Bulletin*

		Domestic				*Foreign*
	Total	*State and municipal*	*Federal agencies and trusts*	*Corporate*		*Including IBRD*
				Bonds	*Stocks*	
July–Dec. 1946	2,964	496	47	1,687	731	0
Jan.–June 1947	3,258	1,325	97	1,301	483	53
July–Dec. 1947	4,123	900	105	2,133	734	249
Jan.–June 1948	4,747	1,582	192	2,363	609	5

In line with remarks made in previous chapters concerning the sensitivity of the market in government

securities, it will be apparent that, since private bond prices moved over ranges comparable in type to those of government bonds, these remarks may also apply to the private bond market. This possibility is of great importance to the central bank, owing to the desire of that authority to influence the new-issue market by alternately making it more or less attractive for investors to sell out of government securities (and dump them on the banking system) in favour of new issues, or by making government securities more or less attractive, in the short run, to investors disposing of new savings—by 'investors' is meant, primarily, savings institutions. This possibility will now be examined for the case where certain declines occur in the prices of both government and other bonds.

Provided the demand for new issues remains strong, a fall in market bond prices, while offsetting previous gains which may have accrued to dealers in a rising market, will not of itself impede bond flotations. *But* if the demand for new issues actually falls off in response to a rise in bond yields, then blocks of new securities will accumulate rapidly in portfolios of new-issue dealers. The latter, in these conditions, will not promptly clear their shelves at a heavy loss but will refuse to take on new commitments at any price. In short, with a highly organized market of the 'over-the-counter' type, which has become accustomed to low rates, and to minute changes in rates, the effect of higher interest rates on the *supply* of new issues will be directly affected by the concurrent effects on the *demand* for such issues. The point being that the latter can easily be discovered by the short-run *controllers* of the former, but cannot be influenced markedly by them. The significance of this consists of the possibility of the demand for new issues being strongly influenced, over a short period, by central bank action. If, for example, the prices of Treasury bonds are made to fall far enough to put investment portfolios 'into the red', that portion of the demand for new issues which arises from 'switching' out of

Treasury bonds may very well disappear in the short run —this may be due either to expectations of further increases in interest rates in the future, or to reluctance to realize a capital loss. Capital losses increase in significance as money becomes cheaper: with a narrow spread between government and high-grade corporate bonds (relevant in the case we are considering, where institutions are the important factor) the loss of one year's income by depreciation of capital value may take some time to recoup —*during* which time the prices of Treasury bonds might very well rise again. Equally, even if the loss is worth taking *now*, it may be worth waiting for the spread between Treasury and other bonds to widen—an expectation which may be disappointed if the supply of new issues, reacting as described above, declines very sharply. With higher interest rates (e.g. $3\frac{1}{2}$ per cent.) on government bonds, along with a market subject to wider fluctuations, there will be an accompanying lower sensitivity to small gains and losses by dealers and lenders and—especially if the underwriter can bully a borrower who is himself rather indifferent to small changes in terms—these market influences may generally be absent, the more so if fluctuating prices in the past have minimized the paper losses (over cost) which can be inflicted on institutions by dropping goverment bonds a couple of points. In the case we are considering, both the institutional character of the market and the existence of very low, relatively stable, rates may render official monetary policy highly effective in the short run (six or nine months) in restraining the flow of new issues. This in turn, if accompanied by a similar unwillingness of banks to grant long-term loans (very probable), may lead either to postponement of capital expenditure or to the financing a larger proportion of that expenditure from earnings which might otherwise be dispersed as dividends—both of which are short-run objectives of monetary policy. Such considerations apply similarly in the reverse case of an induced rise in govern-

ment security prices. They apply perhaps to a special case of a special case, but no central banker could neglect them.

It will be apparent to the reader that the 'special case of a special case' did not occur during these years. When government security prices did decline, they merely reduced paper profits on investors' portfolios, except in marginal quantities, and *did not induce losses*. Further, institutions were willing to switch out of government securities, as a matter of post-war principle as well as a means of increasing earnings, and uncertainty about future official policy does not seem to have been sufficient to hold up this movement for any appreciable length of time. There may have been some doubts in mid-winter 1947–8, but these seem to have been mainly concentrated amongst bankers, while the wider spread between government and other bonds simply added to the flow of institutional funds out of the former into the latter—a flow which at once stopped the spread from widening, or narrowed it again. Thus investment bankers were not put under pressure to cease marketing new issues, though price declines were forced on them and the market did become congested, in October 1947, before the downward movement became established. Subsequent, however, to the great institutional shift (on principle) out of government bonds, the possibility of successful restraint or 'ease' being carried out on these lines became greatly enhanced.

§ 2. *Consumer Credit*

The post-war rise in instalment credit and other forms of consumer credit continued on the path described in Chapter VIII. Instalment credit continued to increase faster than charge account credit, &c., and adopted a characteristic seasonal pattern save in the case of automobiles whose purchase is either unaffected by ordinary seasonal factors or is affected by different ones (timing of manufacturers' changes in models, &c.). In relation to national income, the magnitude of outstanding consumer

credit remained low compared to pre-war. Nevertheless, in view of the inflationary pressure present in the economy and the inadequate supply of consumers' durable goods in relation to potential demand, the Board continued to maintain strict terms for Regulation W. But with the

CHANGE IN CONSUMER CREDIT OUTSTANDING: QUARTERLY

June 1946–8

$ millions *Source: Federal Reserve Bulletin*

End of month	*All consumer credit*	*Instalment credit*			
		Total	*Automobile sales credit*	*Other sales credit*	*Instalment loans*
June 1946 Total outstanding	7,884	2,875	336	699	1,840
Sept.	+739	+384	+89	+53	+242
Dec.	+1,511	+685	+119	+262	+304
Mar. 1947	+243	+383	+147	−10	+246
June	+867	+606	+189	+152	+265
Sept.	+464	+381	+124	+97	+160
Dec.	+1,715	+875	+147	+435	+293
Mar. 1948	+100	+350	+216	−63	+197
June	+763	+611	+235	+145	+231
Total outstanding June 1948	14,286	7,150	1,602	1,770	3,778

satisfaction of immediate post-war demand for non-durable goods, and the abandonment of detailed economic controls, the Board greatly simplified its control. Effective the 1 December 1946, Regulation W was amended to remove from control all consumer credit save instalment credit on major durable goods. In announcing its reasons for this[1] the Board signified that Regulation W, as now amended, constituted what was considered to be its permanent form should Congress choose to confirm the

[1] Press release; reprinted *Annual Report of Board of Governors*, 1946, pp. 98–100.

Executive Order of 1941 by legislation. Referring to well-known arguments for the use of instalment credit regulation as a contra-cyclical stabilizer, the Board said:

> Under this revision the regulation is focused on instalment credit . . . including 12 major categories of durable consumers' goods which constitute the great dollar bulk of credit subject to the widest expansion and contraction. Charge accounts and single-payment loans, in which fluctuations are comparatively small, are eliminated from the scope of the regulation. The revision effects a substantial simplification of the regulation's provisions and will make it administratively more workable. This revision narrows the scope of the regulation to what the Board considers a minimum consistent with the exercise of a stabilizing influence in this area of the economy. In this form, the Board believes the regulation can be better understood and its merits and defects better appraised. When inflationary pressures have subsided, the terms of the regulation would need to be modified further.

This revision established a uniform maximum maturity of fifteen months and, save for furniture and floor coverings (20 per cent), a uniform minimum down-payment of 33 per cent.

Congress did not so choose and Regulation W expired in November 1947. Its subsequent reincarnation and second death are dealt with later.

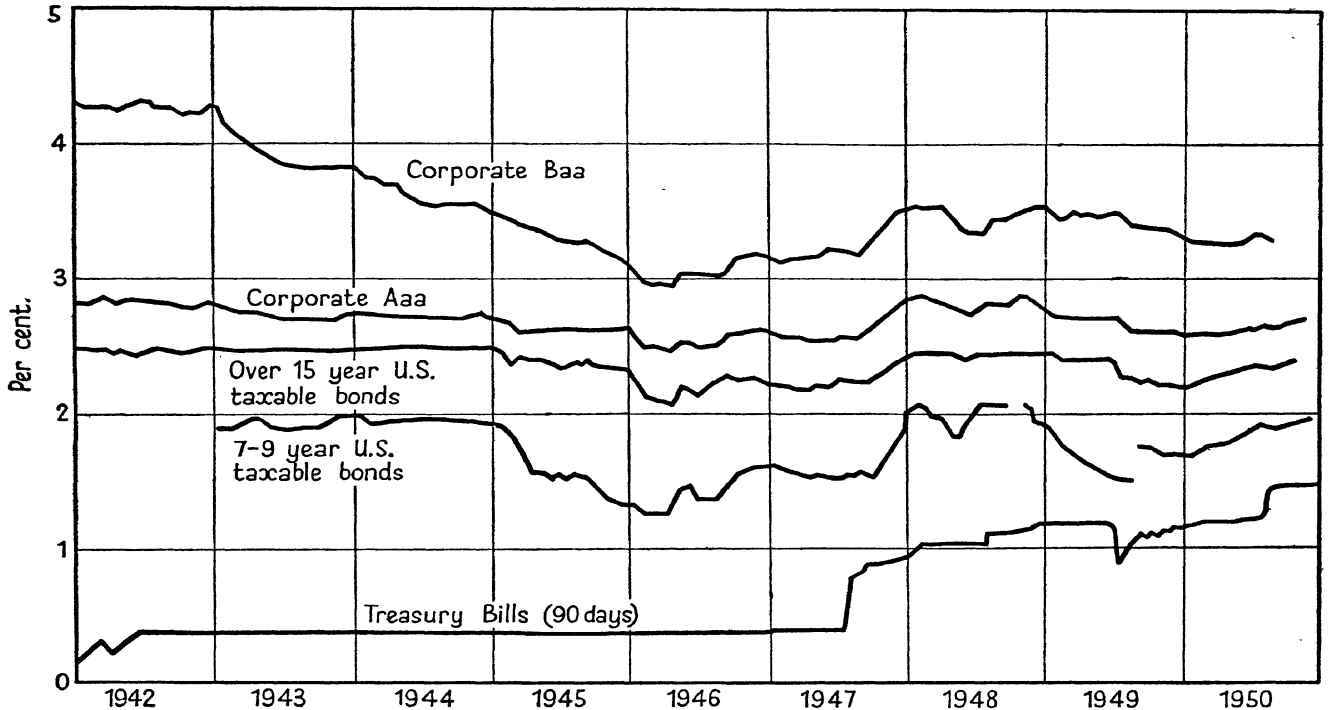


FIG. 5. Bond yields in the U.S.A., 1942–50. *Source: Federal Reserve Bulletins.*

TABLE I. GROSS DEBT OF UNITED STATES GOVERNMENT, 1945–9

$ *billions* — *Source: Federal Reserve Bulletin*

End of month	*Bills and Certificates**	*Notes**	*Bonds**	*Savings bonds and notes*†	*Special issues*	*Non-interest-bearing, &c.*‡	*Total direct debt.*§
June 1945 .	51·2	23·5	106·4	56·2	18·8	2·7	258·7
Feb. 1946‖	58·4	19·6	121·6	57·2	20·9	1·3	277·9
June 1946 .	51·8	18·3	119·3	56·2	22·3	1·3	269·4
June 1947 .	41·1	8·1	119·3	59·0	27·4	3·2	258·3
June 1948 .	36·3	11·4	112·5	59·5	30·2	2·2	252·3
June 1949 .	41·0	3·6	110·4	62·8	32·8	2·0	252·8
Dec. 1949 .	42·0	8·2	104·8	66·0	33·9	2·1	257·1

* Marketable issues.
† Includes armed forces leave bonds and 2½ per cent. investment bond of Oct. 1947.
‡ Includes issues to international institutions.
§ Excludes guaranteed securities (negligible).
‖ Debt peak.

TABLE II. CALL DATE DISTRIBUTION OF UNITED STATES MARKETABLE PUBLIC DEBT, 1946–9

$ *billions* — *Source: Federal Reserve Bulletin*

First call	*June 1945*	*Feb. 1946*	*June 1946*	*June 1947*	*June 1948*	*June 1949*	*Dec. 1949*
Within 1 year .	61·3*	70·2	61·9	52·4	49·9	52·3	56·3
1–5 years . .	34·0	35·4	35·1	42·5	46·1	39·2	35·1
5–10 years .	41·5	33·0	32·8	18·9	10·5	15·1	18·6
Over 10 years .	44·3	61·0	59·6	54·8	53·9	48·6	45·1
TOTAL .	181·3	199·8†	189·6	168·7	160·4	155·2	155·1

* Includes 4·9 billions of 0·9 per cent. notes maturing 1 July 1946.
† = peak figure.

Totals include certain small items (guaranteed securities, &c.) which do not appear in component figures.

TABLE III. ESTIMATED OWNERSHIP OF UNITED STATES GOVERNMENT SECURITIES, 1945–9

$ billions *Source: Treasury Bulletin*

End of month	Total* Federal securities	Banks		Individuals	Held by non-bank investors					
		Commercial banks	Federal Reserve Banks		Insurance companies	Mutual savings banks	Corporations	State, local, &c.	U.S. Govt. agencies and trusts	Miscellaneous investors†
June 1945	259·1	84·2	21·8	58·9	22·7	9·6	22·9	5·3	24·9	8·9
Dec. 1945	278·7	90·8	24·3	63·7	24·2	10·7	22·0	6·5	27·0	9·5
Feb. 1946‡	279·8	93·8	22·9	63·7	24·7	11·1	19·9	6·7	28·0	9·1
June 1946	269·9	84·4	23·8	63·0	25·1	11·5	17·7	6·5	29·1	8·8
June 1947	258·4	70·0	21·9	66·0	24·8	12·1	13·9	7·1	32·8	9·8
June 1948	252·4	64·6	21·4	65·3	23·1	12·0	13·5	7·8	35·8	9·1
June 1949	252·8	63·0	19·3	66·6	20·8	11·6	15·1	8·0	38·3	10·0
Dec. 1949	257·2	66·8	18·9	66·2	20·5	11·4	16·3	8·0	39·4	9·8

* Includes guaranteed securities.

† Includes savings and loan associations, non-profit institutions, corporate pension funds, dealers and brokers, foreigners, and I.M.F./I.B.R.D.

‡ Debt peak.

TABLE IV. TREASURY SURVEY OF OWNERSHIP OF MARKETABLE FEDERAL DEBT. RECONVERSION PERIOD

1. *The Banking System*

Par value. $ billions *Source: Federal Reserve Bulletin*

End of month	Federal Reserve Banks					Commercial banks					
	Total*	Bills	Certificates	Notes† and bonds 0–5 years	Bonds over 5 years	Total*	Bills	Certificates	Notes and bonds 0–5 years	Bonds 5–10 years	Bonds over 10 years
June 1945	21·8	13·0	6·0	2·1	0·7	77·5	2·9	16·8	21·8	29·1	6·9
Feb. 1946	22·9	13·0	7·5	1·7	0·7	85·2	2·4	21·7	20·9	31·9	8·2
June 1946	23·8	14·5	6·8	1·9	0·6	76·6	1·1	16·7	19·2	31·5	8·1

* Includes guaranteed securities (negligible) not included in component figures.

† All bonds and notes in this table classified by maturity date.

TABLE V. TREASURY SURVEY OF OWNERSHIP OF MARKETABLE FEDERAL DEBT. RECONVERSION PERIOD

2. *Non-bank investors, by maturity classes**

Par value. $ billions *Source: Federal Reserve Bulletin*

End of month	*U.S. agencies and trusts*		*Mutual savings banks*			*Insurance co's.*			*Others*			*Total non-bank*	*Total marketable† federal debt.*
	0–5 years	*over 5 years*	*0–5 years*	*5–10 years*	*over 10 years*	*0–5 years*	*5–10 years*	*over 10 years*	*0–5 years*	*5–10 years*	*over 10 years*		
June 1945 .	0·3	5·8	0·5	3·4	5·5	1·4	4·3	15·3	18·9	10·6	16·6	82·1	181·4
Feb. 1946 .	0·3	6·7	0·5	2·1	8·3	1·3	3·7	18·9	19·5	7·4	19·6	91·2	199·9
June 1946 .	0·1	6·7	0·7	1·9	8·6	1·6	3·3	19·4	18·3	7·0	21·7	89·3	189·6

* i.e. to final maturity date.

† Includes guaranteed securities, not included in component figures.

TABLE VI. TREASURY SURVEY OF OWNERSHIP OF MARKETABLE FEDERAL DEBT, 1946–9

1. *The Banking System*

Par value. $ *billions* — *Source: Federal Reserve Bulletin*

	Federal Reserve Banks						*Commercial banks*					
End of month	*Total*	*Bills*	*Certs., notes, bonds, 0–12 months*	*Bonds* and notes, 1–5 years*	*Bonds, 5–10 years*	*Bonds over 10 years*	*Total*	*Bills*	*Certs., notes, bonds, 0–12 months*	*Bonds and notes, 1–5 years*	*Bonds, 5–10 years*	*Bonds over 10 years*
June 1946 .	23·8	14·5	8·2	0·8	0·1	0·1	76·6	1·1	22·3	25·3	21·9	5·9
June 1947 .	21·9	14·5	6·5	0·7	..	0·1	63·0	0·8	15·5	29·9	11·6	5·2
June 1948 .	21·4	8·6	6·7	2·6	0·6	2·9	57·6	2·3	14·5	30·6	6·2	3·9
Dec. 1948 .	23·3	5·5	6·9	3·3	0·4	7·2	55·3	2·8	14·6	28·1	6·3	3·5
June 1949 .	19·3	4·4	7·8	2·1	0·6	4·5	56·2	2·8	16·6	26·3	6·6	3·9
Dec. 1949 .	18·9	4·8	7·2	1·9	1·4	3·6	59·9	3·5	20·5	24·9	7·0	3·9

* All bonds and notes in this table are classified by first call date.

TABLE VII. TREASURY SURVEY OF OWNERSHIP OF MARKETABLE FEDERAL DEBT, 1946–9

2. *Non-bank investors, by call classes**

Par value. $ *billions* — *Source: Federal Reserve Bulletin*

End of month	*U.S. agencies and trusts*			*Mutual savings banks*			*Insurance co's.*			*All other investors*			*Total non-bank*	*Total. marketable debt.*
	under 1 year	*1–10 years*	*over 10 years*	*under 1 year*	*1–10 years*	*over 10 years*	*under 1 year*	*1–10 years*	*over 10 years*	*under 1 year*	*1–10 years*	*over 10 years*		
June 1946.	0·1	1·2	5·5	0·4	2·3	8·5	1·1	4·3	18·9	14·3	11·9	20·8	89·3	189·6
June 1947.	0·1	0·9	4·3	0·6	2·7	8·4	0·8	4·7	18·5	13·5	10·8	18·2	83·9	168·7
June 1948.	*	0·6	4·7	0·6	2·4	8·6	0·9	3·7	17·1	16·2	9·9	16·5	81·4	160·4
Dec. 1948.	0·2	0·5	4·7	0·5	2·3	8·0	1·1	3·5	15·2	17·3	10·1	15·1	78·8	157·5
June 1949.	0·1	0·8	4·5	0·5	3·3	7·3	1·1	3·9	14·2	19·0	10·8	14·2	79·6	155·2
Dec. 1949.	0·1	0·8	4·4	0·5	3·8	6·6	1·2	3·9	13·5	18·6	10·0	13·1	76·4	155·1

* i.e. securities classified according to date of first call, not final redemption.

TABLE VIII. ASSETS AND LIABILITIES

All member banks, 1945–9

$ *billions* — *Source: Federal Reserve Bulletin and Federal Deposit Insurance Corporation*

Items	*30/6/45*	*Per cent.*	*30/6/46*	*Per cent.*	*30/6/47*	*Per cent.*	*30/6/48*	*Per cent.*	*30/6/49*	*Per cent.*
Assets										
Reserves with Federal Reserve Banks	14·8	11·7	16·0	12·2	16·0	12·9	17·4	13·6	17·8	14·0
U.S. Govt. securities	73·2	57·9	72·3	55·0	59·2	47·4	54·1	42·5	53·1	41·8
Other investments	5·6	4·4	6·5	4·9	7·0	5·6	7·4	5·9	7·7	6·1
Loans	20·6	16·3	23·3	17·7	28·7	23·0	33·9	26·6	34·5	27·1
Other assets (cash items in collection, &c.)	12·2	9·6	13·3	10·2	14·0	11·2	14·5	11·4	14·1	11·1
TOTAL	126·4	100·0	131·4	100·0	124·8	100·0	127·3	100·0	127·2	100·0
Liabilities										
Demand deposits: total	96·6	76·4	96·4	73·3	87·4	70·0	88·6	69·6	87·6	68·8
1. Individuals, partnerships, and corporations	57·4	45·4	65·6	49·9	67·9	54·4	68·2	53·6	67·2	52·8
2. U.S. Govt. war loan deposits	21·7	17·2	11·8	9·0	0·9	0·7	1·8	1·4	2·0	1·6
3. U.S. Govt. other deposits	0·25	0·2	0·2	0·2	0·2	0·2				
4. Interbank	11·1	8·7	10·4	7·9	9·6	7·7	9·4	7·4	10·2	8·0
5. Other (state, local, and foreign, &c.)	6·1	4·8	8·3	6·3	8·7	7·0	9·1	7·2	8·2	6·4
Time deposits	21·8	17·2	26·2	19·9	28·1	22·5	28·9	22·7	29·4	23·1
Capital accounts	7·3	5·8	7·9	6·0	8·3	6·7	8·6	6·8	9·0	7·1
Other liabilities	0·8	0·6	1·0	0·8	1·0	0·8	1·2	0·9	1·3	1·0
TOTAL	126·4	100·0	131·4	100·0	124·8	100·0	127·3	100·0	127·2	100·0

TABLE IX. ANALYSIS OF LOANS

All member banks, 1945–9

$ billion

Source: Federal Reserve Bulletin and Federal Deposit Insurance Corporation

Loan category	*30/6/45*	*Per cent.*	*30/6/46*	*Per cent.*	*30/6/47*	*Per cent.*	*30/6/48*	*Per cent.*	*30/6/49*	*Per cent.*
1. Commercial (including open market paper)	7·09	34·5	9·70	41·6	13·82	48·2	16·73	49·4	15·21	44·2
2. Agricultural	1·13	5·5	0·88	3·8	0·97	3·4	1·24	3·7	1·70	5·0
3. Real estate	3·25	15·8	4·27	18·3	6·24	21·8	7·78	23·0	8·38	24·3
4. Consumer	1·69	12·7	2·46	10·6	4·00	14·0	5·25	15·5	5·86	17·0
5. Miscellaneous			1·13	4·9	0·97	3·4	1·04	3·1	0·94	3·0
6. Security trading	6·50	31·5	4·88	20·9	2·66	9·3	2·13	6·3	2·76	8·0
TOTAL	20·60	100·0	23·30	100·0	128·7	100·0	33·90	100·0	34·5	100·0

TABLE X. INDUSTRIAL STOCK PRICES AND YIELDS

Sources: { *Price: Standard and Poor Corporation*
Yield: Moody's 125 Industrials

Monthly averages	*Price 1935–9 = 100*	*Yield*
June 1946 . .	157	3·5
Oct. . . .	126	4·25
Dec. . . .	129	4·5
June 1947 . .	124	5·1
Dec. . . .	129	5·5
June 1948 . .	143	5·3
Dec. . . .	126	6·8
June 1949 . .	117	7·2
Dec. . . .	140	6·5

TABLE XI. INTEREST CHARGED BY BANKS ON COMMERCIAL LOANS

(with call-money rate and Government bond yield), 1945–9

Monthly averages, per cent. *Source: Federal Reserve Bulletin*

Month	*New York City*	*7 Northern and Eastern cities*	*11 Southern and Western cities*	*Call money New York City*	*over–15 year Treasury bonds*
June 1945	2·20	2·55	2·80	1·00	2·35
June 1946	1·84	2·51	2·97	1·00	2·16
June 1947	1·83	2·44	2·95	1·38	2·22
June 1948*	2·12	2·49	2·92	1·50	2·41
June 1949	2·35	2·86	3·17	1·63	2·38
Dec. 1949	2·38	2·67	3·03	1·63	2·19

N.B. Dec. 1949, average rate (all above banks) on loan of:
$1,000–10,000 = 4·66%
$10,000–100,000 = 3·74%
$100,000–200,000 = 3·12%
over $200,000 = 2·56%

* Series changed June 1948. Prior figures not comparable, but trend is not affected.

PART IV

MONETARY MANAGEMENT AND THE RECESSION

JULY 1948–DECEMBER 1949

XIX

THE TURNING-POINT, JULY–NOV. 1948. SPECIAL POWERS AGAINST INFLATION

WHEREAS, hitherto, the monetary story has been told somewhat in isolation from the rest of the economic story, an attempt is made, in this part, to depart from that isolation. This does not mean that some composite story is to be told: it simply means that a general chapter is interwoven with monetary chapters for the reason that rapid changes in the general situation are relevant to changes in monetary policy in a way not hitherto experienced since the war.

The Special Session of Congress in August 1948 (referred to in Chapter XI, § 2) was widely regarded as a highly original method of electoral campaigning rather than a serious attempt to halt the progress of inflation. Mr. Truman attempted to blame Congress for refusal to enact positive anti-inflationary legislation, while the Congressional majority replied that the blame rested, if anywhere, with Mr. Truman, for failure to control government expenditure. There was noticeable reluctance, on both sides, to attack such obviously inflationary schemes as the government-sponsored easy housing-credit programme. Since Congress had iself reduced taxation and willingly acceded to demands for increased defence expenditure (and eventually enacted the European

Recovery Programme), it was driven to fall back on the deflationary possibilities of the Taft–Hartley labour law and, as usual, assail Mr. Truman for attempting to introduce socialistic legislation by the back door of inflation. The arguments were not very edifying on either side, and proper action, if it were still needed, had inevitably to be postponed until after the Presidential and Congressional elections of November. Meanwhile, both Executive and Legislature, as again in 1950, turned in distress to the Federal Reserve System. Amid a welter of demands from the White House for price controls, rationing, commodity market regulation (an old stand-by this), tighter rent controls, excess profits taxes, *and* higher statutory minimum wages, repeal of Taft–Hartley, *more* liberal housing credit, increased social security and education expenditure, and a better farm-support programme (i.e. most of the Democratic Party economic platform), appeared a request for the resumption of consumer credit regulation and the raising of member-bank reserve requirements above the existing statutory maximum. It was to these demands that Congress, in part, acceded.

The restoration of Regulation W, which had been allowed to lapse the previous November, was enacted as an emergency power to run for twelve months only. The power of the Federal Reserve Authorities over consumer credit was restricted to instalment credit—in full agreement with the Reserve Board. The rise in outstanding instalment credit, amounting to over $1 billion in the six months ending 31 July, was only very slightly faster than the similar rise in 1947, but neither this speed of advance nor the outstanding total (still below the percentage of national income achieved by instalment credit in 1940–1) gave cause for particular localized anxiety about the financial stability of consumer financing. Rather was it anticipation[1] of the course of instalment credit, under complete freedom as to terms (demonstrated later by happenings

[1] *Federal Reserve Bulletin*, 1948, pp. 901 ff.

of 1950), which gave good grounds for advocating at least some regulation (however liberal), while whatever the comparative sobriety of instalment financing might be when viewed in isolation there was no doubt that restraint on durable consumption would be a valuable anti-inflationary measure. Further, for reasons mentioned in Chapter VIII, § 1, this may have been the least unpopular, politically, of the various suggested controls.

Regulation W was reimposed by the Board effective 20 September 1948, in accordance with a Joint Resolution of Congress dated 16 August 1948 which restored the validity of the Executive Order of August 1941 for one year. After some initial disagreement,[1] the terms were fixed at a minimum down-payment of $33\frac{1}{3}$ per cent. for automobiles and 20 per cent. for other listed articles, while upon all listed articles the maximum maturity was fifteen months except for loans exceeding $1,000, the maturity of the latter being permitted to run to eighteen months. These terms were slightly less severe than those operating before the previous November—33 per cent. on all articles save furniture (20 per cent.) and fifteen months on all loans—but prohibited what was thought to be a considerable and growing volume of sales on down-payments of 10 per cent. (save on cars) and maturities of eighteen months or over.[2] The growth of such sales, it was thought, was lifting demand to levels beyond current capacity and merely adding to inflationary pressures.

So much, at the moment, for consumer credit. More important, from our own viewpoint, was the question of reserve requirements. Discussion of this question was somewhat bedevilled by misunderstandings between those who saw the raising of reserve ratios as an attempt to restrain the banking system, positively, by reduction of disposable liquid assets, and those who regarded it as an emergency measure designed to offset an autonomous

[1] *Annual Report of Board of Governors of Federal Reserve System*, 1948, pp. 89–90.

[2] *Federal Reserve Bulletin*, 1948, p. 902.

expansion of reserve money which would otherwise have had the bicycle-pump effect now so familiar. The former rightly pointed out that the consequences were dubious, given the post-war policy of supporting, if need be, the market in government securities, more especially in government bonds. Sale of government *bonds* to obtain fresh reserves in order to conform with higher legal requirements, or cash adjustment by sale of theoretically 'non-liquid' investments, might not materially affect the 'subjective liquidity' of bankers whose portfolio of floating debt remained intact or was being increased by the gradual shortening of the whole marketable debt. The fact that the new requirements were 'emergency' only and to lapse after a year or so would further reduce any restraining effect. In a sense, bankers were to be deprived of certain earning assets and forced to invest in non-marketable non-interest-bearing assets (i.e. reserve balances) with a life of one year. It would be doubtful if liquidity could be said to be reduced at all, and loss of earnings might further encourage bankers to expand loans and other investments. If higher reserve requirements forced a sale of *short-term* securities by the banks, the consequences might be different, but in 1948 a sale of bonds was far more likely—questions of the liquidity of short-term versus longer-term assets at that time beginning to outweigh the relatively greater loss of earnings suffered by selling bonds. The banks could, in effect, evade this attack on liquidity by the sale of investments and emerge substantially unimpaired. Only by an increase in reserve requirements of 15 per cent. or more, accompanied by reductions in bond prices below par, or by the enactment of some much more drastic scheme of special reserve proposals, could this weapon really be made effective and practically force the banking system to refuse further creation of credit. This the System did not now wish, any more than it wished to adopt any other policy involving drastic restriction, and the statement of Chairman McCabe, before the House

Banking and Currency Committee on 2 August 1948,[1] presented a much less heroic view.

This very able declaration summed up the post-war policies and actions of the System in terms of what has been referred to here as 'neutrality', but which the Chairman designated 'restraint': the increase in reserve requirements (and the Board requested 10 per cent. against demand and 4 per cent. against time deposits, the power to run for two years) was desired as a compensation for loss of the fiscal surplus—which had been a means of offsetting the supply of reserves arising from inflows of gold and sales of bonds to the Reserve Banks by non-bank investors. Like the fiscal surplus, it was to be used in conjunction with rising short-term rates, a higher discount rate, gradual 'funding' into savings bonds and special issues, and 'self-restraint' campaigns. Some 'restraint' was also expected from the dubious effects referred to above, and from the reduction in the multiple credit expansion possible on a given reserve base. In short, given the outlook at that time, the measure was required if the System was to continue its present policies and not revert to a rather hopeless inflationary inaction. Mr. McCabe concluded:

I should like to state emphatically the Board's view that the use of its powers under present conditions should be directed towards restraining further credit expansion and not toward forcing liquidation of the outstanding volume of credit. The Federal Reserve System was established to provide for flexibility in our monetary system. It was not designed to make available any amount of money that borrowers might demand without regard to the productive capacity of the economy and the speculative nature of the commitments. The System would be derelict in its duty if it did not exercise a proper measure of restraint.... The necessity of maintaining a degree of stability in the value of (government securities)... has confronted the System with formidable difficulties in the exercise of restraint. The proper handling of this problem requires the most careful management. It can be facilitated by extension of the System's powers as proposed in the Bill before

[1] Reprinted *Federal Reserve Bulletin*, 1948, pp. 904 ff.

you, which extension is thoroughly consistent with existing powers and traditional methods.

Mr. McCabe appealed to the Treasury for co-operation (which he got) and appealed to Congress for further action in the non-banking field. Congress granted power to increase reserve ratios, for one year only (from 31 July), by 4 per cent. against demand and 1½ per cent. against time deposits—considerably less than the System demanded. Congress also refused to consider the now persistent request that reserve requirements should be made to apply in some way to all commercial banks.[1]

Having obtained power to increase the legal reserve ratios of member banks, the next step was to use it. Was it to be used all at once or, as the situation might require, in perhaps two or three steps—the total volume of reserves that could be absorbed in this manner being nearly $4 billion? The disadvantages of a 'once for all' move lay in the fact that the government bond market might run away again under the shock, sales by the banks being heavily supplemented by non-bank sales—weakness being accentuated by the fact that a rise in short-term rates would tend to lower support prices of the shorter bonds into line with a new rate curve involving, in addition, greater uncertainty. In the ensuing turmoil the creation of bank reserves might be much greater than 4 billions and tightness in the market be lost. Raising of reserve requirements *and* a rise in short-term rates are, at a time of bond-support, not quite compatible instruments. However, having pleaded for such powers, one was perhaps bound to use them quickly and the circumstances of the late summer, combined with current forecasts, engendered a sense of urgency. In the middle of August the Treasury announced an increase of ⅛ per cent., to 1¼, on one-year securities commencing with the refundings of mid-Sep-

[1] This proposal runs headlong into constitutional argument about State's rights and 'our dual banking system'. It makes very little headway politically.

tember. This was characterized by the Treasury as an anti-inflationary move, but Mr. Snyder also said that 'there would be no change in the government's policy with regard to long-term Treasury bonds'.[1] Securities offered in exchange for those maturing were, in September, 1⅜ per cent. eighteen-month notes, and, in October, 1¼ per cent. twelve-month certificates. The former represented some small move towards offering a slightly less liquid security and towards the spacing out of refunding operations. At the same time the yield on savings notes (non-marketable) was raised in line with the higher market rates. The Reserve Banks, in their turn, raised the Discount Rate to 1½ per cent., and on 8 September the Board announced an amendment to Regulation D whereby reserve requirements at all member banks were increased by 2 per cent. against demand deposits and 1½ per cent. against time deposits. This was made effective in two stages, 16 September for country banks and 24 September for the remainder (i.e. reserve and central reserve city banks), and left a further 2 per cent. against demand deposits 'in hand' (4 per cent. in New York and Chicago).[2] In spite of the decision not to use the whole supplementary power (4 and 1½ per cent.), the market reverted sharply to conditions of the previous winter.

Reference has been made to the incompatibility of changes in reserve requirements with attempts to tighten the market via rising short rates, manipulation of the open-market account, and the general inculcation of uncertainty. It has been suggested that reserve requirements might only be changed in some emergency. It is sometimes suggested that September 1948 was hardly such an emergency. For, granted the need to absorb reserves autonomously supplied, the fiscal position did not deteriorate to anything like the degree imagined at any time during

[1] *Report of Secretary of Treasury*, fiscal year, 1948–9, p. 74.

[2] *Annual Report of Board of Governors of the Federal Reserve System*, 1948, p. 91.

1948–9. There was, admittedly, a cash deficit of two billions. But the Treasury met this, for the most part, by a reduction of $1½ billion in the general fund balance (raised to unusual heights in the first and second quarter of 1948) and net borrowing of $500 million.[1] If the cash position was, thus, good, the debt operations were very much better. The Treasury acquired a net $3·3 billion by sale of savings bonds and savings notes, and a further $2·6 billion by sales of special issues to the trust accounts. With this $5·9 billion, only $0·5 billion went into current expenses while $5·2 billion were used to retire marketable debt (the remaining 0·2 went in payments to international institutions). Of this 5·2, a large part, admittedly, had to be used to pay off the percentage of each maturity which holders demanded in cash rather than exchange for a new issue. This amounted to just over $2 billion for the year and may be offset against 'funding' (of a sort) into savings bonds. With the remainder ($3·2 billion) the Treasury was able to retire $2·7 billion of Reserve Bank investments and a $500 million bond issue besides. Even the reduction in the general fund *need* not have been met from the Treasury account at Reserve Banks but from the tax and loan accounts. Neither does the Treasury position appear to have deteriorated seasonally. During July and August there were available in part, for monetary purposes, the proceeds of the savings-bond drive of the former month ($1·2 billion net): this, together with the resultant of other receipts and payments, enabled a further $900 million of bills held by the System to be retired during the two months. In September there was a large cash surplus, most of which went into tax and loan accounts, while a further $100 million of bills were retired early in the month. What might be called 'fiscal pressure' on the banks was thus relaxed in September; presumably owing to the raising of reserve requirements.

However, the fiscal outlook in September cannot have

[1] *Treasury Annual Report*, 1948–9, pp. 61 ff.

been strong enough—the amount of restraint anticipated from that quarter insufficient—nor the Treasury attitude to short-term rates (which might have been raised to 1½ or 1⅝ per cent.) liberal enough for the Board in view of the current supply of reserves and the anticipated demand for bank credit (i.e. very heavy). Such considerations, added to some faith in 'reserve requirements in themselves', outweighed the disadvantages. The record of July and August, in the matter of bank reserves, was not, indeed, encouraging. Liquidation of Treasury bonds reemerged on a substantial scale as resources were shifted further into mortgages and other private securities. Reserve Banks bought $1,575 million of bonds in two months (the majority in the second month), insurance companies selling over $800 million and 'others' about $500 million: selling by banks was negligible. Together with gold imports, $1·8 billion of reserves were thus supplied to the market. Aided by currency outflow and other minor factors, the retirement of bills held by the System withdrew $1·14 billion of the above.[1] The System managed to sell $400 million of short-term securities, mainly to non-bank investors (but this development, while encouraging, was as yet too recent to be regarded as permanent). The rest ($300 million) went to support a higher level of deposits and some increase in excess reserves. Bank loans commenced yet another sharp expansion and net demand deposits at member banks in the first half of September averaged $78·8 billion as compared with $77·1 billion in the first half of July.[2] It seems, therefore, that the System was unable fully to offset its purchases of bonds, the banks being permitted to expand loans without being forced to

[1] The Treasury held its account with Federal Reserve Banks close to the 2-billion mark until September, when, during the period of reserve ratio change, the account was drawn down somewhat.

[2] Demand deposits 'adjusted', i.e. 'net' less interbank and U.S. government deposits moved up 1·2 billions. Loans of weekly reporting members increased 355 millions in July and Aug., but, exclusive of the decline in security exchange loans, increased 807 millions.

sell liquid assets in order to obtain the necessary reserves. In short 'neutrality' had suffered a defeat. In these circumstances, without benefit of hindsight, a use of supplementary powers was perhaps justified, regardless of inherent merit. The results, were, however, not particularly gratifying.

Initially, the effects were slightly better than we have indicated likely. The banks did not obtain the extra $2 billion of required reserves entirely by selling bonds, but parted, instead, with a substantial amount of floating debt. Selling by non-bank investors, however, of longer-term government bonds accelerated significantly during the month, possibly for fear that a repetition of 'Christmas Eve 1947' was in the offing. But, during September, such non-bank investors, along probably with those who had lost short-term investments through the compulsory cash retirement of a small 2½ per cent. bond issue maturing 15 September, reinvested substantial sums at short-term—thus easing the burden on Reserve Banks and moderating the rise in bank deposits arising from non-bank liquidation of government securities. In October the position was not nearly so good. Sales of Treasury bonds by non-bank investors to the System continued at much the same rate as in the previous month, while commercial banks themselves continued to sell long and buy short. This time there was no 'fiscal' pressure on bank reserves, and no increase in legal requirements: neither were non-bank purchases of short-term securities, though extremely helpful, sufficient to offset by themselves the effect of purchases by the Federal Reserve in support of the bond market. In consequence, the reserve position of member banks was extremely easy: but rather than allow excess reserves to mount up, member banks quickly invested such reserves in short-term securities bought from Reserve Banks; with short-term rates of 1¼ per cent., 'full investment' was worthwhile. Since short-term securities in the hands of the banks constituted, in fact, a form of excess reserves, this development must be regarded as a defeat for the System,

unless it is asserted that the banks bought short *in preference* to expanding their loans. Though there may have been some tendency of this sort the volume of bank buying in so short a period is too great to be explained this way. The fact was, given uncertainty concerning government bonds, there was no other use for such reserves—for in October the *demand* for bank loans fell abruptly. Just why, was not clear. However, to return to the market, the change in ownership of government securities and the change in yields during these two months was as follows:

A. CHANGE IN OWNERSHIP OF MARKETABLE GOVERNMENT BONDS

Sept.–Oct. 1948

$ millions *Source: Treasury Bulletin*

	31 Aug.–30 Sept.	*30 Sept.–31 Oct.*
U.S. Government agencies and trusts	0	0
Federal Reserve Banks	+1,480	+1,665
Commercial banks	−769	−525
Mutual savings banks	−243	−142
Insurance companies	−548	−420
Others	−377	−577
TOTALS	+1,480 −1,937	+1,665 −1,664

Discrepancy in September totals is due to the loss of 450 millions of short-term bonds retired (none of which was owned by Reserve Banks).

B. GOVERNMENT AND OTHER BOND YIELDS

July–Dec. 1948

Selected daily averages, per cent. *Source: Federal Reserve Bulletin*

	Treasury 3–5-year yield	*Treasury 7–9-year yield*	*Treasury over 15 year*	*High-grade corporate**
31 July	1·59	1·99	2·44	2·82
4 Sept.	1·66	2·04	2·45	2·84
23 Oct.	1·71	2·06	2·45	2·84
27 Nov.	1·69	1·99	2·44	2·84
31 Dec.	1·63	1·92	2·43	2·76

* U.S. Treasury series.

C. CHANGE IN OWNERSHIP OF TREASURY BILLS, CERTIFICATES, AND NOTES

Sept.–Oct. 1948

$ millions — *Source: Treasury Bulletin*

	31 Aug.–30 Sept.	*30 Sept.–31 Oct.*
Federal Reserve Banks	+366	−2,028
Commercial banks	−1,362	+1,056
Government agencies and trusts	+30	+20
Mutual savings banks	+88	+31
Insurance companies	+295	+22
Others	+240	+511
TOTALS	+1,019 −1,362	+1,640 −2,028

Discrepancy in September totals accounted for as follows:

Treasury bills retired	200 millions
Short-term securities not exchanged for new offer	142 ,,
	342 ,,

Discrepancy in October totals accounted for:

Incomplete exchange	388 ,,

D. PERCENTAGE YIELD ON TREASURY BILLS AND CERTIFICATES

July–Dec. 1948

Selected daily averages — *Source: Federal Reserve Bulletin*

	3-month bills	*9–12-month certificates*
31 July	0·997	1·10
4 Sept.	1·076	1·17
23 Oct.	1·120	1·23
27 Nov.	1·150	1·22
31 Dec.	1·155	1·22

The effect of these shifts on member bank reserves was as follows. In September the Reserve Banks put into the market, as a result of general purchases in support of the market, approximately 2 billions of reserves: and together

with minor factors, gold flows, and a reduction in the Treasury balance with the System of $260 million, a total of over $2,500 million was supplied. $250 million were withdrawn by retirement of bills and currency outflow. Reserves actually increased by $2,300 million, of which $2,000 million represented increased legal requirements, $200 million a rise in excess reserves, and $100 million the base for a further rise in deposits. In October the System put $1,650 million of reserves into the market by purchases of bonds and together with other factors over two billion were supplied. The System withdrew 2 billions by sales of short-term securities and a further $250 million were lost by other factors—mainly a rise in non-member deposits. There was thus a net decline in reserves of $250 million—required reserves increased $50 million and excess reserves declined $300 million. As previously pointed out, the System was, in fact, somewhat powerless in October and one may suppose that if the expansion of loans had continued at a rate comparable to that of the previous year, reserve requirements on demand deposits might have been raised the remaining 2 per cent., unless the Treasury had assisted by repaying debt to the System.[1]

In spite of the fact that the operations of these two months were conducted against a background of steadily rising short-term rates, the maintenance of uncertainty, and a further lowering of, for example, the prices of 3–5-year Treasury bonds in consequence of rising short-rates, it is doubtful if this aspect of restraint was effective. It was indeed generally vitiated by the vast operations of September and October. That being so, the *kind* of uncertainty which movements of short-term rates could usefully induce—of the type which might slow down sales of bonds by non-bank investors—was not possible. The situation is

[1] The fiscal position was weak in October but the balance in tax and loan accounts adequate to extinguish at least 500 millions of reserves via repayment of bills.

somewhat analogous to the use of 'bank-rate' by European central banks under the 1925–31 Gold Standard. The technical consequences of raising short-term rates were of little use if confidence in the whole future of the exchange rate, or, in this case, of government bonds, remained weak. Manipulation of interest rates 'within $2\frac{1}{2}$ per cent.' require a proper market; in the autumn of 1948 there was not a proper bond market. As a bribe, however, to induce *wider* investment in floating debt, the rise of short-rates is independent of these 'confidence' factors and, since the summer of 1947, had undoubtedly been of use to the System. Non-bank investors increased their holdings of marketable government securities maturing within one year by over $\$2\frac{1}{4}$ billion between, for example, June 1947 and December 1948, although holdings of Treasury tax and savings notes (an offset) declined by $900 million. In the same period, outstanding marketable floating debt (of twelve-month or less maturity) declined from a total of $62 billion to one of $49 billion. Whereas in June 1947 the Reserve Banks held over 90 per cent. of outstanding Treasury bills, in December 1948 they held barely 40 per cent. To some extent these figures reflect a switching from longer-term assets on the part of investors who should never have been holding long-term assets in such volume in any case; but judging by future developments it also represented the investment of idle balances and the reduction in bank deposits which the System desired.

But both the 'switching' suggested above and the large-scale selling of bonds for investment of funds elsewhere, the latter movement being the cause of so much trouble, were steadily removing from the market two of those factors, noted on pp. 206–7, which had militated against its 'settling down' in October 1947. By the close of 1948, government bonds comprised under 30 per cent.[1] of the assets of life insurance Co's compared with about

[1] See Chapter XV, p. 207.

43 per cent. in mid-1947,[1] and similar reductions must have occurred elsewhere (in the 'others' category): the great period of institutional selling was, it was hoped, drawing to a close, while the bulk of speculative sales had occurred in the stampede of December–February 1947/8. The third factor mentioned—the rapid progress of inflation—was also drawing to a close and, with it, one source of the constant need to monetize the public debt. Further, the ability and willingness of the monetary authorities to put a floor underneath bond prices had been fully tested. Thus although the struggle to avoid the gratuitous creation of bank reserves during this period of bond-support had been hard and not always entirely fruitful, the conditions now emerging were more propitious for successful management—provided that inflationary pressures in the future were relatively moderate.

We have already referred to the abrupt falling off of loan expansion in October 1948. Commercial, industrial, and agricultural loans at weekly reporting member banks increased only $150 million in October compared to $350 million in September, while average net demand deposits at all member banks in the second half of October were only $260 million above the average for the second half of September.[2] In part, perhaps, a consequence of 'restraint' by commercial banks (voluntary or induced), this change in the demand for bank loans was due, mainly, both to the use of alternate sources of new credit supply and to reduction in aggregate new credit demand. The former was represented by the sale of new issues to non-bank liquidators of government securities, and, in some cases, the repayment of bank loans with the proceeds. The latter was due to record profits in 1948, to moderation of price increases, and to some increase in other private savings.

[1] It was estimated that insurance companies had lent, over and above the increase in premiums, $3·2 billion with funds obtained from sale of government securities Oct. 1947–Oct. 1948: *Federal Reserve Bulletin*, 1948, p. 1458.

[2] The increase in same period in 1947 was 990 millions.

But of any definite recession which might be associated with these latter factors there was, as yet, little further sign.

Prices in many lines had eased slightly, but they had done so before since 1945. The Consumers' Price Index fell to 173·6 in October from a post-war peak of 174·5 in August and September, but this was entirely due to a drop in the component food price index from its July peak of 216·8 to 215·2 in September and sharply to 211·5 in October. Wholesale prices, however, had moved more significantly. The index reached its peak in August (169·5) and fell to 165·2 in October. Besides food there were declines at wholesale, in textiles, hides and leather products and building materials, but further increases in, e.g. metals, chemicals, and house furnishing goods. Industrial production continued to rise, the adjusted index reaching 195 in October from 186 in July. The adjusted index of factory employment rose similarly from 159·8 (1939 = 100) to 162·8, but was slightly down from the September peak of 163·3. Average hours worked per week in manufacturing industry in October (40·0) were slightly above the July figure, while average hourly earnings were up over 3 cents from $1·332 to $1·366. From the side of production and employment, except for some weakness in textiles, there was thus little sign of coming trouble, while prices were neutral in their behaviour. As for slightly longer-term talismen, October was not the time of year for publicized introspection, reviewing of investment plans, &c. In exports the further outlook, with Marshall Aid, seemed to indicate some temporary stability superseding the decline of 1948, while the projected increase in Federal expenditure gave exactly the same indications as during the inflation scare of the previous July.[1] Trouble,

[1] The stock-market, a battered talisman, had drifted slowly downwards after a brief burst of enthusiasm (due in no small part to the working of the Dow speculation system) in the early summer. This in spite of higher share earnings. But it would be wrong to credit Wall Street with special prescience. The market was disturbed by political fears (internal and

when it came, came from the consumer, who failed, despite increasing disposable income, to increase the volume of his purchases as much as expected. This development made itself felt in October, but although causing some perplexity, it was not considered serious, Regulation W notwithstanding[1] (perhaps the weather was too warm for shopping), and stocks began to mount in preparation for the Christmas season. The Federal Reserve System saw no reason, as yet, to abandon restraint and reverted in November to a use of Treasury funds for restraining purposes while also taking advantage of a revival of the bond market.

external) and, ever since 1946, had been waiting to see what a post-war deflation would be like before attempting to bring prices more into line with dividends.

[1] Rate of expansion of instalment credit showed no immediate decline that could not be accounted for by a pre-control rush.

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THE ONSET OF RECESSION, NOV. 1948–APRIL 1949

THE slackening of demand for commercial loans, which first became noticeable in October, continued throughout the remainder of 1948, and was quickly joined, in November, by a complete reversal of conditions in the government bond market: selling gave way speedily to buying on the part of all investors (other than Reserve Banks) save insurance companies, who continued to sell government securities of all maturities but on a much reduced scale. This development continued in the new year. It was caused by two or three main factors. Firstly, the reaction was, in a sense, speculative. The shakeout of bond ownership had gone too far, and many investors were waiting only for some added assurance, against risk of capital losses, before buying in. This reaction was pushed on, as buying developed, by the knowledge that the System was now pegging the market in the reverse direction and might not continue to do so if the business situation deteriorated markedly, or would not be able to do so if its holdings of bonds began to get low. The second main factor, which must further have accentuated the first, was that commercial banks rapidly regained confidence in the prices of Treasury bonds and, especially in view of declining demand for loans, not to mention the effects of progressive 'shortening' (with the passage of time) of their government-security portfolios, began once again to purchase bank-eligible bonds. If short-term rates were held steady, the re-emergence of a pattern-playing phenomenon, given the shape of the current rate curve (Chapter XVII, p. 229), was a certainty as soon as confidence was restored. Capital gains on Treasury bonds

were once more in the offing. The third factor is associated with some drop in mortgage demands, the growth of pension funds, and a decline in the supply of new issues[1] —the latter being due to a fall in the requirements of business for new capital, itself a consequence both of record profits in 1948 and of reduced investment projects (including inventory requirements) for 1949. The increased liquidity of businesses, together with the reduction in corporate taxes in 1948, also tended to increase demand for government bonds by such businesses. There was, in short, a change in speculative liquidity-preferences, a change in commercial banking policy, and a change in the direction of savings flows—partly for institutional reasons (i.e. pension funds), and partly for reasons associated with the abatement of inflationary pressure. Meanwhile the demand for short-term securities also changed, but only as regards the banks (who were now interested in bonds). Non-bank investors on balance maintained, during these months, their short-term holdings while, within that category, corporate investors increased their holdings.

With the market on its feet the Reserve System was able to maintain restraint on bank reserves—which were themselves liberated in the New Year by deflation of deposits—and, by use of Treasury funds, apply further pressure. Thus, from 18 November to 6 January, a further $500 million of bills owned by the System were repaid by the Treasury, and from 17 March to 7 April another 600 millions, while on 1 February and 1 March maturing certificates, totalling in all $488 million, were similarly repaid. During the same period the Treasury had to pay out 864 millions in incomplete exchanges, much of which was, on balance, reinvested in other government securities. In addition to fiscal pressure, open-market operations of the System further absorbed bank reserves freed by a reduction in deposits and supplied by currency refluxes,

[1] Producing, as it did, a rise in corporate, &c., bond prices and narrowing of the spread between Treasury bonds and high grade private securities.

and also enabled the Treasury account at Federal Reserve Banks to be reduced to more normal levels without unduly easing the reserve position. These operations began in mid-November, coincident with the resumption of the repayment of bills, as liquidation of bonds ceased and the market rebounded 'technically'—given a fillip no doubt by the victory of the Administration in the November elections, a political result favouring the continuation of the policy of support: fears of a change of Administration, a change anticipated by almost everybody except one man, and of a reversion to more 'orthodox' monetary policies, had contributed to nervousness of bond prices in the previous months. From 100·7 on 6 November the average price of 'over fifteen-year' Treasury bonds rebounded to 100·9 on 20 November, whereupon the System began selling, pushing the average to 100·76 on 27 November. Similarly, the 7–9-year yield went from 2·08 per cent. to 1·95 and back to 1·99, and the 3–5-year yield from 1·72 per cent. to 1·67 and back to 1·69. The bill rate continued to increase gradually while the certificate yield remained steady or declined slightly. The Reserve System *sold* $55 million of bonds in the three weeks ending 1 December, while weekly reporting member banks bought $36 million. From this modest beginning the System was able to sell Treasury bonds persistently throughout these months, to a total of 2 billions. The policy seems to have been to permit a rise in the prices of bank-eligible bonds and restrain such a rise on the longer issues: presumably because a future fall in the prices of bank-eligible bonds, in event of further inflationary developments, was desirable (involving losses), while the current rise did no harm. A rise in price of the longer issues was not desired owing to the encouragement such a rise gave to switching into other debt instruments, and also because the System desired to sell as much as possible in order to keep up pressure on bank reserves. The strength of the market was such that the System could sell sufficiently heavily on the long side

while permitting a fall in yields on the short side without relaxing restraint to any significant degree. Thus the yield on 'fifteen-year and over' fell to 2·38 per cent. by March (from 2·45 in October) and was held there (average price approximately 101·65) while the 7–9-year yield was allowed to fall steadily from 2·05 per cent. (October) to 1·77 (April)—the 3–5-year yield behaving similarly. Mean-

A. CHANGE IN OWNERSHIP OF MARKETABLE GOVERNMENT BONDS

Nov. 1948–April 1949

$ *millions*	*Source: Treasury Bulletin*
Government agencies and trusts	+14
Federal Reserve Banks	−2,023
Commercial banks	+816
Mutual savings banks	+182
Insurance companies	−452
Others	+892

Federal Reserve −2,023
The rest (net) +1,456

The discrepancy in these totals is due to loss by 'the rest' of over 500 millions due to conversion of 2 per cent. bonds into 1¼ per cent. certificates on 15 December.

B. CHANGE IN OWNERSHIP OF TREASURY BILLS, CERTIFICATES, AND NOTES

Nov. 1948–April 1949

$ *millions*	*Source: Treasury Bulletin*
Government agencies and trusts	+49
Federal Reserve Banks	+76
Commercial banks	−1,762
Mutual savings banks	−195
Insurance companies	−337
Others	+271

Federal Reserve +76
The rest (net) −1,974

The discrepancy in the latter totals is due to the retirement of bills and certificates held by the System ($1,588 million), the incomplete exchange of maturities by 'the rest' (864 millions), and a gain to 'the rest' of over 500 millions due to the 2 per cent. bond conversion. Market purchases by the Federal Reserve are estimated thus: 1,588+76 = 1,664, while market sales by 'the rest' are estimated at 1,974 less retirement losses (864) plus conversion gains (519) = 1,629.

while, in order to evade a recurrence of dumping and increase the attractiveness of bills to investors, the bill rate was allowed to move gradually upwards from 1·14 per cent. (October) to 1·16 in March, but permitted to decline in April. There seems to have been a deliberate attempt to produce price movements of a bewildering character for 'rate curve' experts and, apart from other considerations already mentioned, ward off the threat of pattern-playing that was ever present if the government-bond market was buoyant and short-term rates none too flexible.

The net change in ownership of the marketable public debt during the period was as shown in the tables on the previous page, the System selling $2,000 million of bonds and buying about $1,650 million of 'shorts'—a net contractive effect of 350 millions on bank reserves and a greater contractive effect on bank deposits (depending on net sales to non-bank investors).

The total movement of bank reserves was as follows:

SUPPLY AND WITHDRAWAL OF RESERVES

November 1948–April 1949

Source: Federal Reserve Bulletin

Withdrawn	$ *millions*
1. Federal Reserve net market sales of government securities	359
2. Retirement of securities held by Reserve Banks	1,588
3. Other withdrawals: decline in borrowing and 'other' Federal Reserve credit, rise in 'other' and 'non-member' Federal Reserve accounts: net	435
TOTAL	$2,382
Supplied	
1. Gold inflow	328
2. Currency return flow	760
3. Decline in Treasury Federal Reserve account	626
TOTAL	$1,714

The estimated net reduction in reserves during this period was thus $668 million—the actual recorded reduction was $660 million, required reserves declining 556 millions and excess reserves 104 millions.

This process looks, superficially, similar to that of the previous winter with the addition of small net sales by Reserve Banks which might be explained by the reduction in required reserves (inducing purchase by banks of securities from the System). The difference lies in the fact that if the fiscal surplus had not been available, open-market operations would, nevertheless (judging by the magnitude of bond sales by the System), have been sufficient to mop up all reserves freed by the reduction of deposits and supplied autonomously, while yet leaving the banks scarcely more liquid than in October. As it was, by use of both fiscal surplus and market operations, the banks were deprived of their newly freed or supplied reserves and forced to sell government securities on balance as well. Further, they were tempted to buy Treasury bonds at increasing prices, in exchange for 'shorts', their confidence being utilized to reduce their liquidity. 'Liquidity' was, as we have seen, an extremely volatile concept where a banker's view of Treasury bonds was concerned, and it was the policy of the System to utilize this volatility for central banking purposes. *In fact* the basic liquidity of the banks was scarcely affected so long as the 'cheap-money' era continued, but the more the banks bought bonds at premium prices (within reason) the more they could be involved (by System action) in paper losses in the future and thus restrained from reselling. But, it may be noted, this policy was possible only now that the System had itself a balanced portfolio: when it only had short-term securities (mostly $\frac{3}{8}$ per cent. bills) and was bound to a fixed-rate pattern far more illogical than that now prevailing, commercial-bank investment policies were wholly pernicious in inflationary circumstances. That the System had a balanced portfolio which it was able to *use* was not simply a feature of recession: it was quite consistent with milder inflationary conditions and firmer debt ownership than prevailed in 1946–8.

The reduction in net deposits of member banks,

sufficient to release $600 million of reserves, was approximately 2·5 billions, of which about 1 billion (estimated from reporting member bank returns) was due to a decline in outstanding loans, and the remainder to fiscal/debt operations and net market purchases of government securities by non-bank investors, offset in part by gold and currency flows. This will be referred to later when the development was more complete.

The heading of this chapter is 'the onset of recession'; by April it became clear that the recession was a fact of economic life justifying abandonment, to some extent, of credit restraints and, as it turned out, the conversion of the System into a strong expansionary force. What considerations led to this conclusion?

We noted previously some disappointment at the level of consumers' demand in October 1948. This disappointment was not due to unseasonal weather or political concentration but, as it turned out, to a more serious change in the behaviour of consumers' demand, a change which had been developing surreptitiously throughout the summer. The reasons for this change—a clear case of personal expenditures on consumer goods refusing to rise with an increase in income, cannot be examined in detail. Two varieties of reasons may be put forward: firstly, with the income distribution existing in 1948, both between consumers themselves and between consumers and corporations, &c., the satiation of post-war demand rapidly became a *fait accompli*, at least in the sense that maintenance of the rate of growth in aggregate consumption was not possible. The productive machine, however, seems to have been geared to just such a rate of growth. Consideration of the survey[1] of Consumer Finances shows that the holdings of liquid assets by the lowest income units were significantly depleted and, more important, that the newly formed units had almost no liquid assets. Considerable shifting around of such assets may indicate that many

[1] *Federal Reserve Bulletin*, 1949, p. 896.

of those who were inclined to draw on savings rapidly had done so. Increased consumption of, at least, durable goods was thus dependent to a greater extent on favourable instalment credit terms. After September 1948 such terms may not have been available (reaction to the relaxation of terms in 1949 lends plausibility to this). Restraint upon durable consumption reacts, according to preferences, upon non-durable consumption as people are forced to 'save-up' for, e.g. a car, rather than buy, e.g. a new pair of shoes. Reduction in consumers' demand for many goods, or rather its failure to increase, may also be associated with excessively high construction costs and a depressing of demand for new houses—for with houses go a host of consumers' goods. These suggestions have some plausibility, but it must be remembered that early post-war demand, particularly in a country of such advanced standards of consumption and rapid growth as the U.S.A., is subject to all kinds of irregular fluctuations, replacement cycles, and changing fashions whose marginal importance may outweigh the factors we have mentioned and, after a prolonged period of inflationary pressure, be quite sufficient to induce a speculative cycle in inventories. The second suggested reason, which applies more to a secondary stage, is a swing of price expectations of consumers, as soon as retailers begin to show signs of distress, leading to postponement of purchase. The greater the freedom from want, the greater this effect may be. The Survey of Consumer Finances declares that consumers were extremely price-conscious in the post-war years and tended to be highly discriminating in this matter.

The effect of this failure of consumers' demand to fulfil producers' hopes was to engender a severe 'accelerated' reduction in inventories, associated with some working of the acceleration principle on fixed investment, and a sharp but not severe reduction in prices. It was several months before the situation became clear, i.e. the decline

completely general, and it was not at first realized that 1949 was to be different from, for instance, the 1947 'reaction'. Having battled so long with inflationary forces, the authorities were not keen to dismantle 'restraint' and take drastic action against 'deflation' unless a major recession appeared likely. A minor recession was, in fact, welcomed as a 'healthy readjustment' which was a very small cost for a 'free economy'. When it became clear, by February, that some readjustment *was* in progress, the monetary authorities again hesitated (possibly with an eye to the automaticity of Federal compensatory spending) before deciding that the recession was large enough to permit abandonment of restraint without unduly encouraging subsequent inflationary pressures. In March and April they did not hesitate to abandon 'restraint' and instead attempted to steer a completely central course.

By the end of February the index of factory employment (adjusted) had declined from 162·8 in October to 153·5 (in durable-goods industries from 188·7 to 178·3 and in non-durable-goods industries from 142·3 to 133·9). Corresponding indexes of manufacturing production declined as follows: total index 202 to 196, durable-goods industries 231 to 226, non-durable-goods industries 179 to 173. 'Industrial production' (i.e. the above plus mineral production) declined from 195 to 189. Average weekly hours worked also declined fractionally, but weekly earnings per worker hardly at all. Total non-agricultural employment (adjusted) declined 1,186,000, of which 768,000 was accounted for by manufacturing industry, and, even, 50,000 by 'construction'. Unemployment (not seasonally adjusted) rose from 1·8 millions in October to 3·2 millions in February. The price-declines we noted in October continued through the winter and spread generally. It was recognized that a substantial shake-out of stocks was in progress although, at the base of things, steel production was not yet affected and, at the other end, the automobile industry (alone, save for television, among durable

consumers' goods) experienced no slackening of output.[1] From the monetary viewpoint we have already noted both the accelerated decline in commercial loans, due now to inventory liquidation as well as other factors, and the strong demand for government securities. This performance was paralleled to a significant extent by the behaviour of consumer instalment credit—whose rate of expansion before Christmas was much slower than in the previous year and whose seasonal slackening in the first quarter of the year became an absolute decline instead of a modest increase.

MONTHLY CHANGE IN CONSUMER INSTALMENT CREDIT OUTSTANDING

Winter 1947–8 and 1948–9

$ millions *Source: Federal Reserve Bulletin*

Month	*Total instalment credit*	*Automobile sales credit*	*Total instalment credit*	*Automobile sales credit*
	1947–8		*1948–9*	
November . .	+270	+52	+89	+33
December . .	+423	+52	+278	+39
January . . .	+30	+51	−175	+4
February . . .	+63	+52	−86	+31
March . . .	+278	+13	+88	+19
Total outstanding (end of March) . .	6,498	1,367	8,428	2,105

This change was itself paralleled by a sharp drop in department-store sales of 'major household appliances'[2]—in the first three months of 1949 such sales were 36 per cent. (by value) below those for the first quarter of 1948, while aggregate department-store sales (by value) were

[1] Though possibly of retail demand: automobile manufacturers put great pressure on their retailers (with threat of loss of agency), in such circumstances, who are forced to build up stocks.

[2] i.e. washing machines, &c. Radio, television, &c., sales were *up* 22 per cent.—television being completely recession-proof at that time, due to its novelty.

6 per cent. lower. The drop in sales of major household appliances had appeared in October 1948, but the general fall in sales, as compared with a year previously, only became definitive in the first quarter of 1949.[1]

But, in spite of these indicators, the full force of the inventory cycle was not yet felt—accumulation ceased in the first quarter of 1949 according to the national income statistics—there being some lags in the process, whereby stocks built up 'further back' while others were being run down, before the level of production adjusted itself to changed conditions of demand. From April to July the contraction was much faster.

Signs of a recognition of a 'return to normal' were admitted by Secretary Snyder in a speech to the American Association of Bankers on 14 December 1948,[2] in contrast to his more 'anti-inflationary' speech to the National Association of supervisors of state banks on 22 September.[3] Mr. Snyder professed, however, to see a difference between minor changes in the activity of what he called a 'high-level economy' and the fluctuations of a 'business cycle'; this distinction being made on grounds that a 'business cycle' could be largely traced to speculative excesses, notably in real estate, and to financial (banking) instability, both of which were absent in 1948 (the latter due in some degree to the policy of stabilization in the government-bond market). The budget message of Mr. Truman, delivered in January 1949, provided for increased Federal expenditure in 1949–50 (partly defence expenditure, partly social security, education, &c.) and on the revenue side was apparently based on estimates that did not envisage a decline in national income: further, he demanded a tax increase of $4 billion (on profits, estates, and surtax) which would give him a *budget* surplus of over 3 billions. But it is very

[1] *Aggregate* consumption, in the national income accounts, derived some compensating support from the persistent rise of expenditure on services.

[2] *Treasury, Annual Report*, 1948–9, p. 317.

[3] Ibid., p. 314.

difficult to take these messages at their face value, political tactics having so important an influence at the margin—and, regardless of such considerations, fiscal estimates projected six to eighteen months ahead in so volatile an economy are necessarily so hazardous that conservatism is no doubt the only course. Moreover, predictions of a substantial deficit based on the automatic unbalancing of the budget which a recession would bring about (by reduction of revenues and increased expenditure on social security and agricultural support) might have the adverse effects on business confidence familiar in the 1930's.

Chairman McCabe submitted a statement to the Joint Committee on the Economic Report, on behalf of himself and the Board, on 14 February 1949.[1] The Chairman pointed out the excellent facilities possessed by the System for economic diagnosis and forecasting and admitted that a 'readjustment' was in progress, but at the same time was prepared to consider that this might prove no more serious than that of early summer 1947. That being so, he requested extension of the supplementary powers over member-bank reserves granted the previous summer, and enactment of the full '10 per cent. and 4 per cent.' power then demanded, besides the usual demand for the application of a uniform system of legal reserves for the entire commercial banking system. The Board also requested a reprieve for Regulation W. The extension of the temporary powers over reserve ratios was demanded as an insurance against some future time when reserves would be supplied in familiar fashion and when no fiscal defence was available. 'Let me emphasise', he said, 'that we have not used the temporary authority merely because we were given it. We have only used a part of it, cautiously and with discretion, to meet a specific development.' '. . . we should be prepared to deal with problems that would arise if reserves increase significantly. That is why adequate continuing authority is needed to require banks to hold supplementary

[1] *Supplement to Federal Reserve Bulletin*, Feb. 1949.

reserves in the form of balances at the Reserve Banks.' He concluded:

I would be the last to want government to have power and authority merely for the sake of having power and authority. In the complex and fluid monetary field, however, the timeliness of policy moves is of critical importance. That is why the Board believes that in the interest of a stabilised progressive economy, it is essential that our monetary machinery be prepared in advance to adapt itself to changing economic needs.

The System, one need hardly say, got none of its demands: they were soon brushed off and temporarily forgotten as the System 'adapted itself to changing economic needs'—i.e. to deflationary tendencies.

In late February the Board and the Open Market Committee began to consider a prompt change of tack. On 1 March the latter met and as usual renewed the authority given to its Executive Committee to 'effect transactions in the System account'. The Committee still directed that *stable* and orderly conditions should be maintained in the market, but inserted the phrase 'in the light of changing economic conditions' before 'general credit situation of the country'. This granted some discretion to relax 'restraint' and at the same time not revert to full 'easy money'.[1] On 2 March the Board of Governors met and, pursuant apparently to understandings reached with the Open Market Committee the day before, proceeded to a liberal relaxation of Regulation W (instalment credit), Mr. Eccles dissenting. The maximum maturity on all listed articles was raised to 21 months from 15–18, while the minimum down-payment was reduced to 15 per cent. from 20 per cent., except in the case of automobiles where 33 per cent. was retained. In view of the situation in the retail trades (doubtless vividly portrayed by visitors to the Board and Reserve Banks) and the uncertain outlook, the Board felt justified in taking this action.

[1] See *Annual Report of Board of Governors*, 1949, pp. 110–11.

On 28 March the Board voted to reduce margin requirements on stock-market trading to 50 per cent. from 75 per cent. The Board gave little reason for this action other than abatement of inflationary pressures. It should be remembered that a requirement of 50 per cent. was 'normal' and a higher percentage only justified in special conditions. But in so far as Wall Street might be given a boost by this action, it was timely—not only for purely anti-cyclical reasons concerning the financing of business investment. The fact was, as has been mentioned before, that sometime or other, failing substantial slump, the market would have to move upwards in order to narrow the very wide spread that had developed since the end of the war between yields on first-class equities and yields on first-class bonds. This 'spread' has been attributed to a variety of factors. The first group concern the 'institutionalization' of savings (their being channelled into hands either forbidden by law to invest in common stocks or unlikely to do so by established prudence) and the reluctance of small investors remote from the money-centres to buy stocks, due to ignorance of the market and the highly coloured tradition of stock-market debauchery. While such factors are undoubtedly important and would hinder any large volume of equity financing, the fact remains that Wall Street is very much dominated by speculative forces of great sophistication. Thus the second set of factors concern speculative gambling theories, ideas of 'normal' prices (rather than yields), and a deep-seated pessimism, born of the inter-war years, which regarded post-war profits as temporary. Such 'systems' and feelings seem to have offset any desire on the part of investors to hedge against post-war inflation by investment in equities (those who did so, either in 1942 or 1947–8, are now well rewarded), or to combat high taxation by high yield. These feelings were no doubt confirmed by the Wall Street slump of 1946 (due to special post-war monetary factors), and the broad course of stock prices since that date was mainly a

reflection of long-run pessimism and the operation of the various speculative 'systems' employed by the devotees of Wall Street.[1] Be that as it may, there is a limit to 'spreads' between yields beyond which some pull must be exerted as between bonds and equities. Once under way, the 'systems' would ensure a long bull market. If this had to occur, better to start it off during recession than wait for it to start itself. Wall Street, in fact, began its ascent in July 1949 and seldom looked back thereafter—post-war pessimism being exorcised by the mildness of the recession and the liberality of dividend payments. But this argument, though of importance, is subsidiary to those of a 'return to normal' and of the desirability of giving some official indication that the credit situation was easier.

The general developments of November to February continued through March and April. The index of industrial production fell more sharply than hitherto, from 189 in February to 179 in April,[2] while non-agricultural employment declined 430,000 and average hours worked per week in the manufacturing industry declined a full hour to 38·3. Under pressure of declining investment and inventory liquidation, steel output was now curtailed, and only the automobile industry withstood the general trend. Construction contracts awarded for residential building were running appreciably below the 1948 level and only partly offset by increases elsewhere (e.g. public works and utilities). Department store sales in April were better than in 1948, due to a re-emergence of demand for non-durable goods, but the poor demand for household appliances and furnishings was even more pronounced than previously (sales of 'major household appliances' in April

[1] Some 'informed opinion' I have questioned on this matter adopts what might be termed a 'cynical Keynesian' view of stock prices, saying they reflect nothing whatever beyond the resultant of gambling systems. But, as is usually the case with opinions of this sort, outside factors are admitted to exert a 'pull'.

[2] Durable-goods industries 225 to 212. Non-durable-goods industries 173 to 162.

were 47 per cent. below those in April 1948). The price indexes declined moderately, save the cost-of-living index which moved up slightly—due to some rebound in food prices and increased rent and fuel charges.

In view of this situation the Reserve Board voted (unanimously, on 22 April 1949) for a further relaxation of Regulation W.[1] The maximum maturity on all listed articles was raised to twenty-four months and the minimum down-payment on all listed articles save automobiles was reduced to 10 per cent. The 33 per cent. requirement on automobiles was retained. Shortly after this, on 28 April, the Board also voted to reduce member bank reserve requirements, effective 1 and 5 May for non-reserve city banks and other banks respectively. Requirements against demand deposits were reduced 2 per cent. for New York and Chicago banks and 1 per cent. for the remainder, while requirements against time deposits were reduced a uniform ½ per cent. This was calculated to release approximately $1,200 million of reserves. The action 'was taken in furtherance of the Board's policy of adjusting all of its credit regulations in accordance with changing economic conditions and the credit requirements of the current business situation'.[2] The adjustment of instalment credit terms, to a now very liberal condition, on articles whose sale had weakened considerably and whose supply was adequate, needs little comment; its effects may be examined later. The reduction in reserve requirements depends for its effect upon liquidity reactions already characterized as dubious and, but far more important, upon the open-market policy that accompanied it. This policy was not yet fully reversed from restraint, as we shall see in the next chapter.

[1] *Annual Report of Board of Governors*, 1949, p. 103.
[2] Ibid., p. 104.

XXI

THE RESERVE SYSTEM VERSUS THE RECESSION, MAY–SEPT. 1949

§ 1. *A middle course. May–June 1949*

AFTER taking the various decisions noted in the previous chapter, the authorities tried for a time to follow a middle course. They thus permitted an increase in the liquidity of member banks but avoided a rise in the price of long-term government securities which would otherwise have resulted from the freeing of bank reserves, from the stabilization of short-term rates, and from the demand for government securities by non-bank investors. Open-market sales held down the prices of long-term Treasury bonds while the price of the bank-eligible issues was permitted to rise—encouraging a switch into loans or other investments and rendering (for future purposes) the banks potentially slightly less liquid in the process. This policy was not permanently tenable, as increasing pattern speculation would eventually exhaust the System's holdings of long-term bonds, but for several months it could be pursued without anxiety. However, by the end of June the economic situation was thought to demand a strongly expansionary monetary policy: the System then proceeded to adopt such a policy, the more willingly because to allow the market to boom, rather than be forced to watch it boom, was to retain initiative (both present and future). Reserve requirements came down automatically on 1 July when the supplementary powers lapsed, and on the same date Regulation W once more passed out of existence. Stability in the whole market was abandoned and yields on all maturities allowed to decline sharply under pressure from commercial banks and others. In August and September reserve requirements were

again reduced, and it can be said that every practicable possible inducement was, by then, accorded to lenders to lend money to private borrowers. In the autumn, however, the System's prognostications changed round to an inflationary character and there was begun a long process of 'tightening'.

The 'middle course' policy, which lasted for two months, can be regarded in terms of what could have been done in 1945–6 (or was done earlier in the war) if the System had then possessed an adequate bond portfolio. The release of reserves induced a strong demand from commercial banks for all bank-eligible government securities, the demand for bank-eligible bonds being slightly stronger than the demand for bills or certificates. The System sold short-term securities freely, medium-term securities gingerly, and long-term securities with determination. As of old, non-bank investors sold out their holdings of bank-eligible bonds to commercial banks and bought longer with the proceeds or with newly accrued surplus funds. They bought such bonds either from insurance companies, who were still selling, or from the System who thereby cancelled deposits created by the banks and drew back reserves. Over the two months the System sold an estimated $1 billion of Treasury bonds and 700 millions of bills, certificates, and notes, but the figures are misleading because the next reduction of reserve requirements, which properly belongs to the next period, occurred in part on 30 June. Meanwhile, all fiscal pressure ceased and, possibly in order to avoid pressure upon bank reserves arising from stabilization operations on the long-term market, the Treasury account at Reserve Banks was drawn down (for ordinary expenses) $550 million during two months to the low working figure of 440 millions, on 30 June, while the tax and loan accounts were maintained at an aggregate 1½ billions on average.

The resumption of 'pattern-playing' of a modified form, encouraged by retention of the 1⅛ per cent. certificate rate

and an effective ceiling on the bill rate of 1·155 per cent., as well as by the release of $1,200 million of reserves, can be seen from the following table for the month of May:

CHANGE IN OWNERSHIP OF GOVERNMENT BONDS

May 1949

$ *millions* *Source: Treasury Bulletin*

	Government agencies and trusts	*Federal Reserve Banks*	*Commercial banks*	*Mutual-savings banks*	*Insurance Co's.*	*Others*
1–10-year bonds (49 billions outstanding)	−33	−223	+468	−134	−18	−60
Over 10-year bonds (54 billions outstanding)	−3	−303	+71	+149	−105	+191

7–9-year average yield week ending	30 April	1·76%
,, ,, ,, ,,	28 May	1·70%
Over 15 year ,, ,, ,,	30 April	2·38%
,, ,, ,, ,,	28 May	2·38%

The credit policy that was pursued at this time did not actively *dis*courage credit institutions from holding government securities on balance, though it may have encouraged (could not avoid doing so) a shifting about of securities by dispelling uncertainty regarding the rate curve or even creating expectations of a downward shift of that curve. Liquidity of commercial banks was restored or improved —both by increased holdings of short-term assets, by reduced commercial loans, and by inculcation of 'certainty' —and as regards the flow of reserves the System was neutral. Credit became easy but not aggressively so, and this 'easement' might only offset the rise in a banker's feeling of caution towards new loans which uncertain general economic conditions usually engender. When over 40 per cent. of total assets are government securities

traded in a basically stable market and a further 25 per cent. are legal reserves, cash assets of various kinds, and other non-risk items, banking liquidity is much more a subjective notion which the central bank attempts to influence rather than an objective fact which can be significantly altered over a short period. During these months the authorities felt that no pressure should be put upon bank reserves and no feelings of 'illiquidity' engendered: the banks could go ahead and expand loans if they wanted to, but they could obtain, meanwhile, a good return on riskless short-term investments. As for non-bank investors, they were perhaps encouraged to buy long rather than short, but they were neither discouraged, by capital losses, from selling government securities nor encouraged, by capital profits, to do so. This is the kind of thing that might be meant by 'passivity' of a central bank—it is not a 'lazy' policy nor is it often feasible.

Inspection of the actual figures of bank reserves, debt ownership, and related items during this period, is hampered by the fact, already mentioned, that end of month figures are affected by operations which concern the next period. Reference to member-bank investments, &c., estimated in the Federal Reserve Bulletin for 29 June, seems to show that the entire quantity of reserves released in May was invested in securities sold by the System (directly to banks or indirectly via the long-term market), namely, about $1,200 million. This is in contrast to the previous period when fiscal pressure was used, in conjunction with open-market sales, to prevent the banks from increasing fully their portfolios in response to liberation of reserves (due then to contraction of deposits). This time, in alignment with changed policy, full reinvestment was allowed while fiscal operations and gold flows (amounting in all to $750 million) were allowed to swell bank reserves (and deposits) in order to offset the contractive effect of stabilizing operations at 'the long end' (which amounted to over $500 million). The net deposits of member banks changed

very little over the period, loans only declined a net $120 million, while other investments increased $200 million and the operations of the central bank were approximately neutral.

While the reduction in reserve requirements was treated 'neutrally', the relaxation of the selective controls also represented an abandonment of 'restraint' rather than a deliberate expansionist policy. Partly in response to the changing impact of Regulation W, instalment credit began to increase rapidly once more—by $258 million in May and $234 million in June, compared with $196 and 192 million in the same months of 1948. This increase over 1948 appears to have been due in the main to increased credit on sales of automobiles (automobile production reached a new peak in June), but is reflected also in department store sales of, e.g. household appliances, which recovered slightly from depression of the first quarter. On 30 June the control of instalment credit ceased and with it the collection of certain detailed information without which the appraisal of the effect upon demand of changes in credit terms is not possible. Fortunately, by early relaxation of Regulation W, the Board's staff were able to obtain some evidence of the above type before their powers disappeared. Conclusions and evidence were published in the *Bulletin* of December 1949 in an article by Mr. M. Moss. The evidence shows that the relaxation of instalment credit terms is quickly passed on to the consumer by finance companies, banks, &c. The question to be asked is; did this relaxation widen the market? Did buyers come in on the most favourable terms who would not otherwise have come in at all, or did those who would have bought, anyway, simply take advantage of easier terms? From the published evidence it would seem that while many of those who bought on instalment credit during this period could afford to buy on terms much less liberal than the Regulation permitted, the percentage of those who actually did buy on the most lenient terms increased significantly. The

argument is that if 'those who could have bought anyway' had simply taken advantage of more liberal terms, then the proportion of contracts signed *at the legal limits* would not have increased (unless one can show a sudden worsening of the financial position of consumers and at this time, over so short a period, one cannot). Thus one can at least infer, from the fact that this proportion did increase, that the evidence is consistent with a widening of the market[1] and a presumption that the relaxation of terms in March and April appreciably, and *rapidly*, affected the demand for durable consumers' goods, especially automobiles.

In the stock-markets, the use of credit by brokers and dealers for the purchase or carrying of securities other than government obligations increased appreciably in April, while use of such credit by 'others' did not. The credit outstanding at weekly reporting member banks for account of brokers and dealers, of the above category, increased from an average of about $400 to 450 million in September–March 1948–9 to one of between $600 and 700 million in the ensuing six months. Meanwhile, the market was distinctly bearish and injection of additional credit may have prevented a steeper decline than was actually the case. The index of industrial common stock prices (Standard and Poor Corporation 1935–9 = 100) fell from an average of 124 in April and May (127 in January) to 116 in mid-June on a low volume of trading.[2] But this bearishness did not last. No substantial selling developed. The business outlook was, by midsummer, improving, and, since corporate dividends were maintained or increased, yields of over 7 per cent. on 'blue chip' industrials[3] began to look wrong. In the subsequent bull

[1] For detailed analysis of this, see M. Moss, *Federal Reserve Bulletin*, Dec. 1949, p. 1442, 'A study of instalment credit terms'.

[2] Average daily volume 808,000 shares in June compared with 878,000 in April and 938,000 in July. Typical daily volume in 1950 was over 2 millions and in week ending 1 July (Korea) was 3,420,000.

[3] Moody's '125 Industrials'; average yield June 1949 = 7·2 per cent.

market[1] lower margin requirements were of assistance, credit outstanding growing by a further 600 millions, but the action of March 1949 did not unchain a market that was straining at the leash. Meanwhile, in the depressing market atmosphere of these months, common stock floatations were no more attractive than they had been since the end of 1946.

Meanwhile the recession deepened rapidly. Secretary Snyder, however, personally adopted a policy of refusing to use such a word to describe the situation. He seems to have done so for good reason. Since there were such marked contrasts between the current downturn and many previous downturns—favourable contrasts—prominent men in economic life could best help to maintain business confidence by emphasizing such a contrast and even changing the form of language usually used to describe downturns. Thus, when addressing the Executive's Club of Chicago on current business developments,[2] 8 April 1949, he referred to evidence that 'we are entering to-day on a new period of reappraisal in our domestic economy'. This seems to mean a period of 'readjustment'—the idea being that there was a slight change in an array of great opportunities. Some immediate needs had been fulfilled and now the greater, longer-term, opportunities could be grasped—the more easily because the nation had never been financially more sound (citing liquidity of individuals and businesses and stability of government-bond prices). But he warned against 'undue credit expansion, speculative buying and other excesses that might *precipitate a business recession*' (italics mine). 'Recessions' evidently arose from 'excesses'; reappraisals and healthy readjustments were different and of the natural order of things. On 26 May Mr. Snyder addressed the National Association of Mutual Savings Banks on 'Public debt management in promoting a stable economy'.[3]

[1] Index of common stock prices was 158 in June 1950 and has since moved higher.

[2] *Treasury Annual Report*, 1948–9, p. 326.

[3] Ibid., p. 329.

In 1931 [he said], the economic outlook was dark. And we know now that the natural forces of recovery were helpless to operate in the environment which had been created by the speculative excesses of the boom period. . . . Each of the recessions in our business history has been featured by heavy liquidation of speculative accounts; and the absence of this feature to-day is, to my mind, the most striking element of contrast with previous periods.

He went on to review the role of debt management—the maintenance of confidence in the credit of the United States Government by keeping stable bond prices, the use of fiscal surpluses and other funds to repay debt to the banking system in a manner most suited to the credit situation, and the encouragement of savings during inflationary periods by aggressive selling of savings bonds.

But to others the situation was, as usual, not quite so free from anxiety. In spite of the fact that the current downturn was mainly due to liquidation of inventories, the satisfactory level of fixed investment could very soon deteriorate, and it would not have to deteriorate much before recovery from the inventory slump would be only a partial recovery for the country as a whole. The year 1949 might end well but 1950 see a further reduction in national income and a relapse into stagnatory decline. Consumers' demand in the aggregate was well maintained, but increased consumption of services marked a decline in expenditure on goods. Regardless of the expected fiscal compensation, the authorities evidently decided, by the end of June, that the risk of inflationary pressures was sufficiently remote and the dangers of stagnation (at least) sufficiently near that an aggressively expansionary general credit policy (along with abandonment of the most important selective control, abandonment which the authorities could not in any case prevent) was opportune. The index of industrial production fell to 170 in June (and preliminary estimates became available before the end of the month), while unemployment rose (partly seasonally) to 3·8 millions, and factory employment declined a further

287,000 from the April figure. The index of wholesale prices declined a further 2½ points between April and June. The housing industry was not yet beginning its leap forward and the lone eminence of the automobile industry could scarcely be regarded as an adequate 'prop'. Thus, when the supplementary reserve requirements expired on 30 June, the 'middle course' was abandoned.

§ 2. *Aggressive Easy Money. July–September 1949*

On 28 June the Open Market Committee met to decide the policy to be adopted, in the light of the current economic situation, towards the anticipated renewal of very strong demand for government securities due to the imminent reduction in reserve requirements. In the meantime discussions had been going on with the Treasury concerning interest-rate policy in the present and future. The result of these discussions was embodied in a now famous press release. As to whether the Treasury agreed or acquiesced is not clear.[1] The release ran as follows:

> The Federal Open Market Committee, after consultation with the Treasury, announced today that with a view to increasing the supply of funds available in the market to meet the needs of commerce, business, and agriculture it will be the policy of the Committee to direct purchases, sales, and exchanges of government securities by the Federal Reserve Banks with primary regard to the general business and credit situation. The policy of maintaining orderly conditions in the government security market and the confidence of investors in government bonds will be continued. Under present conditions the maintenance of a relatively fixed pattern of rates has the undesirable effect of absorbing reserves from the market at a time when the availability of credit should be increased.

In its formal directive to its Executive Committee,

[1] The statement simply refers to 'consultations'. The Board's *Report*, 1949, p. 114, says that the Board expressed a view to Mr. Snyder. It does not say whether Mr. Snyder agreed as a matter of permanent policy—he was unlikely to object at the time.

the Open Market Committee simply substituted the words 'orderly conditions in the government security market' for 'stable and orderly . . .' and agreed that the $800 million of newly freed reserves should be 'allowed to make themselves felt' in the market. The statement above was heralded by many as a return to 'flexibility' of interest rates and an abandonment of rigidity *either way*—a development obviously of momentous importance in the recent history of central banking in the U.S.A. It was quite obvious, however, that the real test of its importance would not come until inflationary pressures re-emerged and 'flexibility' meant a raising of rates—perhaps only a very slight rise, but 'par' would inevitably be threatened, and then what? Would the Treasury even acquiesce in the kind of flexibility that the System might desire in the short-term market? Mr. McCabe was very closely questioned on this point by Senator Douglas when the former testified, in the autumn of 1949, before the 'Sub-committee (of the Joint Committee on the Economic Report) on monetary credit and fiscal policies'. Mr. McCabe said that the decision was acceptable to the Treasury and 'the announcement reached by mutual agreement'. Further remarks may be quoted: in answer to questions as to whether the agreement applied to the future as well as to the present (the market was strong in November 1949 when testimony was given), Mr. McCabe said:[1]

> The acid test of relationships and even of partnerships, Senator, comes when you have to meet a critical situation in the future. I am going on the assumption that this was an agreement made by men of understanding and goodwill and that it means what it says.
>
> SENATOR DOUGLAS. That is not a statement of policy for an indefinite period of time. I think it is somewhat indefinite in language; but certainly, whatever it means, it does not mean the two bodies are bound forever.
>
> MR. McCABE. To the Federal Reserve, it means flexibility.
>
> SENATOR DOUGLAS. That in periods of inflation the interest rate will

[1] See published hearings of the Sub-Committee, p. 494.

be increased and, if necessary, the prices of Government securities depressed?

MR. McCABE. That the Open-market operations will be flexible.

SENATOR DOUGLAS. Flexible both ways?

MR. McCABE. And that we will conform to the economic situation with which we are confronted.

SENATOR DOUGLAS. You will have flexibility both ways?

MR. McCABE. Both ways.

SENATOR DOUGLAS. Do you think the Treasury so understands it?

MR. McCABE. That is my understanding. The Treasury understands this: that they have the final decision on fixing the rate on any refunding of Treasury obligations. We so recognize that they have this final decision and that when they announce a maturity—the refunding of a maturity—they determine the rate.

For some reason Mr. Snyder was not specifically questioned on the 'agreement' referred to by Mr. McCabe, but he did say that the 'Treasury Department has never taken an inflexible position in reference to interest rates. We just have to keep a careful watch on interest rates fluctuating too rapidly one way or the other.' Too *rapidly*, be it noted, not too *much* or too widely, but too rapidly. Whether Mr. Snyder intended it or not he thereby disclosed the fundamental point of disagreement: for it was always the System which wanted to change the rates some time before the Treasury could be persuaded to agree—or rather, before the Treasury would agree to a *higher* rate: there is no record of disagreement in the reverse direction. Discussion of the press release of 28 June 1949 is important, not only because the change of policy inherent in it is most significant, but because it gives some additional understanding of why, when the agreement *was* put to the 'acid test' (i.e. in a crisis), the System broke loose from its recognition, as Mr. McCabe had put it, 'that when they (the Treasury) announce a maturity—the refunding of a maturity—they determine the rate'.[1]

[1] By use of open-market powers the System forced a market rate higher than the refunding rate set by the Treasury in Sept-Oct. 1950, the System itself footing the 'underwriter's loss' on the Treasury issue.

Having made this decision the System proceeded to step out of the government-bond market altogether, and, for practical purposes, stayed out of it for nearly six months, allowing bond prices to move freely but retaining some influence over them by its operations in the short-term market. Short-term rates fell abruptly at first, but were not allowed to fall to levels of the early post-war years.

However, before telling the 'market story' of these few months, it is necessary to leap ahead slightly, record another decision of the Board, and complete the 'debt ownership' and 'bank reserves' story of the period. On 5 August both the Board and the Open Market Committee met again to consider the general credit situation. The forecasting mechanism of the System had, by then, decided that the upturn of the inventory cycle could not be long delayed but that the outlook for 1950 was still one of slight further general decline or, at least, of failure to expand consistently with a growing labour force. This forecast, in its first part, was very accurate; the adjusted index of industrial production fell a further 8 points to 161 in July (a decline of 17 per cent. since November 1948) but rose 9 points in August to 170. It was therefore decided, with an eye to longer-term prospects, to encourage further expansion by the banking system (whether by loans or investments) through the medium of a further reduction in reserve requirements. Since this would reduce requirements at Reserve City and Country banks below the statutory maximum (those for New York and Chicago were already below it), it also gave the System some room for future manœuvre—advantage of this being taken in January 1951.

In order to ease the impact of the reduction in reserve requirements upon the market, and in an attempt to use this weapon in a less blunt fashion than hitherto, the reduction in requirements was made in six separate stages and spread over a period of four weeks. By the end of

the four weeks, requirements for all member banks against demand deposits were down 2 per cent. and against time deposits 1 per cent.: the announcement of 5 August included the entire programme for the month. Changes in reserve requirements during our whole post-war period are now summarized below:

Source: Federal Reserve Bulletin

Date, &c.	*Per cent. required against net demand deposits*			*Per cent. required against time deposits*
	Central Reserve City banks	*Reserve City banks*	*Country banks*	*All member banks*
Statutory maxima under Law of 1936:	26	20	14	6
1. In effect 1/1/48 . . .	20	20	14	6
2. Effective 27/2/48 . .	22	20	14	6
3. ,, 11/6/48 . .	24	20	14	6
Statutory maxima under Law of 1948, expiring 30 June 1949:	30	24	18	7½
1. Effective (two stages) by 24/9/48	26	22	16	7½
2. Effective (two stages) by 5/5/49	24	21	15	7
3. Effective 1/7/49 . . .	24	20	14	6
1. Effective (after 6 stages) 1/9/49	22	18	12	5
Statutory maxima under 1936 Law:	26	20	14	6

The new reductions were estimated to free $1·8 billion of member-bank reserves: the question then arose, under the 'flexibility' policy, as to what effect this should be allowed to have on the market. The Open Market Committee decided that to allow full pressure of bank demand to be felt in the short-term market would simply depress rates to very low levels that would only prove temporary. If the System wished to depress rates it could do so when it so chose by open-market operations against a background of

market strength. The purpose of reducing reserve requirements was not, in the first instance, to depress rates but to provide the banks with greater lending power. Pending their finding outlets for this power they should be provided with short-term securities from the System's portfolio, but, be it noted, only with short-term securities if the banks wished to bid Treasury bonds away from non-bank investors they were free to do so and encouraged to do so. Agreement between the Board and Committee was registered, requirements reduced, and short-term securities sold freely by the System. The results of the earlier flexibility decision, of the reduction in required reserves on 1 July, and of the further decisions noted above, are partly revealed by the statistics shown on the following page.

These tables need some explaining. The change in ownership of *all* bonds is affected by conversion operations of September 1949 when $1,293 million of bonds were partly refunded into certificates. Since the Federal Reserve Banks were entirely out of the bond market we are interested only in the changes of ownership elsewhere: from the figures of change in ownership of 5–10 and over ten-year bonds July-September and 1–5-year bonds July–August the process is plainly visible. Commercial banks continued to buy from non-bank investors, some of whom bought longer with the proceeds, on balance, and some of whom reduced their bond portfolios and, in all probability, invested the money elsewhere. Insurance companies generally reinvested entirely elsewhere, while 'others' were supporters of the long-term government market. These movements are much smaller than we have been accustomed to, but nevertheless represent—the System being out of the market—an expansion of bank credit consequent upon relaxation of 'restraint'. This expansion is further visible in the short-term market. In spite of an increase in outstanding certificates ($1,014 million), renewed net Treasury borrowing on bills ($780 million), and large sales by the System, commercial banks

seem to have swallowed the lot and bought substantially from non-bank investors as well. The fact that non-bank investors were willing to disgorge short-term securities in such quantities[1] is due to the fact that non-marketable

CHANGE IN OWNERSHIP OF MARKETABLE TREASURY BONDS

30 June–30 Sept. 1949

$ millions *Source: Treasury Bulletin*

	All bonds	*1–5 year (July and Aug. only)*	*5–10 year*	*over 10 year*
Government agencies and trusts	+6	0	−1	+12
Federal Reserve Banks	−242	0	0	0
Commercial banks	−190	+214	+106	+90
Mutual savings banks	−88	−2	−30	−15
Insurance companies	−435	−94	+17	−198
Others	−344	−116	−92	+111
Total bonds outstanding = −1,293 millions				

CHANGE IN OWNERSHIP OF TREASURY BILLS, CERTIFICATES, AND NOTES

30 June–30 Sept. 1949

$ millions *Source: Treasury Bulletin*

Government agencies and trusts	+1
Federal Reserve Banks	−1,090
Commercial banks	+3,425
Mutual savings banks	−18
Insurance companies	−17
Others	−503
Total certificates outstanding	+1,014
Total bills	+780

[1] From estimates of System holdings of September maturities, it seems that Federal Reserve Banks sold directly or indirectly 1,330 millions to commercial banks. The latter gained approximately 500 millions by bond conversion and bought 780 millions of new bills from the Treasury. Non-bank investors gained approximately 270 millions by conversion but sold 810 millions to commercial banks, a net loss of 540 millions.

savings notes were now attractive relative to bills—such investors thus tended to shift into savings notes at this time and to unload their Treasury bills on to the banks. Savings notes outstanding increased over $2 billion in this period, about $800 million of which was thus new bank credit—as was the increase in the bill issue.[1] The budget deficit was substantial in July and August but insufficient to absorb the full amount of Treasury borrowing (including over $1 billion on special issues), and the entire new creation of credit went into the general fund and was dispersed later in the year. The fact that the Treasury could borrow substantially from non-bank investors at short-term on savings notes—a process which continued during the fiscal year—is an interesting example of 'compensatory' finance whereby the government directly borrows the 'hoardings' of business as well as new money from the banks.

Over the whole quarter, reserves were withdrawn by the System (owing to its policy of maintaining an orderly short-term market), by the Treasury (account with Reserve Banks built up again), and by minor factors, totalling $2,190 million, while only $267 million were supplied by gold and currency flows, &c. Bank reserves were thus reduced by over $1,920 million—'required' declining $1,743 and 'excess' $177. But now that restraint has been abandoned these figures are of little interest. It should be noticed, however, that whereas approximately $2·2 billion of reserves were freed by legal action (including 1 July), required reserves only declined $1,740 million, indicating a sharp increase in net deposits. Part of this increase is due to the credit created for the Treasury previously mentioned, part to a small net monetization of bonds, and part to increased loans and 'other investments'. Member bank loans increased $600 million from 30 June to 28 September as did 'other investments' (an unusually rapid growth).

[1] i.e. both were financed by direct or indirect sales of securities to the banking system.

With some offsetting influence from the rise in the Treasury account at Reserve Banks, net deposits at member banks increased approximately $3 billion during the period —absorbing roughly $600 million of reserves. This renewal of monetary expansion, even if partly due to Treasury action, can to some extent be attributed to a credit policy which actively encouraged a movement of funds out of the government securities market. It is time to return to that market.

When the System withdrew, momentarily, from the fray on 1 July, short-term rates fell precipitately—one uses such an adverb, to describe a change of just under ¼ of 1 per cent., with some diffidence, but in the context it is apposite. The Treasury-bill rate was 1·158 per cent. before the change of policy and fell rapidly to an average of 0·923 per cent. for the week ending 9 July. The certificate rate fell similarly from 1·21 to 1·04 per cent. The System appears to have intervened almost immediately in the bill market but did not sell any certificates until after 6 July. Thereafter it sold short-term securities, as required, to steady the market. Both bill and certificate rates fluctuated irregularly around 1 to 1·2 per cent. during the ensuing months,[1] without any noticeable tendency to rigidity. In response to lower short rates and the abrupt cessation of open-market sales of bonds, the price of Treasury bonds rose at once. The average price of 'over fifteen-year' bonds rose from 101·66 before the System's withdrawal to 103·28 for the week ending 9 July and moved gradually upwards through the summer, reaching 103·94 on 24 September (yield moved from 2·38 per cent. down to 2·22 per cent.). Yields on shorter bonds moved similarly, but the figures are misleading owing to changes in the series. A three-year government bond yielded approximately 1¼ per cent. in September compared with nearly 1½ per cent. in June, while a seven-year bond fell in

[1] Treasury refunding in Sept. and Oct. was carried through on a 1⅛ per cent. twelve-month basis.

yield from 1¾ to 1½ per cent.; but, in line with the bill rate, the short bond rates fell abruptly at first and tended to fluctuate irregularly thereafter rather than fall farther.

With these forces acting to move down the yield on the longest government bonds, and to provide existing holders of such bonds with significant capital gains, there appears to have been a rapid transmission of downward pressure to the market in corporate bonds. The average price[1] of high-grade corporate bonds was 100·9 on 25 June, 101·5 on 9 July, 102·3 on 30 July, reached 103·3 in mid-September, and thereafter declined slightly. The reaction on medium-grade issues was slower at first but similar later and with larger reductions in yield. Whether this movement had an effect upon the flow of new issues is difficult to say owing to the fact that investment bankers appear to have miscalculated the official policy. The 'easements' of May 1949 and the maintenance of stability in long-term bond prices were apparently taken as quasi-permanent, for the volume of new corporate, &c., issues in June, over $1·5 billion, was exceptionally large. The market was fed at that time by a spill-over of funds arising from the resumption of modified pattern-playing and from the sale of Treasury bonds by insurance companies, but in the late summer, when conditions were even more propitious, the volume of new issues dropped back to normal levels (i.e. $700 million or so a month). It cannot be denied, however, that the authorities gave every possible encouragement to the capital market and permitted yields on government bonds to drop low enough actively to discourage any institutional support for such bonds (or, indirectly, to encourage existing holders to sell out to banks or to new buyers—pension funds, &c.—who were bound by legal or conventional practice to be substantial buyers of government bonds even at high premium prices). This easement of the credit situation was not an ideal one. The market had never been sufficiently 'tight' before easement and the

[1] Standard and Poor Corporation's series.

whole situation was bedevilled by the manipulation of bank reserve requirements—an aftermath of earlier problems. In spite of the sudden change of policy on 1 July 1949, which had startling effects on the market, it cannot be said that the credit policy of the System at this time was wholly of the type whose possibility was gradually emerging. It is true that by dropping all restraint the authorities allowed the inherently expansionary monetary system complete freedom and, after 1 July, urged it on and gave every incentive to lenders to lend—in this way becoming an 'engine of inflation'. But as an example of quick action to influence the timing and direction of lending it was not good. Restoration of flexibility made such action possible to a degree which the System could never hope to attain before. With flexibility one could move slightly away from the 'neutrality' position and begin to develop a more ambitious policy designed to draw funds into and push them out of the government securities market as the economic situation required without at the same time becoming involved in wide fluctuations of interest rates. Such flexibility became feasible in the market in United States government securities only when ownership of government securities became 'firm' relative to the state of affairs existing early in the post-war period. It was not feasible, as we have seen, when the market was subject to an inherent weakness posed by institutional selling of a quasi-secular type: it became feasible when ownership of government securities became, at the margin (quite a wide margin possibly), a form of 'hoarding', a pool of readily reinvestible resources which could be manipulated by the central bank whose actions were designed to control and affect the liquidity-preferences of marginal ownership.

XXII

'FLEXIBILITY BOTH WAYS': A CAUTIOUS BEGINNING AND A RELUCTANT TREASURY, OCTOBER–DECEMBER 1949

THE credit policy of aggressive ease came up for reconsideration in the autumn, when forecasts began to shift under the influence of revived credit demands and of the sudden emergence of a boom in housing construction which was carrying the number of housing 'starts' to new post-war record levels and bringing in its wake a resurgence of demand for consumers' durable goods (other than automobiles, at peak levels anyway). Taking this in conjunction with the Federal deficit and with forecasts of developments in the private sector additional to those first mentioned, it began to look as though 1950 would see a revival of inflationary pressures rather than a mere 'inventory recovery'.

But what had happened during the summer? It would seem that the level of industrial production reached in July was very considerably below current final demand, so much so that a substantial increase was quite consistent with continued inventory liquidation. Thus, whereas July saw the production 'trough', accumulation of stocks did not begin until the first quarter of 1950—delay in accumulation, or, rather, in ceasing to run down stocks, being due to the 'consistency' mentioned above and to the fact that personal consumption expenditure (in dollars, and more so in physical volume) rose in the third quarter to the level of the fourth quarter of 1948, and in the fourth quarter surpassed all previous post-war records in aggregate,[1] in spite of a drop in 'disposable personal income' of

[1] Comparison with price declines shows some stability in the physical

$6·7 billion over that for the last quarter of 1948. If consumption expenditures in the third quarter were already very encouraging, those for residential housing contracts were even more so:

CONSTRUCTION CONTRACTS AWARDED

[*37 States. F. W. Dodge Corp.*]

$ *millions* — *Source: Federal Reserve Bulletin*

	All construction		*Residential building*	
	1948	*1949*	*1948*	*1949*
June	935·2	949·9	355·3	375·0
July	962·7	947·8	349·7	344·8
Aug.	854·1	911·0	337·6	398·7
Sept.	762·2	1,071·7	279·7	503·5

	Wholesale building materials price index (1926 = 100)
Oct. 1948	203·7
Sept. 1949	189·4

When it is also remembered that the remarkable ability of the American credit system to lend on house mortgage was being given the maximum of encouragement both by Federal credit agencies and by the central bank, these figures are even more indicative of the shape of 1950. 'Inventory recovery' was, meanwhile, general. The adjusted indexes of industrial production, total, durable, and non-durable respectively, rose to 174, 199, and 172 in September, non-durable-goods industries recovering more rapidly than the rest under the influence of stable demand unaffected by fluctuations of investment. In the durable-goods industries, automobile output reached a new peak (Index No. 232, 1948 peak 209), but steel output—the last to be affected by recession—at 179 was still well below the May figure of 204 (February 233), and 'stone, clay, and glass products' were still at a recession low. Manufactur-

demand for non-durable goods, a record volume of durable goods sales, and continued increase of expenditure on services.

ing employment rose by 190,000 from the July 'low' (adjusted series) and unemployment, down substantially from the 4 millions of July, was now 5·3 per cent. of the labour force compared to 6·5 per cent. in July. Average hours worked in manufacturing industry picked up to 39·6 per week in September compared to 38·8 in July, while average weekly earnings increased from $54·67 to $55·72. Meanwhile the fall in prices slowed down or stopped. 'Farm products' continued to decline at wholesale while many other components of the wholesale-price index rose slightly above their July levels—the index of raw material prices falling to 162 from 163·2 and that for 'manufactured products' rising to 150·1 from 149·7. The cost-of-living index moved irregularly, due to fluctuations in food prices, and was the same in September as in June (169·6) but fell in July and August (168·5). In keeping with previous suggestions concerning the role of instalment credit, the total of this type of credit continued to expand, but at a slightly increased pace (287 millions in August, 277 millions in September). While sales credit at department stores still showed a (seasonal) decline from the peak of December 1948, that at furniture and household appliance stores reached new post-war records, as did automobile sales credit—whose increase accounted for nearly half the growth in the total.

With this situation in mind the monetary authorities began to consider whether 'aggressive ease' might not unduly encourage a real estate boom (complete with speculative excesses) and a relaxation of instalment credit terms to a pitch where the level of consumers' demand for durable goods was dangerously dependent upon a burden of debt whose average term might be beyond two years. These considerations were not outweighed by the anticipated effects of the devaluations of non-dollar currencies upon the American economy. The prospect of some revival of moderate inflationary pressures encouraged use of the degree of flexibility now attained (begging the

question of 'par' for the time being): the aim being to forestall excesses of credit expansion as far as possible. This might be difficult enough without the use of selective controls but was certainly worth trying. Thus one moved away from being an 'engine of inflation' towards, at least, neutrality, the first signs of which appear in the 'controversy' between the Board and the Reserve Bank of New York over a proposed reduction in the Discount Rate to 1¼ per cent. This controversy is fully publicized in the Board's 1949 report.[1] It appears that the directors of the New York Bank wished to lower their Discount Rate in mid-September. They wished to do so in order to bring the Rate into line with the market and, perhaps more important, to allow room for future manœuvres—room being already achieved in the market. The Board was reluctant to sanction this change owing to the shift in its forecasts of future economic activity. Consideration was postponed owing to pre-occupation with international affairs and, when the matter was taken up again, the outlook of the authorities regarding 1950 had gone over more definitely to the inflationary side. The New York Bank apparently wished to persist, probably for 'flexibility' reasons, while the Board finally vetoed the Bank on grounds (of some slight inconsistency) that the economic outlook did not require it[2] and that a reduction of the Discount Rate just after the devaluations would indicate that the Board took a gloomy view of the effects that those devaluations would have on the American economy—an indication it did not wish to give.

Nothing further was done to alter the policy of the System until mid-November, and in the meantime the prospect of renewed opposition to 'flexibility', by the

[1] *Annual Report of Board of Governors*, 1949, pp. 107–9.

[2] The wording was most cautious: 'the upturn in economic activity and in credit expansion during recent weeks had been sufficiently general to suggest the possibility of the resumption of inflationary conditions later on, and the situation then existing was not one that needed the stimulation of a lower Discount Rate'.

Treasury, began to loom large—for the latter had now got down to a $1\frac{1}{8}$ per cent. basis for its twelve-month securities and application of 'flexibility' would mean abandonment of this. Meanwhile the whole question of credit policy in general and relations between Treasury and the System in particular was being given public airing by the 'Douglas Committee'.[1] Hearings before this committee began on 23 September and finished, after two intervals of more than a week, on 7 December. (Statements were prepared and submitted to Senator Douglas's Committee, in answer to an able questionnaire, during August and September; public hearings began 23 September.) In this 'airing' the two conflicting agencies attempted, officially, to play down the controversy somewhat and avoid outright rudeness. Chairman McCabe, President Sproul, and President Williams (Reserve Bank of Philadelphia) each admitted post-war differences with the Treasury over short-term rates (all defended bond support), and insisted on the need for flexibility, while emphasizing that co-operation between the two agencies was nevertheless very close. Secretary Snyder generally pooh-poohed the controversy as well, but the battle was joined by the Council of Economic Advisers, who came out in dogmatic support of the Treasury, and by Governor Eccles, who was not in any case accustomed to glossing over the truth for the sake of more subtle methods of warfare. Mr. Eccles not only gave very forthright evidence, but sent a letter to the Committee which directly refuted the impression of friendly co-operation and honest differences among friends given by other evidence:

> The Federal Reserve System was established by Congress primarily for the purpose of determining and carrying out credit and monetary policy in the interest of economic stability and is

[1] Properly: Joint Committee on the Economic Report, Sub-Committee on Monetary, Credit, and Fiscal policies. Chairman: Senator Douglas. Members: Senator Flanders, Congressmen Patman, Buchanan, and Wolcott. Economist to the Sub-Committee: Professor L. V. Chandler.

responsible to Congress for that task. There is a seven-man Board of Governors, appointed for 14-year terms with approval of the Senate. The Board is assisted by an experienced and highly qualified staff of experts. There are 12 presidents of the Federal Reserve Banks, each with a staff of specialists, and each Federal Reserve Bank has a board of directors composed of leading citizens in its district drawn from professional, business, farming, banking, and other activities. There is also the Federal Advisory Council, composed of a leading banker from each of the 12 districts, established by Congress to advise the Board. All of these supply information and advice and many participate in formulation of monetary policies appropriate to the needs of the economy.

Under present circumstances the talents and efforts of these men are largely wasted. Views of the Federal Reserve Board and Open Market Committee regarding debt management policies are seldom sought by the Treasury before decisions are reached. The System, however, has made suggestions on its own initiative to the Treasury in connection with each financing, but very often these have not been accepted. Decisions are apparently made by the Treasury largely on the basis of its general desire to get money as cheaply as possible.[1]

Whatever the truth of the matter, this public airing of inter-departmental dispute was not conducive to peace at that time. It so happened, also, that refunding operations in prospect for 15 December and 1 January (1950) were particularly large. Bonds and certificates matured on 15 December to the value of $5 billion and a further $5·7 billion of certificates matured on 1 January, while in the first half of 1950 there were certificate or bond maturities in every month save May. Thus the Treasury could, by refusing to change its policy, hold the Board to, for instance, 1⅛ per cent. simply because there was no breathing space in which to jack up market rates and present the Treasury with a *fait accompli*. For its part the Treasury had to get in first before the System could, or would, spoil the 1⅛ per cent. market, and if necessary announce its terms prematurely early in any breathing space that

[1] *Hearings*, p. 410. Read by Senator Flanders to Secretary Snyder.

might occur in 1950 (May was one, July–September another). Such a state of skirmish could not and did not continue indefinitely without a battle, but nevertheless seems to have been the case at the close of 1949. For when the System decided in November (apparently) that short-term rates must be allowed to move up in reflection of a tightening of credit conditions, the Treasury at once countered with an opposing suggestion to maintain $1\frac{1}{8}$ per cent. for the time being while issuing, for the December maturities, a $4\frac{1}{4}$-year $1\frac{3}{8}$ per cent. note. This latter proposal, whatever its exact terms, was a recognition that sooner or later the policy of refunding short (hitherto masked by retirements and 'funding' into non-marketable paper) must inevitably render the banking system so liquid and, at low rates, so starved of earnings as to render useless any anti-inflationary credit policies whatever and place the authorities completely at the mercy of the market. By putting out a $4\frac{1}{4}$-year security—a typical 'bank bond', although slightly shorter than many might have desired—the awkward results of refunding short were recognized and, to some degree, avoided for the moment. These notes and another, similar, issue of five-year $1\frac{1}{2}$ per cent. notes, issued in March 1950, were allowed to fall below par during 1950[1]—itself a sign of new conditions under which 'par' began to lose its peculiar significance acquired during the war. But if the Treasury acted, in this matter, in agreement with the System, it refused yet once again to acknowledge the need for higher one-year rates.

Sensing danger, apparently, the Treasury announced, at the end of November, along with the $4\frac{1}{4}$-year note for 15 December, a $1\frac{1}{8}$ per cent. certificate (twelve month) for 1 January—a premature announcement which forced the System either to hold the market until 1 January or let the issue fail. It chose to hold the market. That this was in

[1] i.e. before the general abandonment of par on older issues in Mar. 1951. A $1\frac{3}{4}$ per cent. five-year note was issued in December 1950 after the rumpus of September and October.

direct conflict with a policy of 'tightening' is evident from comments by President Sproul, in a speech to the New York State Bankers' Association on 23 January 1950—quoted by the Reserve Bank of New York in its 1949 report.[1] Thus we leave the two departments no more able to agree on short-term rates than they were in 1946—the only difference being, perhaps, that the Treasury now openly resorted to premature announcement, a sign of weakness, of open warfare and mistrust, in spite of the declaration of 'flexibility' on 28 June 1949.

After all the close co-operation over debt-retirement, Treasury cash balances, bond holdings of government trusts, and the like, this was disappointing. It was again a matter of the Treasury agreeing, later, under pressure or even duress, with what it had denied to previous argument. Of any realization that the maintenance of the short-long distinction between interest rates, with the short lower than the long, required constant tactical freedom in market management unless the whole structure was to degenerate into farce there was no sign from the Treasury whatever. If it did realize it, it did not care—an interpretation of its views which make its grudging concessions simply a sop to opposing opinion given to avoid a serious conflict. It is indeed curious that agreement proved impossible, since, over the long period, the Treasury hardly stood to lose even where debt service charges are concerned. It seems, however, that the Treasury did not trust the intentions of its opponents—a feeling with which one can have much sympathy, whether the mistrust was deserved or whether it was not.

This set-back affected a policy which originated in late November 1949. The Executive Committee, which handled the open-market account, had decided, in accordance with the flexibility directives of 25 June and 5 August, and in view of changing conditions, to permit a firming of short-term rates. But since these soon came up

[1] *Annual Report of Federal Bank of New York*, 1949, p. 27.

to the 1⅛ per cent. twelve-month point little could be done. The decision was informally approved by the full Committee on 22 November, and ratified by a formal meeting on 5 December. At the latter meeting, however, the Committee gave in to the Treasury and tartly stipulated that a policy of 'mild restraint within the limits imposed by the necessity of supporting a 1⅛ per cent. one-year rate' should be followed. Seasonal influxes of funds after Christmas were to be offset by open-market sales in order to prevent any decline in interest rates. The System was, so far, moving with great caution—no attempt being made as yet to force down long-term bond prices by open-market sales in that market. The attempt to raise short-term rates, very gradually, was made in order to change the feeling of the market, to change it from slackness to tightness—a change in System buying policy being felt at once by the dealers who constitute the government-securities market. Such dealers would find the System a reluctant buyer and a willing seller, find prices tending to decline and themselves required to look hard for buyers. This atmosphere would be transmitted to the money-market banks but probably no further, while member banks in general would not find their reserve positions quite so easy. Non-bank investors would find short-term securities a little more attractive, and their expectations about the future course of interest rates would change marginally—inducing some hesitation to commit funds 'longer'. Uncertainty would emerge, perhaps not very widespread, but enough to weaken the picture of a fixed 'rate curve'. In short, the 'engine' was to be slowed down: this is the significance of a rise in the short-term rate of ⅛ of 1 per cent., a trivial enough rise but one reflective of changed market conditions. It was the first step—a further rise in short-rates and an attack on government-bond prices would be the next.

This change was felt in the bill market—the bill rate rising from 1·052 per cent. to 1·108 in the week ending

26 November, and averaging 1·097 in December. The rate on 9–12-month certificates was already at about 1·10 per cent. and could not move up significantly without endangering the Treasury market.[1] In the remainder of the government-securities market there was little significant change of direction, and the upward path followed since 30 June was continued. The yield on bonds 'fifteen years and over' fell to levels previously witnessed only in the acute phase of 'pattern disruption' of early 1946. The average yield on such bonds fell from 2·22 to 2·19 per cent., '7–9-year' bonds followed suit as before, while '3–5-year' bonds were relatively steady—if Secretary Snyder could float a $4\frac{1}{4}$-year issue at $1\frac{3}{8}$ per cent. and raise one-year money at $1\frac{1}{8}$ per cent. there was little room, short of completely certain conditions, for any further reduction of 3–5-year yields. Corporate bonds continued to follow the government market (fed from it as they were)—the yield on Moody's Aaa bonds reaching 2·58 per cent. in December (2·71 in June) with Baa at 3·31 (3·47 in June). The flow of new bond issues was not heavy, but the new low level of rates and buoyant market prompted a resurgence of refunding issues in substantial volume—$1 billion in the period August to December 1949 compared with $\frac{1}{2}$ billion in the preceding seven months. Investment bankers again either miscalculated or ran out of clients—new issues in the first half of 1950 were substantial but by that time the System was trying to force the market down. The stock-market continued to rise under the influence of factors already mentioned and the increasingly favourable prospects for 1950. The index of common stock prices rose to 133 in December (129 in September, 118 in July), industrials reaching 140 from the midsummer low of 124. But new issues of common stocks did not yet increase significantly as a proportion of

[1] Certificate rate statistics are for a '9–12'-month average, the twelve-month rate being slightly higher, and in this case nearer to the 1·125 per cent. of the Treasury's January offering.

total new issues: this was, however, partly due to a much higher proportion of State and municipal issues in the total. As a proportion of corporate new issues, common stocks did increase.

To return to the banking system; the picture of bank reserves, debt ownership, and deposit expansion was little changed from that of the summer, but the events of December were obscured by the considerable refinancing operations of that month and by sales of short-term government securities by non-bank investors for purposes of tax payment. This latter occurrence, along with the maintenance of $1\frac{1}{8}$ per cent., enabled member banks to withstand the seasonal drain on reserves without, on balance, parting with securities to the System—non-bank investors did the work for them. So well did they do it that the Treasury account at Reserve Banks had to be built up to absorb those reserves created by non-bank sales to the System that were not already absorbed by currency outflows. If the System had not been committed, and known to be committed temporarily, to $1\frac{1}{8}$ per cent., then commercial banks might have been willing to buy from non-bank investors: as it was they apparently preferred to wait, while the System was left to absorb these seasonal sales by maintaining a market for the 1 January Treasury financing.[1] No 'tightening' is feasible under such conditions where the market can, in fact, make a fool of the authorities. But if December is thus obscured, October and November are clear (see Table A on the following page).

During these two months one can also discern an extremely active bill market—non-bank investors added to their holdings of Treasury bills by $600 million and reduced their holdings of certificates by $450 million, either in response to expectations engendered by the higher bill rate, or else because available certificates did not carry

[1] During December 1949 ownership of government securities by 'others' declined by $1,500 million, while ownership by Reserve Banks increased by $1,200 million.

the exact maturity desired by such investors. This market in bills was to develop further in 1950, when it became very clear that the Treasury bill was ceasing to be a 'commercial bank' instrument and becoming primarily a *non-bank* instrument for investment of temporary funds: the 'bank' short-term security was becoming, as before, but for different reasons, the certificate or short bond and note. This is one aspect of the attempt to place floating debt outside the banking system on an increasing scale. We have noted the progress of this before (Chapter XIX, p. 278) and can report further progress in 1949 (Table B). That this development was due in some degree to a growth in corporate liquidity may be true, but it was none the less an important achievement of debt management and reasonably attractive short-term rates.

A. CHANGE IN OWNERSHIP OF GOVERNMENT BONDS, OF MATURITY OVER TWELVE MONTHS

Oct.–Nov. 1949

$ millions *Source: Treasury Bulletin*

	1–5 years	*5–10 years*	*over 10 years*	*Total over 1 year*
Government agencies and trusts . .	−1	−3	+14	+10
Federal Reserve Banks	0	0	−22	−22
Commercial banks .	+123	+105	+29	+257
Mutual savings banks .	−54	−4	−40	−98
Insurance companies .	−44	−40	+4	−80
Others . . .	−24	−58	+17	−65

B. OWNERSHIP OF GOVERNMENT SECURITIES MATURING WITHIN ONE YEAR, BY 'OTHERS'

$ millions *Source: Federal Reserve Bulletin*

June 1946 .	14,281
Dec. 1947 .	12,515
Dec. 1948 .	17,288
Dec. 1949 .	18,556

Net deposits at member banks continued the expansion which had begun in the summer, and moved up $2

billion in the last quarter of 1949 to a total surpassing that of the previous December. Of this expansion over 50 per cent. was due to an increase in loans, while the remainder was due to monetization of bonds by commercial banks and (but almost all in December) to liquidation of short-term securities by taxpayers and others, partly offset by currency flows, &c. Owing to the Treasury deficit this latter money found its way out into the economy, together with some new money created during the summer, and the 'private money supply' expanded by the full amount of the increase in deposits. Required reserves of member banks moved up approximately $400 millions, but after some small initial sales to the System, reserves were supplied as we have noted, by the market operations of December.

The general economic situation continued, after the interruptions of a coal strike in October, to follow the pattern of late summer. The indexes of industrial production for total, durable, and non-durable goods industries respectively rose to 179, 203, and 179 in December (174, 199, 172 in September), both steel and 'stone, clay, and glass' advancing from recession levels (they were laggards in September). Average hours worked per week advanced from 39·6 to 39·8, passing the forty-hour mark in durable goods industries, with average weekly earnings in manufacturing industry growing to $56·20 from $55·72. Non-agricultural employment, however, declined nearly 400,000 (seasonally adjusted figure), over half of which was attributable to a decline in manufacturing employment and due, one supposes, to the consequences of labour-saving investment during the previous years. There was also some tendency, revealed in the seasonally adjusted figures, for employment in 'trade' to decline. Unemployment rose slightly to 3½ millions (unadjusted), the force of the above declines in employment not being fully revealed until January and February 1950—unemployment in the later month reaching a post-war peak of 4·6 millions. Construction contracts continued to run high above 1948

levels, and by the close of the year over 1 million 'starts' in housebuilding were recorded. Consumption in the last quarter was at a higher annual rate than ever before—a sharp increase in consumption of durable goods being reflected in an expansion of over $1 billion in outstanding instalment credit. . . . But here we must leave the story: one must leave it somewhere, even though 1950 provided some of the most spectacular economic events of recent history. By December 1949 it was tolerably clear that 1950 would be a year of mild inflationary pressures, even though prices were still declining under the influence of cheaper raw materials and lower production costs. The recession was over but the economy was also adrift from many special post-war stimuli, and advancing into a period where a phenomenal rate of house-building and an equally phenomenal (and partly complementary) level of durable consumption, both financed by the easiest of easy credit terms and dependent on them for their continuance, were the principal stimuli to capacity levels of production. Soon it would be necessary to think of something else.

The recession was most valuable experience for the Reserve System, enabling it to get out of the hyper-defensive position typical of the earlier periods and to reconsider, in a change of atmosphere, its purposes and functions. It enabled the System to adopt a policy of aggressive ease whose immediate consequences, as regards the expansionary bias of the government-securities market, could be shown even if its effects could be disputed. The merits of flexibility *downwards* could be used to demonstrate the futility of too much lack of it *upwards*, and the whole subject publicly disputed in such a way that the System's aims might be better understood. After seeing what sort of policies, expedients, problems, and methods were typical of these years, after examining what it was that the central bank did, of what kind of things central banking nowadays may consist, it is time to conclude.

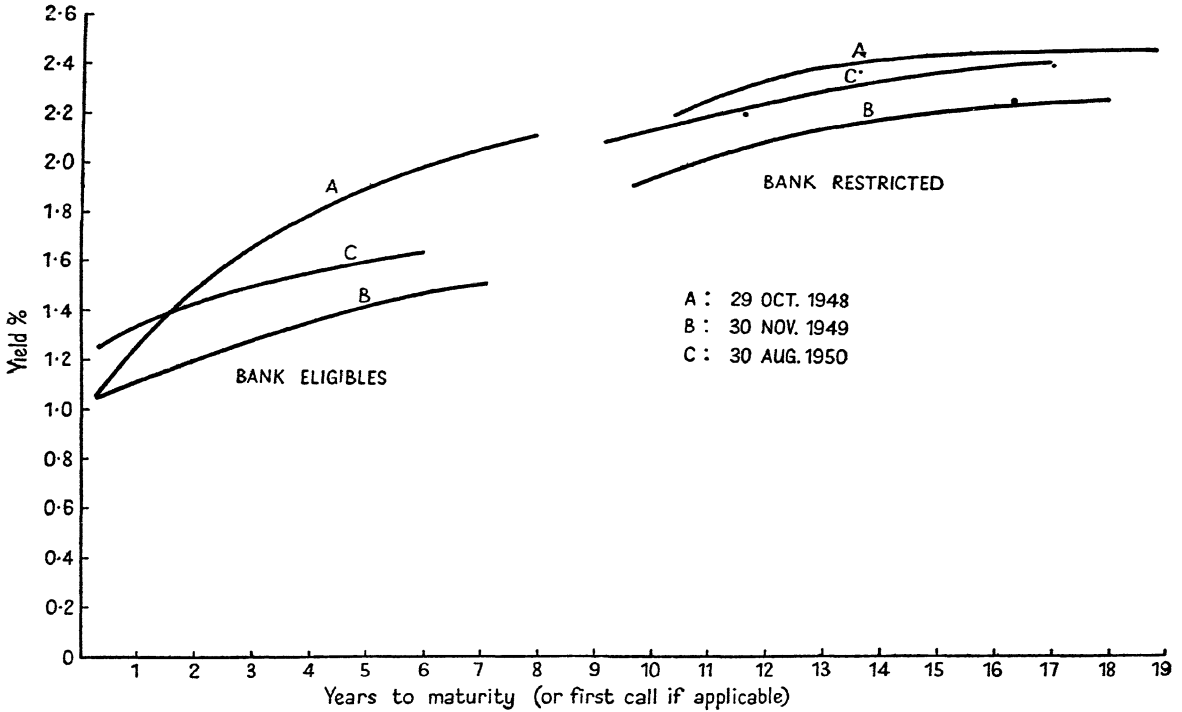


FIG. 6. Yield curves, U.S. Govt. taxable securities
Source: *Treasury Bulletins*

XXIII

CONCLUSION: ADJUSTMENT TO NEW CONDITIONS ACHIEVED; THE RE-EMERGENCE OF A POSITIVE CENTRAL BANKING FUNCTION

IT would be out of place in a historical study to plunge, at the very end, into a theoretical discussion of monetary policy in general, or delve very deeply into the exhausting controversy regarding Federal Reserve policy in particular. My main purpose has been to show what was done, and why it was done, rather than to judge whether it ought to have been done: though my own sympathies have inevitably emerged at frequent intervals. Full discussion of monetary policy would simply be to repeat this book without benefit of the facts. Moreover, one cannot but sympathize with the particularism shown by central bankers. Almost everything *does* depend on the circumstances. From a historical study one can obtain some guide for the future, realize what kind of considerations may be involved in future situations, understand certain decisions, and (if one wishes) pass some judgement. But precise schemes cannot be laid down. Circumstances change quickly, the feel of each situation is different. One can but keep up as best one can. Central banking depends so much on personalities, politics, and varying institutional arrangements, and its practice so akin to a kind of super-speculation or game of strategy whose rules constantly shift or remain partly unknown, that formal generality provides one with a rough way of talking about it without providing much else. That this is so in a great deal of applied economics may also be the case, but it is very much so in central banking. Theory is either rough and ready or else a series

of endlessly complicated permutations which are better replaced by history.

Central banking, or, rather, 'monetary policy', is not something with precisely defined characteristics which is always to be had if one wants it. It is something that has to be carefully constructed, and constantly adapted. The Federal Reserve System was set up to remedy certain admitted defects in the American credit system. Its history is that of a series of attempts to fulfil the hopes of its founders. The bronze reliefs of Carter Glass and Woodrow Wilson which stare down on those who enter the Federal Reserve building on Constitution Avenue are a symbol of Federal Reserve history. What has been traced in this book is a process of assimilation and construction: the assimilation of a totally new structure of interest rates and a large national debt, and the construction of a positive central banking function out of them. This process had occurred during a period of great change in economic thought and of immense improvement in the technical resources available to those who formulate and execute central banking policy. This assimilation and construction may now be briefly reviewed in terms of objectives, taking into account certain events that have occurred since the end of 1949.

I. *The Limited Objective*

No complex of monetary policies and institutional arrangements can be regarded from the viewpoint of ambitious positive anti-cyclical schemes, designed to offset 'real' as opposed to 'monetary' disturbances, without first being regarded as an inherent source of economic *in*-stability. So long as fractional reserve banking exists, and so long as bank loans and investments are not confined solely to automatically self-liquidating paper or to short-term government securities, any cyclical disturbance which involves considerable fluctuations in the market value or marketability of commercial bank assets,

whether itself originated by banking imprudence or not, must inevitably tend to produce perverse fluctuations in the availability of bank credit. This will be the case even though interest rates on risk-free assets may move up and down with the cycle and offset, to some degree, the perverse movement in availability. With an inherently unstable credit system, attempts to put it to positive use prematurely, before, that is to say, curing the inherent instability, may only bring that instability into action—detonate the monetary mine, as Professor Hicks calls it. It is some such assumptions as these which lie behind remarks that the monetary cure is worse than the 'real' disease, that credit restriction can halt an inflation only at cost of severe slump or depression. It is, perhaps, unfortunate that 'monetary policy' is thought to have been tried, and failed, at a time which was, in fact, one of unprecedented monetary instability—the late 1920's and early 1930's.

This instability in the availability of credit, of liquidity-preferences, is not confined to the banking system, but affects all lenders, whether institutional or individual.

This instability being present, it has always been recognized, by legislators, central bankers, and Administrations in the U.S.A., that one of the first objectives of the Federal Reserve System, and of other central monetary authorities in the country, was to render the credit system more of a useful service and less of an irritant. This first objective may be called the *limited objective.*

In no modern industrial community is the credit system more inherently unstable than in the U.S.A.—a consequence of the highly competitive credit industry in that country, its peculiar legal arrangements, the traditional association of purveyors of credit with the industrial development of the country, and the speculative volatility of its citizens. This instability has to some extent been offset, as in other countries, by a long series of legislative acts designed to prevent recurrent catastrophes. Early

attempts culminated in the Federal Reserve Act in 1913, while since that year there has occurred the worst catastrophe of all. Since 1933 there has been seen further legislation designed to remedy the defects of the Reserve System itself, to protect depositors, to improve supervision of the commercial banks, and to control specific areas liable to unusually acute instability. Notwithstanding such progress there is no reason to suppose that chances of future breakdowns have, in consequence, been removed. Failing the success of fiscal and other measures designed to reduce 'real' instability to a minimum consistent with the social-economic organization under which the American people choose to live, there is little that can further be done, by legislation, to remove the weakness of the credit system, save by an ever-increasing elaboration of selective controls over the banking system and other lenders. Such elaboration is politically unlikely, save in grave emergency, and is in any case open to the objection that the virtues of a strongly competitive credit industry which, at its best, contributes to the flexibility and virility of the economy, would thereby be removed along with its vices. Further progress towards the limited objective must, therefore, come from the Reserve System itself and depend upon the ability of the System to keep the banks and others on an even keel. In this task it has been greatly assisted, as we have seen, by the creation of a large national debt.

We have seen that the existence of this debt, with its low interest rates and generally stable market value, holdings of which by commercial banks still constituted, at the end of 1949, over 45 per cent. of their total assets, proprovides a cushion against restrictive lending policies in recession but, unless properly handled, an excessive expansionary force in times of prosperity.

With the present possibilities of an easy-money policy of the 1949 type, one cannot foresee the debt being anything other than a source of great strength and increased credit availability in slump: even though some restrictions

on lending at such times cannot entirely be avoided, they can further be mitigated by the use of government credit agencies and of direct lending or guaranteeing of loans by Reserve Banks. But interest rates on risk-free securities are so low, and the means of driving them lower so close at hand, that discouragement of 'hoarding' (in the form of holding government securities or cash) can be carried to extreme lengths. It seems impossible to grumble on that score. The history of the war-time rate pattern, of the bond-support period, and of the 1949 recession, should dispel any doubts about the ability of the Reserve System to carry out a 'cheap-money policy' to the limit. It must not be forgotten, however, that the dominance of the national debt is declining, and will continue to decline so long as private debt expands faster than public debt and the banks continue to create credit faster by loans and 'other' investments than by market purchases of government securities. This threat to contemporary monetary strength will not, barring some explosion of private debt, become serious for some years, by which time the national debt may have grown once more in size. For the immediate future the debt will continue to play its familiar post-war part, recent operations converting part of the long-term debt into $2\frac{3}{4}$ per cent. non-marketable bonds notwithstanding, unless drastic legislation prevents it.

The problem of the debt as an irritant to inflationary pressures can, as has been seen, be solved by a variety of expedients in so far as the 'problem' is defined in terms of forces *within* the government-securities market which tend to encourage existing owners of such securities to sell them to the banking system. By a varied use of such expedients as the manipulation of short-term rates (1947–9), market operations of all kinds (1948–9), use of bonds held by Federal agencies and trusts (1947), the reduction of floating debt (1946–9), the repayment of debt to the Reserve Banks (1946–9), manipulation of Treasury cash balances (1948), the encouragement of non-bank invest-

ment in the floating debt (1947–9), and the manipulation of legal reserve requirements (1948–9), it is possible to maintain, along with some apparatus of selective controls, an almost perfectly elastic supply of cheap credit without at the same time constantly forcing money into the economy regardless of the demand for it. If the problem is, however, defined also in terms of the very low rates on government securities, which are themselves a constant discouragement to the owners of such securities, then it cannot be said that the above expedients, combined with a mixture of bluff, cajolery, exhortation, and any tactical manœuvre designed to inculcate 'uncertainty', are entirely sufficient. But, as the post-war record of debt-ownership shows, this insufficiency may itself be offset by a persistent policy, carried out by the Treasury, designed to compensate for sales of government securities to the banking system by the sale of non-marketable issues to other non-bank investors. This is, admittedly, the same expedient as 'reducing the floating debt', but is a different aspect of it.

Provided speculative excess can be curbed by selective controls, and provided that this use of the national debt as a monetary stabilizer is all that is required, the Reserve System would have had good reason to remain content with its position so long as the Treasury did not actively obstruct it by intransigence over short-term rates and excessive 'unfunding'. But, it is [illegible] slightly more is required: the limited objective is not enough.

II. *The Less Limited Objective*

It goes without saying that the advocates of credit restriction would be grievously disappointed at the role so far outlined for the Federal Reserve System and were, indeed, persistent critics of official policy during these years. The more moderate of such advocates were saying that to enable holders of government securities to sell at par, or above, at any time in any circumstances, was certainly not to be neutral—whatever other expedients might

be used to offset the more obvious consequences of such a policy. Having attained a position where the credit system was better protected against disaster than hitherto, more positive use, it was suggested, must be made of central banking powers. The monetary power must be used to counteract inflationary pressures which themselves have their origin outside the monetary system. This may be called the *less limited objective.*

Here the controversy, as has been seen, raged between those who desired an extension of powers while retaining a strictly managed market in government bonds, and those who desired to attain their ends within existing powers. The period from the end of 1949 until the present day has seen, so far, a long battle which has culminated in victory for the latter group. During 1951 the longest-term bonds fell to almost 4 points below par, a development which, it will be realized, signified a crucial step away from the 'limited objective'. It must also be interpreted, as far as the inter-departmental struggle is concerned, as a severe defeat for the United States Treasury. Whether the Treasury has since become agreeable to the change or not, the fact must remain that the balance of power has moved sharply in favour of the Reserve System.

But the change must not, unless bond prices fall very very much further, be interpreted as anything more than the final conclusion to the 'flexibility' declaration of 28 June 1949. All that has been provided is a deterrent, in the form of a capital loss, to discourage sales of government securities, a small encouragement to purchases (by permitting a discount on government bonds), and some inculcation of caution via injection of uncertainty. This is simply the reverse of the policy followed during the depth of the 1949 recession, when sales by existing holders were encouraged and potential buyers (save banks) discouraged from buying. The efficacy of 'a few points below par' during a period of inflationary pressure depends entirely upon reactions that may be expected within the existing

framework of interest rates, accounting conventions, and the market practices that have grown up with them. The only difference is that whereas in 1947–8 the psychology of the market was such that the breaking of par was not thought possible without also breaking up the existing type of market, today it *is* possible. The reasons for the change were, firstly, the gradual disappearance of certain inherent market weaknesses (a disappearance helped by the operation described on pp. 341–2), discussed in the relevant chapters in this book, which had their origin in the monetary expansion of 1933–45, and secondly, the fact that, after so many years, the structure of interest rates was coming to be regarded as normal. Thus, when 'par' was broken, in March 1951, the market did not stampede, as it did when par was threatened in December 1947, but remained on its feet. Certainly, some 'orderly market' purchases were made by the system and by the Treasury's trust and investment accounts; but as prices dropped below par, other buyers soon appeared and selling diminished. How far these prices can fall without a stampede is an open question: but a rise in the yield on, say, 15-year Treasury bonds to 3 per cent. and higher would be a more serious departure from these policies.

The objectives of the tougher policy may now be considered. Its success depends mainly upon restriction of the availability of credit in the short run which may result from the infliction of capital losses on lenders. It depends only to a minor degree on any results that it might have upon the willingness of borrowers to borrow at slightly higher rates. Further, it can hardly be a policy suited to persistent credit restriction over a prolonged period of inflationary pressure, but is essentially both a short-run adjunct to other anti-inflationary measures and a concession to revised definitions of neutrality.

The case for 'revised neutrality' is as follows. The main vehicle of monetary expansion in the U.S.A. is, as has been seen, the national debt. All lending institutions, whether

banks or not, obtain new money, newly created money, by selling government securities to the Reserve System or to commercial banks. If, therefore, it is desired to shut off at least part of the supply of new money, or in any case to restore control of the supply to the central bank more fully than hitherto, the dumping of government securities must be discouraged. During the earlier post-war years the best that could be done was to conduct a 'holding operation' on the lines laid down by Mr. Sproul in 1946, during which a great mass of experience was gained and the novel situation assimilated. With this assimilation accomplished, it should then be possible to use the special features of the market situation, which have grown up since 1933, to further a policy of credit restraint in like fashion to the policy of expansion followed in 1949. The prices of government bonds are allowed to fall slightly below par. It is then hoped that lenders will be 'frozen into' their existing holdings of government securities.

Commercial banks, whose capital structure is under pressure from increasing risk assets acquired in a period of rising commodity prices, will find their government bond portfolios showing a loss and their liquidity directly reduced. They will also be able to buy government securities of five years or so maturity at a substantial discount—such securities can be provided by the Reserve System. Short-term rates will also be allowed to rise slightly. It is therefore hoped that bankers will, at least in the short run, refrain from selling government bonds at a capital loss. For, at least initially, interest rates on alternative assets are not sufficiently high to recoup such a loss sufficiently rapidly or, if they are, such attractions are outweighed by increased risk and by the reluctance to show, in balance-sheets, that assets have been sold at a loss. Bonds, in short, will no longer be treated as excess reserves, while, confronted with the reduced liquidity of bonds and the attractions of 1½ per cent. (1951) on short-term government securities, sales of 'really' liquid assets will also be

discouraged. These considerations, which are the more important when interest rates are extremely low (i.e. when a 1- or 2-point capital loss represents up to one year's income), are reinforced by psychological uncertainty[1] regarding the future of security prices and yields which will force a banker to reappraise his commitments and his future policies and strongly encourage him to keep as liquid as possible. Thus, without any large change in interest rates on long-term government bonds, the supply of new reserves will be restricted and a rationing of credit supplies by banks may occur. This may have extremely valuable repercussions on speculative hoarding of commodities, inflation of real estate values, and so forth, without leading to a stifling of the money supply and a downward spiral of credit contraction.

Similar considerations apply to other lenders. Firstly, the market itself will be forced to work harder—automatic support by the System can no longer be counted on. Dealers will be hard pushed to find buyers, and all dealers, banks, and others who manage government security portfolios for their clients can be expected (assuming no panic psychology) to advise retention of government security holdings and purchase of Treasury bonds at a discount. When par was broken, in March 1951, holders of 1967–72 bonds were offered a 25–30-year *non-marketable* $2\frac{3}{4}$ per cent. Treasury investment bond, par for par, for their existing holdings. This bond cannot be turned in for cash before maturity but can be exchanged any time for a $1\frac{1}{2}$ per cent. five-year note. But this note could not be sold, under the new market conditions, save at an appreciable discount. Owners of 1967–72 bonds were thus offered an immediate higher interest rate to 'stay in governments' and a loss if they chose to get out. This ingenious manœuvre was designed to remove some of the expected strains on

[1] Articles by various writers in the *Commercial and Financial Chronicle*, April, 1951, on the significance of 'below par' were an interesting demonstration of uncertainty.

the market arising from the whole operation of the retreat from par support. It was hoped that this incentive, added to the deterrent of a capital loss on remaining holdings of marketable bonds, would stop insurance companies and others from selling government bonds. Since these institutions are wont to sell bank-ineligible bonds direct to the System, a stop to such sales both slows down the expansion of credit and stops the involuntary expansion of bank reserves which caused so much trouble in 1947–8, and again in 1950–1. Provided the general structure of interest rates is expected to continue without major change (i.e. provided $2\frac{1}{2}$–$2\frac{3}{4}$ per cent. is regarded as the norm), and some future fall in rates (as in 1949) is expected, these effects are plausible. The whole institutional make-up of the market makes such sensitivity likely and such sensitivity, as we have seen many times, certainly exists. The object thus is to keep funds in the government-securities market and, in addition, to attract them there, while keeping prices below par by open-market operations and keeping as tight a hold on bank reserves as possible. Such a policy *depends* upon confidence in the existing structure and may be compared with the dependence of bank-rate policy upon the maintenance of the gold pound. The exact manœuvres and expedients employed will depend upon the circumstances, and their success upon the judgement of the System's officials.

The objections to this policy are somewhat obvious, but whether they are practically valid or not depends on what it is that the policy is expected to achieve. It may be stated at once that such a policy is not suited to a prolonged period of inflationary pressure. It is designed to operate in the conditions emerging in 1949–50, before the Korean outbreak. It is designed to prevent the credit system from aggravating price inflation during short periods of mild inflationary pressure. It is an adjunct to fiscal policy, or any other stabilizing policy, and simply seeks to bring the credit system into line with these other policies rather than

allowing it either to be completely neutral, or to work against them. However, even in the circumstances of a rearmament boom, the infliction of capital losses on holders of government bonds, and the definite prevention of the pattern-playing menace, is valuable—particularly if some deflation of prices can yet be achieved, and if the fiscal engine is so slow to get under way. The objections are that interest rates on other securities must, sooner or later, rise sufficiently to attract investors out of government-securities capital loss or not, and higher liquidity-preference or not. Much wider spreads between yields on government securities and other yields will occur, and these will become sufficiently attractive some time before higher borrowing costs could be expected to choke off credit demands. When this occurs, the restrictive effects will wear off and the System will be faced with further support of government securities at prices below par or else with a further rise in yields, and a further rise might destroy confidence in the whole structure. Destruction of confidence would, apart from anything else, create a completely new set of circumstances and a loss of sensitivity. There is little reason to believe that the System would wish to do this, but it would no doubt permit prices to fall as far as the market would tolerate, and, now that 'par' has disappeared, the System is in a much better position to discover exactly what the market will tolerate.

These objections can be answered. For one thing the workings of the new issue market (see Chapter XVIII) will hold up the widening of the spread between government and other bonds, by cutting back the flow of new issues. This will have the desirable effect of increasing the retention of corporate earnings and/or postponing investment projects, and at the same time will prolong the period of 'discouragement' to holders of government bonds. Secondly, a rise in interest rates on real estate mortgages, along with selective controls of housing credit terms, may reduce the demand for credit from that quarter. Thirdly,

by the time the monetary stringency has worn off, inflationary pressure may have subsided under the impact of fiscal policy and the secondary effects of the monetary stringency itself. Fourthly, once 'par' is out of the way, the System can buy up government securities, if forced to do so, at varying prices and without *appearing* to have put a floor under the market. Unless sales of securities are overwhelmingly strong, 'support' under the new conditions bears little resemblance to the old par support and is psychologically quite different. Fifthly, it would be a mistake to expect too much of such a policy. It seeks to attain 'revised neutrality', to make borrowing more difficult at the margin, to discourage speculative buying, to encourage internal financing, in short, to retain stability in the credit system, restrain the inflationary movement in the short run, and reinforce any selective controls in operation. It does not seek to restore monetary policy to a primary position. Much of the exasperation caused by opposition to the Reserve System is due to misunderstanding of this position and a refusal to admit that the indefinite prolongation of early post-war policies, without this concession to the facts of market life, would be to encourage inflationary forces at all times in a needless fashion. The new development of policy recognizes this fact, converts the façade of debt structure (mentioned in Chapter III) into a more accurate reflection of the real state of affairs, and is an answer to a question which might be put by officials of the Reserve System: 'Having assimilated this large public debt, whose very existence and whose orderly market at very low interest rates is of priceless advantage to the financial strength of the country, but whose owners must not be pampered too much, what can we now do to help in a general programme designed to achieve continued prosperity with a minimum of cyclical fluctuation?'

This account of these recent developments is a fitting conclusion to our story. When we began, in 1945–6, the

System was grappling with a rather absurd market problem which was far removed from the general economic situation of the time, though of some harmful influence on it. After emerging from this very hothouse atmosphere, the System then had to adopt a policy of market support, in deference to the peculiar position of 'par', the handling of which policy showed that much closer attention to the general economic situation could now be paid. With the abatement of inflationary pressures the System was able to conduct its policies, after the traditional manner of central banks but fortified by greatly superior forecasting techniques, with very close reference to the current business situation. With the revival of inflationary forces, a battle with the Treasury was inevitable if the final touches were to be put on the policies which had developed. Now the final step has been taken. The long experiment which began with the gold influx of the 1930's is, one may suppose, over. New norms have at last been established, new market arrangements put to use, and monetary policy adapted to new circumstances. What lies ahead is unknown. It may be that everything is due for another drastic change.[1] But whether that is so or not, the Reserve System has good reason to be proud of its achievements and to have justified its independent existence.

[1] With the change of Administration in January 1953, the Treasury at once displayed a determination to atone for the previous twenty years by vociferous pursuit of what has in fact been, so far, only a very slightly more 'orthodox' policy regarding the national debt. This policy, conducted during a period of boom, and associated with complementary action by the Reserve System, has subjected the new norms and new market arrangements to their stiffest test hitherto. Present indications are that the sensitivity of the market, associated with these norms and arrangements, and the general economic outlook, have deterred the Treasury from any bigger operations which would qualify for the adjective 'drastic'.

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