Chapter III

MANAGING THE QUANTITY OF MONEY. Open Market Operations.

Growth and development.

The central banking control over the money market through the instrument of Bank rate is a conditional success. It would be effective only if banks are obliged to resort to borrowing from central bank in order to replemish their cash position. The efficacy of bank rate, therefore, depends at any time upon the position of bank liquidity.

The liquidity of a bank is determined by the structure of assets that a bank holds at any time. The bank assets can be divided into two broad categories, such as securities bearing interest and cash yielding no interest. Among these, cash is the most liquid of all the assets of a bank. A bank can become more or less liquid at any time by exchanging securities for cash and vice versa. In actual practice, the banks always try to strike a balance between these two types of assets in such a way that the twin objectives of profitability and security are attained. When the banking system tries to secure its objectives noted above by purchasing and selling assets in the open market, two results follow. Firstly, such purchasing and selling operations of the banking system affect the rate of interest and secondly they affect the relative position of cash and securities in the structure of assets of the banking system.

This sort of operations in the open market are undertaken by the banking system on its own initiative. But the same results can be obtained if some other agency such as the central bank undertakes purchasing from and selling interest bearing assets to the banking system. Thus, when the central bank sells securities to banks, it reduces the amount of available cash, to the banking system. The

fall in the cash reserves of banks reduces their liquidity which restricts the power of banks to supply new loans. When the central bank purchases securities from the banking system, the liquidity of the bank is increased which enables the banks to advance new loans. As compared with the policy of discount rate, open market operations place some initiative in the hands of the central bank which generally rests otherwise with the banking system under the Bank-rate policy. For, so long as the cash reserves of banks are not reduced, the raising of the Bank rate has no effect on the volume of bank loans if the banks are intent upon advancing them.

had already affected adversely the effectiveness of Bank rate and a need to withdraw excessive funds from the market was served by selling consols spot and buying for the account and borrowing in the market. But with these and other methods employed by the Bank of England no systematic and satisfactory solution for control-ling surplus liquid funds successfully was achieved. In the case of the U.S., the power to undertake open market operations was conferred upon the Federal Reserve Banks from the very date of the inception of central banking system in 1913. But this power was used by the Federal Reserve Authorities for the first time in 1922. The Reichsbank of Germany seems to have utilized the technique of selling and purchasing of treasury bills in order to influence the open money market rate before 1914.

^{1. (}Given below after note 2)
2. M.B.Northrop. Control Policies of the Reichsbank 1924-1933,
New York, 1938, p.58.

Rri. R.S.Sayers. Bank of England Operations, 1890-1914. 1936, p.27 and p.35. The policy of selling consols on the spot and buying for the account meant that the Bank of England sold consols for each to the commercial banks in the first instance and repurchased them for an equivalent amount of cash. But in the case of repurchase, cash was not actually paid to the banks, but retained with the Bank of England to the account of individual banks not for a longer period than nearly one month. Out of these funds, the commercial banks could pay up their obligations arising out of their transactions in

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Open warket operations are found used on an increasing scale as a weapon of central banking control especially after the First World War. Two sets of reasons go to account for this development. In the first place, abnormal increase in the volume of bank cash was brought about during and after the war. During the war, under en all comprehensive effort to mobilize for war, the sound princples of monetary policy were kept aside and the monetary authorities resorted to headlong currency inflation. This mass of lived money remained in use even after the experiences of war finance were over. The plethora of limited money in the inter-war period was also the outcome of the cheap money policy followed by several countries during the Great Depression. The tightening influence of a discount rate policy was lost amidst these circumstances and stringency in the money market couldbe created exer when these excess liquid reserves were absorbed. The problem was not one of effecting an cumbras outflow of liquid funds from the central reservior but one of reabsorbing them which is not possible to achieve by a Bank rate policy alone.

As there emerged the problem of surplus bank cash in the beginning of the inter-war period, the new conditions created by the method of war-finance made it possible to tackle that problem by means of open market operations. The creation of a large volume of government securities, especially short-term securities, made open market operations on a large scale, possible. The insufficiency of was one of the important government securities/and factors which deterred the Bank of England from undertaking open market operations before the First World War. 1

⁽Note 1 continued from page 103) stocks. Thus, the Bank could reduce the quantity of money in the market for the unexpired period of the stock exchange account. (Keynes Treatise Vol.II,p.229). The policy of borrowing from the market much depended upon the cooperation of banks and the resources they possessed. If their liquidity was very high, this expedient of taking the funds off the market proved very expensive. (R.S. Sayers, Op. Cit., p.47).

1. De Keck. Central Banking, p. 190.

The Rationale of Open Market Operations.

The policy of open market operations differs from that of the Bank-rate in that in the case of the latter the initiative for rediscounting that comes from the clients of the banks originates outside the central bank while in the case of open market operations such initiative originates within the central bank. Open market operations are the result of the initiative of the monetary authorities based on their opinions that the community at large due to some reason or the other needs or can or cannot well employ a lar-ge amount of credit.

Open market operations are used to influence the market rates of interest directly and immediately. The use of Bank rate alone is not sufficient for this purpose especially when banks are holding excess cash reserves. Further, the effects of the policy of bank rate on the market rates of interest are not so direct and immediate as those of open market operations. For, open market operations influence the rates of interest in two ways. Firstly the purchases and miner sales of securities by the central bank affect, in the first instance, the cash reserves of banks. As the credit superstructure is usually raised on the basis of bank reserves, the changes in the latter would help to expand or restrict credit. The fall in the cash reserves of banks consequent upon open market sales by the central bank, makes the banks to charge a higher rate of discount. In the case of increase in cash due to me open market purchases, banks would lower the rate of discount for, they do not usually like to hold idle cash. Thus, the central bank can influence the rate of interest by increasing or decreasing the supply of money.

In the second place, the purchases and sales of securities by the central bank affect the prices of securities and hence the rate of interest. At times it might be necessary to have rates sharply changed without delay. By purchasing and selling securities in the open market, a central bank can establish a satisfactory rate structure.

During the inter-war period, open market operations were undertaken for various purposes. Firstly, open market operations may be intended to encourage or discourage business activity by influencing the rate of interest on bank leans to business. Thusm. for instance, in the U.S., open market purchases amounting to two millions, were made by the Federal Reserve Authorities during the five months from Jamuary to May, 1922 at a time when agricultural prices were seriously depressed. The purchases were followed by the reduction in the discount rates of several of the member banks. Secondly, the foreign exchange value of national currency can be proped up by raising the market rate of interest by means of open market operations. Thus, in January 1931 the Bank of England sold securities including Treasury bills at rates higher than the market rates of interest for five types of commercial bills. The market rates as a result were pulled up to the level of bank-rate and the international position of sterling, which was weak before, strength-Thirdly, open market purchases may be made to saturate the market with liquid funds so that the government may be able to float a new loan successfully or may be able to convert an old one at a lower rate of interest . Thus, the policy of open market purchases was followed by the Bank of England in July, 1932 to prepare a sound credit base so that the conversion of 5% was loan might

^{1.} H.Parker Willis. Theory and Practice of Central Banking, 1936,p. 181.

^{2.} W.R.Burgess, Reserve Banks and Money Market! . 1946, p. 246. 3. Decock. Op. Cit., 1949, p. 297.

be helped. During the minteen-twenties, open market operations were used not merely as an ancillary tool to make Bank-rate effective but, as the co-equal introduction instrument of policy, especially to effect the effects of gold movements. The changes in the volume of money, that would be caused by the changes in the gold reserves, were counteracted by the policy of increasing cash-reserves of commercial banks by open market purchases. The fall in the volume of currency was thus made up by a corresponding rise in the volume of bank money. Thus, the total quantity of money in effect did not contract.

Open market operations came to be generally recognized as an important and effective method of credit control especially during the years of Great Depression. The bank acts of several countries were revised so as to give to their central banks either altogether new powers to undertake open market operations or to make such powers as were conferred upon them in the past more effective. Thus, the Reichsbank of Germany was given the power in 1926 to discount, buy and sell Treasury bills of not more than 3 months currency. The amount of such bills to be discounted, sold and bought was not to exceed 400 million reichsmarks. This power, though an advance over the law of 1924 wherein there was no provision for dealing in either Treasury bills or Government bonds, was not enough to exercise sufficient quantitative pressure on the money market. For, the total amount of short-term treasury bills that could be bought or sold was very small andthere was no provision in it for the direct purchase of long-term Government bonds. The discount rate of the Reichsbank was, thus, deprived of one of its major propost. But this deficiency was removed in the law concerning the German Reichsbank of June, 1939. In order to regulate the money market, the Bank was empowered to buy and sell interest-bearing securities as

^{1.} Ibid .p.210.

^{2.} Northrap .Op.Cit.,p.268.

well as treasury bills) which were due to mature within one year from the date of purchase. By a Government Decree promulgated in June, 1938, the Bank of France was authorised in addition to undertake open market operations in negotiable short-term public bills and private bills eligible for discount and resell, in order to influence the volume of credit and to regulate the money market. 22 The National Bank of Belghum was authorised by a Royal Decree of July, 1937 to buy and sell in the open market long term securities of the Belgian Government. Formerly, the Bank was authorised to purchase but not to sell such securities and total purchases were limited to the Bank's capital, surplus and amortization account. The power to deal in Treasury bills was supplemented by power to bid for the Belgian Government and semi-government institutions. Thus, the scope of open market operations of the National Bank of Belgium was enlarged. The Central Banks which came into existence during Bailion
the inter-war period especially in Britian Dominions and India all were authorised to undertake open market operations.

Open Market Purchases and & the Banks.

It has been suggested by Keynes that in the event of an obstinate slump, the central bank can produce a large effect on the cost of raising new resources for long-term investment if it is prepared to persist in its open market purchases far enough. The open market purchases of the central bank would increase the cash reserves of banks. The banks, in the first instance, would try to use these funds for purchasing short-term assets. As a result;

^{1.} F.R.B. September 1939, p. 738. 2. F.R.B. August 1938, p. 650.

^{3.} F.R.B. October 1937,p.1003.

^{4.} J.M.Keynes. Treatise Vol. II, 1930, p. 372.

of interest would fall to so low a level that after a point, they would not be able to cover even their normal profits. If the Cent—rel bank still persists in its policy of increasing the funds with the banks, the banks will be obliged to purchase long term assets and as a result, the long term sate of interest would fall. Thus, the central bank can reduce the long term rate of interest and can help recovery by encouraging long-term investments.

Apart from the ability of central bank to undertake open market purchases to the extent of saturating the banking system with liquid funds, this policy as suggested by Keynes, assumes too much of a passive role on the part of commercial banks or, properly speaking, the sellers of securities. In a period of depression when the prospects of profitable investment of bank-money are very few or negligible, the or the sellers of securities will ordinarily dispose of their earning assets only when the amount of capital gains far exceeds the loss in the form of lower yields on their new investments. With what amount of premium the banks would be ready to part with their present earning assets would depend upon their present serving mere estimate of the depression psychology on the part of their borrowers. If, therefore, in the midst of deep depression, when the prespects of employing their funds conveniently (i.e., suiting the banker's considerations of profitability and liquidity) are absent, the bankers would only exchange earning assets for idle cash by security sales. In such a context three possibilities as to the behaviour of banks can be imagined. Firstly, the banks would liquidate their indebtadness to the central bank as is usually the case in the U.S. In the U.S., there is a tradition against borrowing from the Reserve Banks. This particular behaviour of banks cannot be explained by higher discount

rates of the Reserve Banks. The Reserve banks have seldom charged rates higher than those charged by the banks themselves to their customers. Only the tradition prevents the banks from remaining continuously in indebtedness to the central bank. In such a case, the magnitude of the open market operations shall have to be very large for the purpose of pursuing an effective cheap money policy as suggested by Keynes, and inspite of that the effect of the policy on the credit base might be negligible. This position is amply illustrated by the experience in the U.S., in 1933-34. The volume of bank-indebtedness to the central bank is generally very large when an unbridled speculative boom is followed by a period of crises as it happened in the U.S., in 1929. If the volume of 'eligible' assets held by the banks at the time of open market purchases is just equal to or less than the volume of indebtedness of the banks to the central bank, the policy of open market purchases would have absolutely no effect on the member-bank reserves. If the central banking authorities, in its enthusiasm to carry on open market purchases to the point of satisfying to saturation the desire of the public to hold savings-deposits as Keynes suggested, purchases all investments of the commercial banks putting aside the 'eligibility' rules in an emergency, it would give a sort of open encouragement to banks to entertain bad debts. The problem of 'ammunition' i.e., adequacy both in quantity and quality of securities to be purchased from the banks, is no doubt as important in the case of an expansionist policy as in the case of a contractionist one. In the post-war period the difficulty arising out of insufficiency of 'eligible' assets, has been adequately solved by the tremendous growth of government securities in the investment portfolios of commercial banks. But, in a period of slump even if the banks may be holding a large amount of eligibile assets such as government securities, the policy of open market purchases by the central bank 1.W.H.Burgess.Op.Cit.,p.221.

may fail to expand bank credit. For, the fact that banks are holding government securities despite lower yields on them simply indicates the absence of safer and more profitable alternatives for employing their funds. The effects of open market purchases in such a case will not pass beyondthe banking system.

Secondly, if the banks do not have any indebtedness to the central bank, they may simply allow their cash reserves to increase. This sort of behaviour is displayed by the commercial banks in British Dominions. As for example in New Zealand the relation of cash to total deposits in the case of six New Zealand Trading Banks varied from 29.2% in 1934 to 16.4% in 1938. Similarly in the case of eight commercial banks of the Union of South Africa, these figures fluctuated between the maximum of 36.1% and the minimum of 12.2% during the period between 1922 and 1927.2 This sort of behaviour of banks would depend upon the subjective view that each banker takes of a particular economic situation. It may be that banks may try to keep a stable ratio of liquid assets to deposits rather than cash to deposits. In such a case cash forms only one of the liquid assets. The other important type of such assets is supplied by Treasury bills which are found now in the portfelios of banks in almost all the countries. So far, as the banks exchange the shortterm debts of government for the liabilities of the central bank, no difference is made to the ratio of liquid assets to total deposits. The only thing that happens is that one type of liquid assets is exchanged for the other type. Open market purchases of short-term bank assets like the Treasury bills are of no significance

^{1.} In the post-war period, with government securities predominating a on the assets side, the average earnings of banks have fallen to 2% to 3% in comparison with the average of 5% when loans and advances were large in amount, especially in richer countries.

^{2.} A.F.W.Plumptre. Central Banking in British Dominions. University of Toronto Press, 1940.pp.253-56.

for influencing the long-term rate of interest. On the contrary the banks may regard the changes in their reserves thus induced by the central bank as purely artificial and, therefore, they may feel less concerned to alter their loans and investments in response to alterations in their reserves. The willingness of the American bankers to hold sometimes excessively large proportion of cash reserves may be the result of such a reaction of the bankers to the policy of the Reserve Banks. 1

the third possibility as regards the behaviour of banks can be imagined with regard to the secondary effects of open market expurchases i.e. the actual loaning operations of banks. It is certain that the power of creating bank assets at this stage entirely lies with the borrowers. The policy of inflating bank reserves by means of open market purchases is founded on a vague idea that the banks will be able to employ their excess cash in profitable assets. But if borrowers do not forthcome, no secondary effects of open market purchases would be visible. If there is a sufficient demand for bank loans, a lower discount rate alone would be sufficient. That is why the classical central banking theory regarded open market operations an exception and not a rule.

banks for loans, the bankers may not be ready to entertain them if they are not inspired with confidence in their *** state* clients. If, due to surplus cash reserves, the banks are induced to loan out more funds, their attempts are likely to be followed by tragic consequences. Firstly, to take advantage of cheaper money, if fools rush in where angels fear to trade, so many bad debts would be created. If the central bank adheres to its eligibility rules

^{1.} Ibid .p.242.

^{2.} H.Parker Willis, Op. Cit., p. 181.

the banks would be placed in a precarious predicament. If the central bank undertakes to accept the all bank assets just to discharge its function as a lender of last resort in an emergency, the banks would become less critical of the assets offered to them. Again, though by law the central bank may be empowered to purchase a wide range of assets, in practice it may usually accept a few of them. In general, all assets may be liquid from the point of view of shiftability but they may not be shiftable to the same degree. Thus, in the U.S., though the Reserve Banks have been empowered to accept a wide range of assets, open market purchases are, in practice, confined principally to banker's acceptances and United States Government obligations.

In a period of crises, everything would depend upon the attitude that is assumed by the central bank. This is well borne out by the attitude of the Reserve Bank of India towards the Travankore quilon and National Bank and other south Indian banks in 1938.

dence in his customers, and the loans may be sufficiently secured, he would not be able to realize his loans repaid if other bankers and other entrepreneurs are still depression-minded. The security and liquidity considerations of the banker will be conceived only in a vacuum in such a case. The restrictive credit policy followed by a number of other bankers guided by their personal considerations of liquidity and security will cause losses to the banking system as a whole. In a period of deep depression, economic activity requires to be stimulated in all spheres, otherwise, the marginal

^{1.} R.S. Sayers. Modern Banking, II Edn. p. 224.

^{2.} Burgess.Op.Cit..p.284.

^{3.} S.K. Muranjan. Modern Banking in India, pp 326-327

efficiency of capital cannot be sustained. In view of these difficulties of the bankers, the central banks are now required to be more and more accemedative in times of emergency by relaxing their eligibility rules indefinitely. Inspite of all this, there cannot be any assurance that the private enterprise will react favourably to the cheap money pelicy. In that case more and more socialistic action by the government is the only alternative to step into the shoes which the feet of the entrepreneurs are too cold to occupy. 1

Open Market Operations and The Rate of Interest.

In the foregoing discussions it was taken for granted that the cheap money technique as suggested by Keynes would be successful in forcing down the short-term rate of interest to the most unprefitable level. As a result the banks will have to reach out to lengterm assets and the rate on them consequently shall have to fall. The reaction of the banking system to a cheap money policy was examined so far under a special assumption that in a depression there is generally a lack of sufficient demand for funds for investment purposes. This particular assumption may be now removed. Even if it is taken for granted that sufficient demand for bank loans at a lower rate of interest will comeforth, it is a question how far, by open market operations, the central bank will be able to force down the rates of interest in the manner suggested by Keynes.

The success of the cheap money policy as suggested by Keynes can be realized only under certain conditions. Firstly, the banks would be tempted to purchase long-term investments only when the difference between the short-term rate of interest and long-term rate is large enough to compensate for the loss of liquidity due to long-term investment. The long-term rate of interest should

^{1.} J.M.Keynes. Treatise, Vol. II, p. 371.

rest at such an ideal level that, while ensuring good income to the lenders, it must be at the same time, low enough to be sufficiently attractive to borrowers. There are especially two conditions necessary for the long-term rate of interest to secure this ideal positie on. In the first place the short-term rate of interest should fall to so low a level (almost mext door to nothing according to Keynes) that the margin between the two would become attractive to bankers despite the fall in the long-term rate of interest. This condition is difficult to realize in practice. There is a lower limit below which the short-term rate of interest cannot fall. The whole theory of banking rests on liquidity and short term lending. The banks would always try to maiatain first a certain amount of short-term assets so as to meet their conventional liquidity ratio, and only them embark on long-term lending. Thus; the British banks maintain 30% of their deposits in terms of liquid assets. Increase in the longterm assets of banks is largely dependent upon and is conditioned by the corresponding increase in their short-term assets. This is well illustrated by the behaviour of commercial banks in U.K., during the 18 months before the Second World War. In the U.K. during this period a large part of foreign funds was withdrawn. In addition to this, Treasury had considerably reduced the issue of Treasury bills. As a result, there arose a dearth of short-term assets for the banks. The ratio of liquid assets-cash, call money and discounts - to deposits fell below the traditional 30% level. The result was that the banks were compelled to sell government securities to help in restoring the 30% ratio although their actual cash ratio was already higher than the conventional 10%. The rate on government securities would have risen high but for the timely Treasury policy of stopping the funding of the Treasury bills and issuing additional Treasury bills in order to supply the banks with the necessary amount of

short-term assets. Thus increased bank investments cannot be secured without increasing their short-term assets. Not only this, but the banks would resist the fall in the short-term rate below a certain level. Thus, in 1935, in England, the Lendon Clearing Banks made an agreement to refrain from buying or bidding for Treasury bills at a rate below 2%.

In the second place, even if the short term rate of interest may fall to a considerably low level, the leng-term rate of interest may not fall at all or may rest at a level at which it may not be attractive to borrowers. This is because of the banker's calculations of rasks in various long-term investments. During the period of depression very few investments appear practically riskless and therefore, despite a very low level of short-term rate the banks do not reach out to long-term assets. The policy of increasing bank reserves by means of open market operations bears no *significance for the investment pertfelie of banks. This is can be evident from the following table which gives the fluctuations in the excess reserves of member banks of the & Federal Reserve system along with the total volume of their kames loans and investments.

Year	(In Millions of Deli Excess Reserves of member banks.(A)	Totalloans and invest- ments of all member Banks (B):
1929	43	35934
1934	1500	28150
1935	2469	29985
1936	2512	33000
(Dec.31) 1937 (June)	1220	32739

(Note (A): From Money and Banking.League of Nations, 1937-38 p.1902x 195.

⁽B): From F.R.B., December 1938, p. 1902.

^{1.} W.Manning Dacey. 'The Cheap Money Technique', Llyeds Bank Rev., Jan 1947, pp. 52-53.

^{2.} League of Nations. 'Money and Banking' 1937-38. p.184.(1938).

It can be easily seen from these figures that it is not possible to establish any precise relationship between reserves and the volume of their loans and investments. There is visible a very sharp rise in the excess reserves of Member Banks from 1929 to 1934. This may be to a certain extent the result of easy money policy followed by the Federal Reserve Authorities by means of open market purchases undertaken on a tremendous scale from March, 1932 to November 1933. But no increase was found in the volume of leans and investments of Member Banks. On the contrary there is visible a positive fall in them. Between the two successive years of 1935 and 1936 the excess reserves increased by about 1.74% while increase in the loans and investments, on the basis of these figures, amounted to 15.05%. The restrictive policy was adopted by the Federal Reserve System from August, 1936 and a gradually the max reserve requirements for banks were raised. From 1936 to June 1937 (i.e. about during six to seven months) the excess reserves recorded a fall by more than 50% while the corresponding fall, in loans and investments was only by 0.79%. Thus, the secondary effects of changes in the excess reserves are some-times in the opposite direction and sometimes though they are in the same direction, there is an abnormally wide range between the percentage of change in the reserves and that of the change in the total volume of loans and investments.

The third important condition for the success of cheap money policy is that the banks should purchase long-term assets the rate of interest on which is comparatively higher. For, otherwise the hisher rates on such assets would remain high but the effects of the cheap money policy woulds remain restricted only to a narrow class of investments. On the count of profitability one can say, prima facilitate the bonds with comparatively higher yields and shoter maturities

^{1.} F.R.B., 1938, Dec. p.1069.

would find favour with the banks. But it is not easy to ascertain the direction of long-term investments by banks on the basis of profitability alone. Thus, in the case of the U.S.A., it is true that the fall in the total volume of leans from 73% of total earning assets in October, 1929 to 41% at the end of 1935 was accompanied by a corresponding rise in investments from 27% before the stock-market crash to 59% at the end of 1935. But, herein, out of the 59% of investments. United States Government securities (both direct and guaranteed) accounted for 41% of total louns and investments in December, 1935 while other securities amounted only to 18.4% of the total. This was so despite the fact that the average yield on U.S. Treasury bonds remained the lowest among the average yields on various bonds such as Municipal and other Corporate beads. 2 If this is so, the increase in the cash reserves of member banks will have little or no significance in directions other than that of government obligations.

The league of Nations Committee on Depressions clearly recognised that in most countries there remains a wide gap between the long-term rate of government bonds and the rates changed on commercial leans. It was recommended by that Committee that the rate of interest paids on deposits by other banks such as savings banks should also be brought down in order to prevent any diversion of deposits from the commercial banks which may be then induced to lower their lean rate. This is, however, a misunderstanding of the problem. Higher deposit rates may be a reason for higher rates demanded on investments but higher deposit rates do not explain the gap between rates on government securities and those on other bonds.

^{1.} League of Nations. Meney and Banking . 1935-36,p.196.

^{2.} F.R.B.Dec., 1936, p. 1001.
3. Economic Stability in the Pest-war World. League of Nations.
p. 102

The Cheap Mency Policy Vs. The Stability of the Bond Market.

It can be seen from the preceding observations that though the primary objective of influencing bank-reserves by means of open market operations can be realized, the secondary effects are generally unpredictable. That is why the very principle of putting the central bank credit in the market on the initiative of the central bank is some times called in question. It is suggested that less reliance should be placed on such operations, for, they create artificial ease of credit and an artificial bond market.

pespite this, epen market eperations as a weapon of monetary management enjoy a fixth distinct superiority ever other weapons in that that they influence at ence the rate of interest, short-term or long-term, according to the maturity of the assets that the central bank deals in. It is because of this reason that Keynes called the policy of dealing in debts of various maturities by the central bank as the most important practical improvement in the technique of monetary management. Such a policy, no doubt, would go a long way in directly influencing the long-term rate of interest, but it is surrounded by many limitations. In addition to the limitations enumerated by Keynes in his General Theory, there are two other important limitations of the cheap mency policy aiming at directly forcing down the long-term rate of interest by means of open market purchases.

One/such limitations is as regards the magnitude of the resources of the memetary authority and the consequences of such operations. In order to understand this we shall have to consider the effects of the operations in the open market on speculation. When the mometary authority attempts to push down the long-term rate of interest, it causes the prices of securities to rise and this

^{1.} The view of Federal Reserve Bank of Philadelphia quoted by H.P. William On Cit. p. 192.

Willis, Op. Cit., p. 192. 2. (3 General Theory, p. 206). 3. Ibid , p. 207-208.

would raise prospects of capital gains for the holders of securities. In the beginning speculators will help the monetary authority in driving the long-term rate of interest further down, by purchasing securities at rising prices in anticipation of speculative gains. But as soon as they realise that the rate of interest cannot be forced further down, they will all suddenly unload the burden to secure the maximum possible capital gains. All holders of securities, whether speculators or others, will be guided by the same considera -tions. This incentive to earning from capital gains rather than from interest yield is greater where the tax system imposes heavier imposts en income than on capital gains. At this juncture the central bank can intervene in the security market to maintain the price of bonds (i.e., to keep the long-term rate of interest at the maximum). But the ability of the central bank successfully to steer clear of the storm will be limited by the relative size of the national debt vis-a-vis the resources of the central Bank. A monetary authority like the Federal Reserve whose resources are large relatively to the total U.S. Mational debt may be able to act directly on the long term market with some success. But the position of the Bank of England is different. The relative size of British
to distilly influence the long-term rate of interest
national debt being very great, any attempt by the Bank of England, would involve actually so great a volume of created money that it would shake public's confidence in the system.

The second possible limitation of the cheap money policy springs forth from the attitude of institutional investors like the banks, insurance companies etc. If these investors, in the prevailing economic situation, do not feel confident about the ability of the monetary authority to maintain the long-term rate at a low level, the cheap money policy cannot be maintained. This can be better

^{1.} R.S. Sayers. Central Banking in the light of recent British and American Experience. B.J. of E. May 1949, p. 204.

illustrated from the British and American experience in the post-war period.

In Britain in 1946-47, the monetary authorities were successfuling his in bringing down the long-term rate of interest as low as 21% from 3% . However the authorities could not maintain it at that level, because of the distrust felt by the weighty investing institutions in the efficacy of the monetary policy. The market was convinued that; in the light of basic economic forces is of high demand for capital investment and scarcity of resources, 22% could no This sentiment gave rise to a large scale longer be maintained. selling of long-term bonds the capital gains on which gave rise to increased inflationary spending. The saving in the form of interest on long-term leans that the authorities were able to secure by the cheaper mency policy was insignificant in comparison with the prefits made from capital appreciation. If the memetary authority under the cheap meney policy becomes an enemy of the rentiers, it is much more the friend of speculators - a pelicy of horring Peter to pay Paul.2

In the U.S., the experience was an different. During the war, the commercial banks came to possess a large volume of government securities in their investment portfolio. The banks were the holders of especially short-term government securities. In the postwar period, the Federal Reserve Authorities adopted the policy of maintaining the pattern of interest rates in order to maintain a stable market for government securities. When the banks were convinced that the market would be supported by the Central banking authorities, they at once began to sell off short-term low-rate securities to the Federal Reserve Banks and began to purchase bonds. Thus, during the two years from 1945 to 1947 the holdings of Treasury bonds by commercial banks, mutual savings banks and

^{1.} R.S.Sayers, 1bid.p.205.
2. G.W.Paisa. 'Cheap Maney Pelicy' Economica , August 1947,p.175.

insurance companies considerably increased while heldings of Treasury bills and other short-term securities suffered a sharp decline. When the market was inspired with confidence in the policy of the menetary authority and was free from the apprehension of capital lesses incidental to fluctuations in bond-prices, liquidity outlook of the investors autematically changed. Bends became as liquid, in practice, as the Treasury bills. But for the intervention of the authorities, the bend prices would have risen considerably and the long-term rate of interest would have further fallen. In the inflatienary context of the post-war period in the U.S.A., the authorities thought it undersirable to let long-term rates fall still further down. They, therefore, adepted the policy of raising the short-term rate in order that the long-term rate af might become less attractive to banks, and therefore might step falling further. 2 The experience in both the countries indicates that the attitude of institutional investers such as banks insurance gampains companies etc. plays a vital rele in the success or otherwise of cheap money policy. This is because, the combined resources of these institutional investors are very large in comparison with the total turn over of the market. They are especially, interested in the stability of the bond-market for, the less from capital depreciation would be so larger that it cannot be made up out of increased interest income for several years.

On the strength of above considerations, it is suggested that the monetary authority should take the stability of the bond-market as its objective rather than an ultra-cheap money policy. This objective of monetary policy has come to attain an overwhelming importance since the thirtees of this century. The problem herein is not one of choosing an objective of monetary policy but that

^{1.} F.R.B., Dec. 1947, p. 1524.

^{2.} F.R.B., April 1947. 'Methods of restricting monetization of public debt by banks', p.404.

^{3.} R.S. Sayers, Op. Cit., p. 206.

of choosing the level of interest rates, For, what even an ultra-cheap money pelicy would require stabilization of the rates at a lewer level. The policy of the stabilization of government bonds raises the question as to the level of prices at which the bonds should be stabilized. If the level of stabilization is too low, the policy cannot be successfully carried on without the aid of direct centrels. If the level of stabilization is artificially low, it is impossible to pursue successfully the stabilization policy simply by dealing in debts of different maturities in a free money and capital markets. This is the experience in both U.S.A., and U.K., in the post-war period. There is a great deal of truth in the statement that in U.K. the Treasury was able to maintain the gilt-edged prices only by "rigging the market". With rates at artificially low level in U.K., in the post-war periodit it is not wrong to say that even a nonsocialist government would have found it difficult to remove the post-war controls over investment without incurring the risk of an inflationary beom.

This disillusionment as regards the ability of the monetary authority to hold up the ship evenly in times of inflationary pressure is well expressed in the following words.

"For years together continued progress towards ever cheaper government berrowings has been taken for granted; but on occasions (e.g. such as the approach of full employment in 1937 in U.K.) there have been widespread doubts whether all the blandishments and devices of the Treasury would suffice to held ground already gained a or even stern the headlong retreat to more 'natural' rates of interest. The belief dies hard that cheap money can be no more than a cock-tail even whenit has been our staple fare for many years in war and peace, in depression and recovery.2

2. Ibid p.49.

^{1.} W.Manning Dacey, 'The Cheap Money Technique' Lloods Bank Review, 1947 H Jan.p.50 and p.63.