

B. F. Madon Memorial Lectures : 1977

# THE ART OF CENTRAL BANKING

R. K. SESHADRI

*Retd. Dy. Governor, Reserve Bank of India*

X621  
L7

X621  
L7  
169060

Chamber

& Training Foundation

Sir Purshottamas Thakurdas Research Wing

Bombay 400 020

# THE ART OF CENTRAL BANKING

R. K. SESHADRI

*Retd. Dy. Governor,  
Reserve Bank of India*

**IMC**  
**ECONOMIC RESEARCH AND TRAINING FOUNDATION**  
**Bombay 400 020**

---

\* This is the Tenth Lecture in the Series, delivered at the Walchand Hirachand Hall of the Indian Merchants' Chamber, on February 9, 1977.

## WELCOME ADDRESS

by

**Shri H. T. PAREKH, Chairman,  
IMC Economic Research and Training Foundation**

On behalf of the Trustees and the Executive Committee of the IMC Economic Research & Training Foundation, I have great pleasure in welcoming you all to this Tenth B. F. Madon Memorial Lecture. Under this series, we have been able in the past to get distinguished men from different fields to speak on financial and economic subjects of public importance. This year, we have been equally fortunate in getting a distinguished central banker and outstanding public servant and administrator, with long experience in Finance Ministry and the Reserve Bank of India, to give an address on the 'Art of Central Banking'.

I have had the privilege and good fortune to know Shri R. K. Seshadri personally for many years during his association with the Reserve Bank of India, from which he has recently retired as the Deputy Governor. I know of no one who has Shri Seshadri's depth of knowledge of government laws and regulations, as well as general understanding of financial policies and administration. He has not only the insight and acquaintance of almost all issues connected with finance, public and private, national as well as international, but his intense knowledge and study of the history of the Indian money market for over a century, makes him a scholar of highest distinction, perhaps without an equal in this field.

After his retirement from active service, we thought we should harness his scholarship and mobilise his services for enriching public knowledge on subjects of high finance which would be of benefit also to posterity. His simplicity, his character, and his integrity, his wisdom and balance as

finance administrator in government, have made a deep impression on my mind, and I know how highly he is respected everywhere. On behalf of you all, I would like to thank him for taking great trouble in preparing his learned paper which he has done in two forms, a short one for presentation at this meeting, and a longer study for publication by our Foundation. The time, industry and effort needed to prepare this kind of study is not easy to give unless you are motivated by a high sense of public service.

The theme of this Memorial Lecture, 'The Art of Central Banking' is of great public interest. Hardly a day passes when you do not find in the newspapers some new policy announcement in financial and economic matters, which affect public and the businessmen closely. While momentous events are taking place within India and outside in the financial and economic world, as events of last 6 to 7 years well illustrate, there seems to be a singular lack of public study and discussion on them in India. Whatever policy decisions are taken by government, there is hardly any informed and independent study and comments by the press and other sources. In other countries, outside agencies review and comment freely on government decisions and government respects observations made by such bodies and examines them on their merit. We, in India, have yet to develop such traditions, but in their absence, there is often a gap between thinking in government and thinking of the public. I hope studies of this nature will serve to establish better communication. This research foundation also proposes to take other steps in this direction by forming special study groups with the single purpose of helping to build up a sounder economy in India.

The task of the Central Bank of a country has become far more complex in recent years, and they have to carry great responsibilities. Problems of inflation and recession, of money supply and employment, of determining exchange parities and currency links of lowering and raising rates of interest, and their impact on the economy, of control of

commercial bank credit and public sector spending, of international liquidity and internal liquidity, of international flows of capital and reserve currencies — these and many more are the subjects with which the central banks are intimately connected, and on which changing world circumstances require frequent re-examinations and call for quick new decisions. Shri Seshadri has had to deal with each and all of these problems during his official career, and he has acquired an expertise which few possess. May I request Shri Seshadri to deliver his Madon Memorial Lecture?

**LECTURE BY SHRI R. K. SESHADRI, RETIRED  
DEPUTY GOVERNOR OF THE RESERVE BANK OF  
INDIA, ON THE 'ART OF CENTRAL BANKING'**

I am grateful to the authorities of the Economic Research and Training Foundation, of the Indian Merchants' Chamber, for inviting me to speak on the Art of Central Banking. Before I plunge into the subject, I think an explanation of the choice of the title, which implies an unjustified claim to professional competence and expertise on the part of central bankers, and also perhaps of the choice of this topic will be in order.

2. I have borrowed the title from Hawtrey's essay, written in 1932. Hawtrey believed that central bankers were reluctant to admit that there was something like an art of central banking, but he also thought that men and events were amenable to discipline and control and central banking could, therefore, be based on established principles.

3. It is a measure of the change in the world monetary situation that Hawtrey's assumptions and his essay have become so much out of date. It is interesting to note, in retrospect, that he feared deflation more than inflation, that he did not believe that speculative balances moving from one country to another could cause currency upheavals, and that he expected or hoped that once central banks were able to escape from the tyranny of gold, currencies could in practice be so managed as to produce those changes in consumer income and outlay, which were necessary to enable central banks, acting together, to maintain stable prices and orderly economic conditions throughout the world. The assumptions, which were then made, the issues in dispute and even the language of the discussion now appear to be remote and unreal. It seemed to be desirable, in view of this, to try to ascertain whether there is anything at all in the literature on central banking which survives and can be said to be of interest and importance at present.

4. There was also an additional reason for the choice of this subject, and it is that an objective survey of central banking history seems to be very badly needed at present. Central banks are prestigious institutions, enjoying the aura of power and authority, which is inevitably associated with the management of money, but like all institutions, enjoying unparalleled or nearly unparalleled authority, they have had their ups and downs. They have not been always or universally popular.

5. For quite some years after the establishment of the Bank of England, the prototype for all central banks and monetary boards, the public reaction to central banking was hostile. While a great deal of this hostility was motivated by competing institutions, much of it was also born of the genuine suspicion of any claim that a discretionary power in regard to money could be exercised by any persons, however eminent, with enough knowledge, so as to serve the public interest. This suspicion explains the early controversies, which now look so unreal, between the currency school, which wanted to impose the discipline of a tight and inflexible rule on the central bank, the currency being adjusted to gold movements, without any discretion on the part of the central bank to vary the amount of the issue in any other circumstances, and the banking school, which wanted some flexibility in adjusting the amount of the currency in circulation, so as to meet the requirements of the public.

6. For more than two hundred years since the establishment of the Bank of England, till the Cunliffe Committee's report in 1918, or later, the currency school dominated official thinking on monetary policy. It led to the adoption of what was known as Palmer's rule, the note issue being adjusted to the inflow and outflow of gold, as if it were a metallic currency. Ricardo was one of the leaders of the currency school; and his verdict on the Bank of England, delivered during the debate in the House of Commons on the resumption of convertibility in 1819, is worth quoting, as it reflects the earlier suspicion of central banks.

'The House did not withdraw its confidence from the Bank from any doubt as to its wealth or integrity, but from a conviction of its total ignorance of the principles of political economy'.

7. The Bank of England survived this stricture. Helped by the advantages of empire, the opening up of the Chinese trade after the opium wars, and the break through in communications with the far east between 1869 and 1871, the Bank went on to establish sterling as the universal reserve currency, with about 90 per cent of the world's trade being invoiced in it around 1931. It had enough power and independence in Lord Cunliffe's days to countermand the Treasury's instructions to J. P. Morgan and Co. Cunliffe's successors did not go to the same lengths in asserting their independence, but Lord Norman inspired the resolutions of the Brussels conference in 1920, which recommended that countries without central banks should establish them, and also that these banks should be free from political pressure. Lord Norman persuaded the British Treasury to endorse these recommendations, wrested from Churchill and Snowden, official statements recognising the Bank's freedom to act on its own initiative in charging the bank rate, and in consultation with Benjamin Strong of the Federal Reserve, prepared a memorandum on the scope and functions of a central bank, which although it is not publicised or well-known, still defines for the banks in many countries what a central bank can or cannot do.

8. Norman actively promoted the establishment of central banks in the Commonwealth between 1921 and 1935, and created a tradition by which powerful central bankers like himself or Emile Moreau in France, Benjamin Strong in the U.S.A. or Schacht in Germany, acting in concert and not necessarily with the backing or approval of their Governments, were to stabilise and manage the world's monetary system.

9. There was a reaction from this, after the restoration of gold parity at the old level in 1925. The Bank lost its



reputation, and has not been quite popular with Labour or the left-wing since then. The memories of the general strike and the deflation in the twenties are so bitter that it is not only among left-wing leaders all over the world that central banks have ceased to inspire respect and awe. I quote the following from Harold Macmillan's Memoirs:

'While the authority of the city, particularly of the Bank of England must always be great, yet the most tender critic of the financial and economic policies proposed by successive Governors could scarcely maintain that the Bank had always given wise advice to the Government of the day. I cited various examples, such as Lord Cunliffe's estimate of the capacity of Germany to pay reparations, the advice of Mr. Montague Norman given to the Chancellor of the Exchequer of the day to return to gold at a parity of \$ 4.86 to the pound, the long deflationary policy, which has caused a wave of ill-feeling among the working classes against the capitalist class that was still not yet expended; the events of 1931 and the apparent concession to American banking opinion of the standards of the unemployed; finally, the ill-advised return to convertibility in 1947. All these raised at least doubts in many minds. All sensible people respected the authority of the world of banking and finance, but one did not have to subscribe, therefore, to the dogma of city infallibility'.

10. If the Bank of England, with excessive pre-occupation with gold and sterling's status as the world's reserve currency, lost its prestige in 1925 never to recover it in the same measure, the death of Benjamin Strong, it has been said, left a vacuum in the top management of the Federal Reserve, and the monetary policy of the Federal Reserve System in the critical years from 1929 to 1933, has been described as inept in Friedman and Schwartz's *Monetary History of the United States (1867 to 1960)*. As regards Germany, the great inflation of 1923, now forgotten perhaps everywhere except in West Germany, is an illustration of what can possibly happen, when the international financial

community fails to act in concert or with foresight and wisdom. The German experience was unique and tragic, particularly as it appears from Adam Fergusson's account entitled 'When Money Dies' that Dr. Rudolf Havenstein, the President of the Reichsbank since 1908 was concerned during the critical years and months only with the Reichsbank's ability to provide enough currency — in the belief that this money supply could not affect prices or exchange rates. There were some people who initially did well out of the inflation but the results of drifting like this for a period of about five years became apparent at the end of 1923.

11. As chronicled in William Guttman's and Patricia Meehan's *Great Inflation*, the price of an egg went from 0.8 marks in 1913 to 80,000 billion marks in November, 1923, and people had lost all feeling for numbers to the extent that patients were admitted to a clinic in Munich, describing themselves as millions of years old or with thousands of children. Germany incidentally went through this traumatic experience once more, before reichmarks, rentenmarks and mark notes were replaced by the Deutschemark in 1948.

12. Partly because of these experiences, but partly also because a great deal of information about central banks is now available, they have been exposed to the limelight and inevitably to criticism. The mistakes of the central banks and the foibles of the central bankers have been chronicled in recent books like Brian Johnson's *Politics of Money*, Peter Wilsher's 'Pound in your Pocket', and Galbraith's 'Money'. Can central banking be as bad as the public may be led to expect from these accounts? Or is there a danger of over-reaction, which may be undesirable in the long run, as undermining our faith in these institutions, and thereby affecting their ability to discharge their responsibilities? I thought that an objective appraisal might be of some use as redressing the balance.

## II

13. There are now 129 central banks in which are represented in the IMF and with the central monetary authorities of the common countries, and some others, which are outside the IMF, there may be about 150 central banking institutions in the world. Their experiences are varied. Not all of them subscribe to the principles defining the scope of central banking as contained in Lord Norman's memorandum of the early twenties. Central banks have been carrying on commercial banking under certain circumstances, they have bought large blocks of shares in industrial companies and two of them namely, the Reserve Bank of Australia, and the Reserve Bank of India, have been closely associated with the provision of agricultural credit. Some of the central banks print their own notes. The majority of them do not, and many still rely on security printers in the private sector. Some central banks like the Bank of England take hardly any interest in arranging the transfer of funds within their territories, on account of other banks. Others like the Federal Reserve System in the United States and the Reserve Bank of India, provide free or cheap facilities for this purpose, incurring a considerable amount of expenditure. Some like the Deutsche Bundesbank operate mainly the discount window for their commercial banks, dealing primarily in non-Government obligations. Others like the Federal Reserve, regard open market operations in short-term Government obligations as one of the major instruments of policy. There are minor variations in the concept of money supply; and there are variations, not so minor in the concept of compilation of balance of payments data, with a liquidity balance in the United States, which is asymmetrical in the treatment of liabilities to and from foreign countries, and an official settlement balance, which is apt to be confusing, if it is not used consistently as a guide for policy. Special Drawing Rights figure in the balance-sheets of some central banks, but not in those of others. Some banks like the Reserve Bank of India offer forward cover for protecting exporters as a

standing arrangement and on a major scale, regardless of the cost. Others intervene only fitfully or for other purposes, such as recycling the inflow of U.S. dollars, as in the case of West Germany. It is no longer possible in short, to say as Lord Norman tried to in 1921, what a central bank can or cannot do. On the other hand, central banking, one can say with justification, means whatever any central bank anywhere in the world finds it necessary or expedient to do.

14. Against this background, it is not necessary, or possible, in a paper of this length, to examine every problem, which faces a central bank and I shall deal, therefore, only with a few major issues. Firstly, does monetary policy, or by necessary implication the quantity of money matter as much as we used to think it did? Secondly, how is the money supply to be measured? Thirdly, is the interest rate the sole or predominant or even an effective instrument of control? Finally, to what extent do external forces limit the freedom of central banks or offset or even defeat their efforts? I shall consider these questions, in the order, in which they have been mentioned.

### III

15. The Radcliffe Committee on the Working of the Monetary System in the U.K., came out with a pronouncement which overruled all the earlier official recommendations, in favour of limiting the currency and the money supply as an important and adequate instrument of policy. The Committee was impressed by the theoretical difficulties in identifying the money supply, the haziness, and the impossibility of limiting, the velocity of circulation and the empirical evidence in favour of the view that monetary policy was much less effective than was generally assumed.

16. In the result, although the Committee did not regard the supply of money as unimportant, they viewed it only as part of the wider structure of liquidity in the economy and they advocated measures to strike more direct-

ly and rapidly at the liquidity of spenders, regarding a combination of controls over capital issues, bank advances and consumer credit as most likely to serve this purpose.

17. The Radcliffe report was submitted in August 1959. In the period, which has elapsed since then, the Committee is held, by common consensus, to have over-emphasised the case against monetary policy. The preoccupation with M 1 and to a lesser extent with M 3 within the U.K. or the policy pronouncements of the Federal Reserve System about 'averaging out' the annual growth in money supply do not in any case bear out the view that monetary policy has been relegated to a very low place.

18. The limitations of monetary policy are of course, obvious. Monetary policy is less successful in a non-competitive economy, in which entrenched monopolistic pressures, whether on the part of management or labour, prevent the desired adjustment in prices, or when fiscal policy counters or offsets the central banks' action, or when commercial banks do not respond to monetary policy, or when the velocity of circulation responds in such a manner as to offset that policy. On the other hand, however, it is impersonal. It operates across the board, without preventing readjustments within the overall quantum of money, it is more flexible than fiscal policy, requires less time for formulation and implementation, is more easily reversible and has few, if any, political strings attached to it.

19. As the tradition of regarding monetary policy as the major instrument of control is very strong, the limitations very often tend to be ignored. The advantages of being able to act quickly and with flexibility are in any event so great that inevitably, a far greater burden than circumstances might warrant tends to be placed on monetary policy. I have quoted the Radcliffe Committee's views in favour of reducing this emphasis on monetary policy and also referred to the limitations of such a policy in a non-competitive economy like ours. In the United States, Arthur Hayes, with nineteen years of experience as President of the Federal

Reserve Bank of New York, has expressed the view, on retiring from the bank, that central banks do not generally get as much support from fiscal policy as might be expected, in restraining inflation or cushioning recessions. It is true that recent experience in India has been different, but this experience has been unusual. The consensus of opinion clearly appears to be that there is always some danger of monetary policy being used excessively or as the sole instrument, without adequate supporting action in other fields. The Radcliffe Committee in retrospect seems to have served a useful purpose in enabling us to see this matter in the proper perspective.

20. In a developing economy, with narrow and ill-connected money markets, structural rigidities and non-monetary obstacles to growth, the limitations, especially in the direction of fostering development merely by acting on the money supply, are particularly important and should not be ignored. As a guide to policy, Chairman Martin's statement in February 1960, before the Joint Economic Committee of Congress, which I extract below, seems to be even more relevant in the case of developing countries than in the case of an advanced country like the United States:

'It (monetary policy) cannot prevent monopoly. It cannot assure that the financial needs of all socially desirable activities are met without intervention by Government. It cannot be relied upon to cover federal deficits. What a correct monetary policy can do is to foster confidence (in the dollar) so that people can save with reasonable assurance that their plans will not be frustrated by irresponsible changes in the value of money'.

21. In other words, granted that fiscal financial and debt management policies and physical controls as manipulated by Government operate in the same direction and enough time is allowed for the impact of monetary policy to be felt, it can be more potent and effective than the Radcliffe Committee was willing to allow, though not as important or useful as was once supposed.

22. To the extent that money matters (and it still matters a great deal), we have to consider the problem of measurement. M 1 (currency and demand deposits) and M 3 (which includes time deposits, but in the U.S.A. excludes large certificates of deposit i.e. as it was in the original) are now familiar even to laymen, who are educated and articulate enough to appreciate the impact of economic policies on their daily lives. But what are the near substitutes for money? Large certificates of deposit, deposits in savings and loan associations, Government and other savings banks, building societies and credit unions, savings bonds and easily negotiable shares, unit certificates, company deposits, which have recently become so important in our country, treasury bills and short-term Government securities — the list is virtually endless and can be varied according to one's tastes and preference and the conditions in each country, providing or not providing enough negotiability for near substitutes for money.

23. This very range must be the despair of any person, who aims at sophisticated perfection in the measurement of money. But it seems to be unnecessary to lose faith in the more traditional monetary indices altogether, because of their limitations. It is true that there is liquidity outside the banking system, but there are degrees of liquidity; and so long as assets in the form of bank deposits constitute the predominant portion of what can be readily converted into spending power, the conventional indices, M 1, M 2, or M 3, as the case may be, will be adequate for the formation of policy.

24. The deficiencies in measuring only what is reported by the banking system are not greater than those of quick estimates, confined to the data as reported by the clearing banks in London as distinguished from all commercial banks, or the difficulties of comparing the index in one country, with the corresponding index with the same nomenclature

in another country. M 3, for example, has different meanings in the U.K. and the U.S.A., as liabilities only to residents are counted in one case, while liabilities to all persons are counted in the other case with results, which are disparate, but important when the monetary effects of Euro-currency deposits are analysed. For operational requirements, two or three indices from M 1 to M 3 (from a range, which goes upto M 8, including currency, demand deposits, time deposits, deposits in savings and loan associations and mutual savings banks, large certificates of deposit savings banks and credit union shares, short-term Government obligations and commercial paper) must be deemed to be adequate.

25. The conflict within this limited range, when M 1 and M 2 or M 3 as the case may be, point in different directions, can be resolved by taking all three of them into account. This according to the Purposes and Functions of the Federal Reserve System, the official publication of the Board of Governors of the system, in fact the declared policy in the United States.

26. It is unlikely that a great deal more can or will be said on this subject, but one may hope that any further improvement will be in the direction of introducing more uniformity in the definitions of M 1, M 2 and M 3, so that international comparisons may be meaningful (differences like the inclusion or non-inclusion of liabilities to foreign residents, or in the treatment of items-in-transit, corresponding to liabilities, or of certificates of deposit or non-monetary liabilities can, for example, be eliminated and the selection of non-banking or para-banking institutions, with a view to the inclusion of their liabilities in M 3, can be based on agreed and uniform standards).

27. So far as India is concerned, two minor points may need emphasis. In view of the degree of liquidity of savings accounts and time deposits, aggregate monetary resources corresponding to M 3, must be regarded as being more important than we have been accustomed to believe so far. The other is that the accuracy of measurement of both



money supply and aggregate monetary resources seems to leave some scope for improvement.

28. The formulation of monetary and credit policy depends so much on the measurement of these aggregates that the dimensions of errors and omissions even in quick estimates should be reduced, to the extent possible. Two remedies are obviously possible; firstly, to strengthen the statistical and research cells in the major commercial banks and secondly, to mechanise the collection and compilation of essential data, at all stages and levels in the concerned institutions. Sophisticated monetary policies cannot be based on shifting, incomplete and uncertain statistics, compiled either in such great hurry and with such errors and omissions or with such a great time-lag as to be virtually useless.

## V

29. It will be odd, if one were to discuss monetary policy, without a reference to interest rates. This is a field, in which central banking theory appears to have become most out of date. British practice, supported by Goschen's Theory of the Foreign Exchanges in 1861 and Bagehot's Lombard Street in 1873, and endorsed in the Cunliffe Committee's report in 1918, served London's requirements adequately, as long as sterling was universally in demand. Bank rate changes of the order 1% at a time as advocated by Goschen or  $\frac{1}{2}$ % as suggested later by Keynes, were then deemed to be sufficient for all the purposes of a central bank. The bank rate in Britain has, however, disappeared since October, 1972, to be replaced by the minimum lending rate, based on the treasury bill rate as determined by the market. The growing influence of the monetarists has also led many persons to question the theory that monetary policy works or has to work via interest rates.

30. It has been said that when a child is born in the United States, it has to declare itself to be either a Monetarist or a Keynesian. The theoretical framework, the empiri-

cal analysis of past data, with a view to determining whether there is a closer link between the money stock and consumer expenditure, in accordance with the Monetarists' claim, (indicating the direct influence of money on the entire stream of goods and services) or between autonomous expenditure and consumer expenditure (indicating according to Keynesian theory, the credit effect in the form of autonomous expenditure, after the impact of the change on the entire spectrum of interest rates or yields on financial assets has worked itself out) is already formidable in volume.

31. In the Monetarist model of the economy, the velocity of money is assumed to be relatively stable and a given amount of money supply leads to a larger increase in GNP in a shorter period, the entire impact being spent in a year or thereabout, and the effect of a decrease in money supply on the GNP being symmetrical with those of an increase, while in the Keynesian model, the velocity of money can change, the effects of an increase in the money supply tend to be lagged and, therefore, take a longer period to work themselves out, the increase or decrease in the GNP being greater and the impact of an increase or decrease in the money supply on the GNP, when the economy is expanding or contracting, being asymmetrical for the reason that the chain of reactions is not the same.

32. The Federal Reserve, with objective impartiality, has set computers to work on both the models. There is one at St. Louis, using the Monetarist model and there is another, which has been sponsored jointly by the FED, the MIT and University of Pennsylvania, using Keynesian model. But nothing like a final or definitive view has emerged yet; the statistical evidence produced by Friedman and Meiselman, using U.S. data from 1897 to 1958, or by Friedman himself, using the data for the U.K. From 1880 to 1969, indicating a closer link between money stock and consumer expenditure has been countered by other studies, which have produced somewhat different results.

33. Over the last few years, the Monetary influence has, however, grown, as in an inflation-prone world, the creation of money tends to be so considerable that the chain of reactions, as predicted by Monetarists, becomes more and more credible. If one is pressed to take a stand or to adopt a working hypothesis therefore, one could declare himself to be a Keynesian Monetarist — which is to say, that while the impact of interest rates or the credit effect cannot be ignored, the direct link between money on the one hand and goods and services on the other may well be closer and of much greater significance.

## VI

The discussion has reached a stage at which it will be necessary to consider the merits of interest rates, as influencing either money supply or credit, depending on the degree of emphasis on the Monetarist or Keynesian approach to policy. Interest rates today, outside India, are the highest ever, or at least the highest after about a century, a result which has been brought about by a variety of forces and influences. Compensation to investors for inflation, the pull of demand and supply in the uncontrolled Euro-market, an attempt to make good the losses on account of the depreciation of sterling, the emphasis on monetary rather than fiscal policy and the progressive internationalisation of banking, are some of the considerations and events which have become more important in recent years than in the past. In the result, higher interest rates tend to be generalised. It is not possible for us to believe that the peak levels of interest rates have been reached yet.

34. In July 1973, the call money rate in Frankfurt reached the level of 38 per cent. Although this and other comparable rates at that time were freakish, depending on the maladjusted positions of individual Euro-banks, one can no longer say with confidence that more normal and conventional interest rates will be limited to what can be regarded as accepted levels. One has to consider, therefore,

whether this drift towards higher interest rates, is in the right direction, whether the effects are salutary or as desirable as is commonly assumed, and whether the changes will be easily reversible, if necessary.

35. One may easily have misgivings on all these counts. It now seems to be necessary to take a long-term view, particularly in the context of the growing debt service burden in foreign currencies of the LDCs, which are now being forced to pay commercial and increasingly higher rates of interest, for the loans which they have to raise abroad. The interest mechanism seems to have been overused; and in the LDCs as well as in the advanced countries, we are perhaps, getting used to excessively high interest rates, with results, which may not be very beneficial in the long run.

36. One can easily list the drawbacks of high interest rates. In the case of a developing country, which is insulated from the rest of the world by tight exchange controls, which has a captive market in Government securities and which relies, to a greater or lesser extent and directly or indirectly, on the allocation of credit, the sharpness and edge of the interest rate as an instrument of control are bound to be blunted. Interest rates in such a country, let us say India, do not have to respond to developments abroad. The captive market ensures that Government borrowing is no more or no less than is determined by the liquidity ratios or other physical controls, which operate independently of the interest rate. So far as the preferred sectors are concerned, interest ceases to operate as a price, determining the allocation of resources, as the allocation is otherwise determined. The effectiveness of the interest rate in other sectors is not also great, as any additional expense on account of a higher rate or relief on account of a reduction in the rate is bound to be passed on to the exchequer for the major part, the tax rate being very high.

37. The high cost of interest rates does not discourage borrowing as much as it discourages risk capital, for which the rewards in comparison are meagre. A very lop-sided

financial structure is thus produced in the organised corporate sector, as a result of excessive leverage or gearing, the equity base being reduced to a mere shoe-string. Entrepreneurs, who are starting new business units and do not expect to be in a position to pass on the expense of a high interest rate to the exchequer, in the absence of taxable profits, to which the expense can be debited, are likely to be particularly hit. High interest rates can kill the equity market or new enterprise, and will tend to stick or to become rigid, as savers and investors get used to them.

38. As regards flexibility in the use of the interest rate as an instrument of control, variations within a narrow range like 1% or  $\frac{1}{2}$ % are easily reversible, but it may be more difficult to fall back from a minimum lending rate or say 15% to one of 5% or 6 per cent, with corresponding changes in other rates. When the interests of savers and investors are involved, it will not be easy to reduce high interest rates, after those who have enjoyed them have been tempted by them for longish periods.

39. In the case of an economy, which is not insulated by exchange controls, there are additional complications. As they are open to external forces and the uncertain pulls and pressures of the Euro-market, where interest rates are determined by market forces, in conditions of relative freedom, leading rather than being influenced by domestic interest rates in the major countries, it is a moot point whether the determination of interest rates in the case of any such economy is wholly within the jurisdiction of the central bank. Cogent and logical discussion of the role of the interest rate on the domestic situation becomes irrelevant, when the rates have to be determined by considerations relating to the external balance of a country, for example, for keeping foreign funds locked in, notwithstanding the depreciation of the currency, as in the United Kingdom, or locked out, as in the case of West Germany and Switzerland, or just by responding to the ruling level of interest rates in the Euro-market. In view of these consi-

derations, relative stability in interest rates at a normal and acceptable level, rather than high interest rates, or violent fluctuations in interest rates will be in the interests of a country, which is open to external influences, including the pressures of the Euro-market.

40. A great deal more can be said on this subject. But theoretical considerations apart, it cannot be an accident that in the monetary history of the world, low interest rates prevailed for so long and in so many countries till recently. Our pragmatic ancestors might have had some dim perception of the repercussions of the overuse of the interest rate mechanism.

41. One may end this discussion of interest rates by a reference to the experience of the Federal Reserve System. In 1970, the FED announced a policy change, according to which M 1 and M 2, total member bank credit as a proxy for total bank deposits, and total member bank reserves were to be the primary guides, desirable conditions of credit availability and interest rates being, however, taken into consideration and long-term goals being weighed suitably against short-term trends and unanticipated developments in short-term periods. In other words, less attention was to be paid to interest rates and more attention to monetary aggregates. This would be the position of a Keynesian Monetarist, who is not prepared to ignore the interest or credit effect altogether, but who is basically and fundamentally an adherent of the quantity theory of money. It might be a prudent and acceptable policy for many other central banks besides the Federal System to follow.

## VII

42. Having established or reiterated the importance of monetary aggregates as the predominant guide to Central bank policy, it is now time to consider two major influences, not wholly amenable to central banks' control, which have the effect of varying these aggregates, namely, public debt management and capital flows, primarily in modern conditions to and from the Euro-currency market.

43. Central banks are supposed, according to popular belief, to be engaged in a constant struggle with their Governments about their deficits and to be constantly losing this battle, by borrowing from the market, on behalf of Governments, resources, which do not exist, thereby monetising the public debt. There have been periods in the history of some central banks, including the Reserve Bank of India, when this allegation was true. But it is by no means universally or always true; and in the last few years, and generally since 1951, there has been an improvement in the position.

44. The outstanding public debt is not of very great importance in several countries. In West Germany, the public debt is so meagre that open market operations, for varying the commercial banks' reserves are not possible and the primary reliance has to be on discount rate policy. In Japan, the gilt-edged market is virtually non-existent. For all practical purposes, there are only four countries, namely, the U.K., the U.S.A., Canada and India, where there has been historically a very long and established tradition of borrowing and where the public debt is of such dimensions that any lessons can be drawn from the experience of managing it in the past.

45. Conditions, even in these four countries naturally differ, for historical and other reasons. Open market operations are more important in the U.S.A. and latterly in India, but are conducted with varying objectives. The instructions to Manager of the System Open Market Account in the United States are formal, consisting of introductory paragraphs on the behaviour of economic and financial indices, a statement of the objectives of monetary policy, and operating instructions, based on an analysis and projection of money and credit variables, forthcoming treasury financing, strategies for dealing with short, medium or long-term debt and any other relevant factors; and every directive is published retrospectively after a period of 90 days.

46. There was an artificial restriction, between 1918 and 1961 of the rates at which the Federal Reserves could deal

in long-term securities, as in the interests of encouraging open market operations in short-term securities, a ceiling of 4½% on the coupon rate for long-term debt was prescribed by Congress. The abandonment by the Federal Reserve in 1961 of the policy of adhering to this ceiling as the permissible higher limit for the yield on long-term securities has brought about a better yield pattern for the funded debt of the United States, but traditionally, the operations are still confined to the short-end of the market. Short-term rates in the U.S.A. are apt to be out of alignment with, and from time to time very much more than long-term rates and the pull of the Euro-dollar market on short-term rates in the U.S.A. generally is very strong.

47. In the United Kingdom, on the other hand, there has always been an orderly market in the long-dated securities, the yields being always and more rationally adjusted to the length of the maturities, but the treasury used to be a borrower predominantly through treasury bills; and the monetisation of the public debt used to take place, therefore, predominantly by the discount houses and the banks failing to renew the floating debt in the form of treasury bills and passing on the burden to the Bank of England. The maintenance of orderly conditions in the treasury bill market, therefore, became the most important policy objective, (in contrast to the conditions prevailing in the United States, where the maintenance of stable rates and yields for long-dated securities used to be the predominant objective in the U.S.A. before 1961). In the interests of maintaining orderly conditions in the treasury bill market, and as it was impossible to achieve at the same time the conflicting objectives of varying the amount of cash in the hands of discount houses and banks and to maintain the treasury bill rates at stable levels, the Bank of England declared itself to the Radcliffe Committee as not being interested in the control of cash in the economy through its open market operations.

48. There has, however, been a major change since a massive funding of treasury bills of the value of £ 1 billion took place in 1951. Since then, the danger of monetisation



of the debt has diminished the unfunded debt in the form of treasury bills, in case they are not renewed and have to be taken up by the Bank of England, has been reduced; and the announcement in 1971 of the decision that the gilt-edged market would not be supported as a matter of policy, or as a standing arrangement except for maintaining prices and yields in respect of securities maturing within a year has further diminished the dangers of monetisation.

49. In India, open market operations by the Reserve Bank of India in Central Government securities are, perhaps, much larger in relation to the outstanding volume of the debt, but for some years now, the objectives have been only to maintain an orderly structure of interest rates to provide negotiability and to promote activity in the market, leaving the monetary and credit effects to be brought about entirely by credit policy.

50. In spite of these differences in conditions and traditions, there has been a move since 1951 against supporting Government securities, regardless of the repercussions of such support on the monetary policy, which may be otherwise considered appropriate. There was firstly, the Treasury-Federal Reserve Accord in February 1951 which relieved the Federal Reserve System of the responsibility for supporting Government securities at pegged prices and recognised its independence in managing the bond market. In November, 1951, the Bank of England announced that it would no longer maintain the market rate for treasury bills at a steady level and that from time to time, the market might be forced into the Bank as in the past (this was before the Radcliffe Committee's report by which time, the Bank had gained some but not total freedom in managing the treasury bill market). Around this time, the Reserve Bank of India also abandoned the policy of buying Government securities to meet the seasonal requirements of banks during the busy season, and it has maintained this policy ever since.

51. It does not follow from these changes in policy that central banks in countries, in which the public debt is relatively large, have abandoned their obligation to maintain orderly conditions in the market and to maintain and enlarge it, so as to facilitate funding or borrowing by their respective Governments. It may be true to say, however, that broadly but everywhere, it has been recognised that open market operations are not intended to serve the treasury's requirements, but the objectives of monetary policy.

52. In view of this, there is no longer any independent theory of public debt management. There is no great danger that public debt management will offset or be in conflict with the overall implementation of monetary policy.

## VIII

53. It is doubtful whether the same complacent view can be taken about external influences operating on monetary policy. It used to be a criticism of the Bank of England, that it was excessively concerned with gold movements and with external forces operating on the economy, and it was urged against the Keynesian system that it was intended for a closed economy. In either case, the assumption was that within limits, a country could choose for itself whether it should or should not be influenced by external forces, in so far as they affected the domestic economy. It is becoming increasingly debatable whether this freedom and initiative will continue to be available to central banks.

54. At the risk of presenting a caricature of what may be possible, though hopefully avoidable, one may make a gloomy prophecy. Let us assume that the Euro-markets will expand very greatly. It is not difficult to imagine why it should continue to grow. Oil funds will continue to feed the market, increasing its relative importance in relation to domestic money markets. Exchange control in many countries, which have the effect of starving the world of capital

except in the free Euro-market, the profitability of the Euro-market from the point of view of the major international banks, which will be free in this market from reserve requirements and ceilings for interest rates and will at the same time be incurring lesser expenditure and making more margins, because of the wholesale nature of the market and the first class names of the borrowers are bound to contribute to the growth of the Euro-market. The drift of funds covered by arbitrage, moving from place to place in search of higher interest rates, and the very fact that central banks of countries receiving massive capital inflows may be encouraging their banks to recycle these funds back into the market, with a view to preventing a domestic monetary expansion, not to mention substantial investments by the central banks of the less developed countries in the market, in search of higher interest rates, will also aid this growth.

55. If the market is large and is certain to become very much larger, it also suffers from the disability that it has no lender of the last resort, as the extent to which the head offices or parent banks will be in a position to borrow funds from their own central banks for supporting their overseas branches in the event of a crisis still remains to be proved. A few major losses in shipping loans or defaults by the LDCs, which might have made bad investments with the borrowed funds, liquidity crises driving some major corporate borrowers into bankruptcy, mere losses due to speculation, or finally just the failure of the mechanism of control might jeopardise the position of all the banks or of individual banks. The events of 1974 are too recent for these possibilities to be dismissed.

56. Jolts and shocks as a result of bad loans and investments apart, the effects of the capital flows on interest rates, initially in the Euro-market, but by influence on domestic interest rates also and the effects on the domestic monetary situation of the countries experiencing the outflows or inflows as the case may be, can no longer be small. The size of the Euro-market is already large in relation to the size of any one domestic money market. As this re-

lative size is also growing steadily, every central bank is living in a giant's shadow and is exposed to the pull of uncertain influences and forces emanating from or transmitted by the Euro-market. In consequence, there has been or will be a massive encroachment on the jurisdiction and authority of central banks.

57. This might, of course, be only a caricature of what may happen. There are those who think that there is no cause for alarm. The Euro-currency market, in their view, can be contained by exchange controls, which according to them, can be as effective in preventing the movement of funds as in encouraging funds to move. As currency adjustments, mainly in the form of the diversification of current earnings and holdings and reserves out of sterling, might already have been made to a very large extent, even if they have not been completed in all cases, as the Euro-market deals only in time deposits and loans, and the pyramiding of deposits, as in the case of checking accounts in the domestic markets will not, therefore, be possible and as the Euro-currencies on the move are mostly held against liabilities, which have already entered in the measurement of domestic money supply in the countries issuing the currencies, there can be no alarming addition, it has been argued, to world liquidity or to the world's money supply.

58. The debate still seems to be open. Since the market is fed preponderantly by oil funds, it will be rash for the time being for any one to endorse unreservedly either the fears or the hopes regarding the repercussions on the domestic money markets. But this is undoubtedly a critical area, in which developments have to be watched, because any disasters, if they occur, or without disasters at all, the mere shifting of funds will have wide repercussions and chain effects.

59. The measures taken in 1974, as a result of consultations among the major central banks, like stricter surveillance and control, restrictions on open positions in foreign exchange, the flow and exchange of information as between

central banks, voluntary ceilings for deposits and credits imposed by the commercial banks on themselves, fixation of responsibility on the head offices and parent commercial banks and arrangements for co-ordinated action by central banks, in the event of need, have resulted in greater discipline and order, but the problem of capital flows and the repercussions of uncertain and erratic movements in interest rates in the Euro-dollar markets still remain:

60. If the external and arbitrary influences emanating from Euro-market can be controlled further, central banking policy will certainly become more independent and effective. Let me refer to the possibilities in this direction.

61. Let us assume for a moment that Regulation Q in the United States will be lifted, that in consequence interest rates even on small deposits can be paid locally in America without any restrictions, that reserve requirements will be imposed on deposits in the form of Euro-dollars, so as to diminish the advantages of dealing in Euro-currencies and that this will be matched by appropriate reserve requirements in other Euro-currencies. Let us assume further that there will be an organised and co-ordinated efforts to bring down the level of interest rates and that for achieving this object, an informal cartel agreement restricting Euro-currency interest rates to realistic levels related to local interest rates in the countries issuing the currencies will be promoted, if necessary. Let us also assume that the G 10 will continue to observe, in the spirit and the letter, the agreement which was reached in June 1971, prohibiting the placing of additional funds in the Euro-market from their own reserves (an agreement to which the LDCs are unfortunately not yet in a position to subscribe, as in the current disorganised state of the world and the disappearance of the reserve currencies, there are no alternative and equally attractive outlets for the investment of their own reserves).

62. The results are bound to be salutary. The future growth of the Euro-market will then be moderated and contained within manageable limits. The unpredictability of currency flows and interest rates will be reduced. The level

of interest rates in the Euro-market and domestically in the various countries will tend to be uniform, with, of course, the appropriate differentials in interest rates for various credit risks. Domestic interest rates may, in due course, begin to lead or influence Euro-market rates, instead of the influence being predominantly the other way round.

63. If at this stage, when interest rates have been reasonably reduced, the liquid resources in the Euro-market can be funded, through borrowing by the IMF or the IBRD, appropriate interest subsidies from other funds being granted at the same time to the LDCs, which may be receiving the aid, the fears about the Euro-market can be replaced by hopes and the authority, jurisdiction and powers of the central banks may be increased.

## IX

64. This disposes of the more important problems, which face central banks today. As regards the possibilities of discovering some rules by which central banks can be guided or to which they can be forced to submit, the complexity of the world today is such that a blind adherence to any set rules will not help. It will be easy to draw the opposite conclusion that there are no rules at all, but the rich experience in this generation has not been entirely in vain; and some valid conclusions or guiding principles can be drawn or found.

65. At the risk of omitting the qualifications and reservations, subject to which any short statements can be made, let me summarise the lessons, which I think emerge from this tabloid survey of central banking history. I shall set them out in a series of propositions.

Firstly, central banks are no longer mere guardians of money and prices, for their involvement with the development process and, therefore, with their economies is total. It follows from this that the debates about their relations with Governments and the need for the independence of central

banks are bound to be sterile. The Radcliffe Committee was forthright on this matter as on several other issues. I quote the relevant extract from their report:

“We are dissociating ourselves from a view, which was explicit or implicit in the representation of some witnesses that the public interest requires that the central bank should be assured complete independence of political influence. We do not share this view, however appropriate it might be to some different economy or to some different state system”.

Secondly, in the world in which central banks now operate, it is unrealistic for any authorities, whether they are Governments or international bodies, to bind the banks by a list of do's and don't's. The attempted definition of central banking by Montague Norman and Benjamin Strong are irrelevant to the circumstances of today. Central banks on the other hand, must be pragmatic and must, therefore, be free to experiment and to do things which might have been considered to be unorthodox and barred to them in the past.

Thirdly, some of the ancient controversies and issues are dead, or nearly so. The Monetarist-Keynesian controversy has, I think, been carried on, till we have reached a point of no return. The impression that central banks, at the request of their Governments, are helplessly monetising the public debt has to be revised. Excessive concern with interest rates as an instrument of policy appears to be unjustified and some retreat from high interest rates may in fact be necessary.

Fourthly, central banks are rightly concerned with monetary aggregates, meaning thereby the conventional M 1 or M 3, but these have to be considered in the context of national accounts, financial indices, the liquidity of the banking system and domestic credit expansion and credit trends.

Fifthly, while the monetary policy is flexible and reversible and can be more readily implemented than fiscal policy, central banks all over the world tend to have the feeling that the support from fiscal policy can be greater than it has normally been so far.

Sixthly, while excessive concern with the balance of external payments is incompatible with the management of the domestic economy, it is no longer possible either for an advanced economy or a developing economy to be oblivious of external forces and to be solely concerned with its domestic economy. If the country is advanced, it is caught up in the world market forces and is exposed to the pulls and pressures of the Euro-market. If it is developing, it has to consider aid flows, the debt service burden and the direct or indirect influence on its economy of international monetary developments. As commercial banking has become international, central banks all over the world (even those which are ringed and fenced off by tight exchange controls) have found that they cannot also be insular. The G 10 are already acting on the basis of this finding. They hold formal or informal sessions at Basel, Washington and other places, before taking or announcing major decisions. But as the world is unlikely to benefit in the long run by a rift between the G-10 and the rest, it will be more useful, if the G-10 could share the burdens of decision-making with the central banks of some of the major developing countries.

66. This is not an impressive list of what can be salvaged from the recent history of central banking, but it is truthful and in the long run, it is much better to be guided by general principles, which are valid and relevant to the circumstances of today than by rules, which can work, if at all, only by accident. I started this lecture with a reference to the British origins of central banking and a British verdict in favour of inflexible rules. Let me conclude with another statement by a British author, this time by Sayers, who says this in 'Central Banking after Bagehot'.

"We must have central bankers to exercise a discretionary influence on the monetary situation. And it fol-



lows that there is no code of eternal rules for them to follow. We have central bankers for the very reason that there are no such rules”.

## X

67. I referred also at the beginning of this lecture to the unflattering accounts of the record of the central banks in the management of money. The complexity of the problems and the manner in which they have been dealt with at any rate in recent years shows that the criticism is largely unmerited. Their achievements on the other hand have been creditable.

68. The first major development is that central banks are now totally involved in the development of their economies; and they have consistently prevented deflations. It is an unfair charge against bankers, although this charge has allegedly been made in very high quarters by Harold Wilson, as recorded in Nicholas Davenport's *Memoirs of a City Radical* that bankers like to impose deflation on others. The traumatic experience of the great depression has converted central bankers to the opposite policies for ever; and there is in fact something to be said for the opposite charge that GNP has become a religion and that central bankers, like others are not sufficiently alive to the dangers of inflation.

69. There are not now many persons left with memories of the depression years; and as time passes, their numbers will diminish further. But those who are left and those who were directly affected by the recent recession in 1974 can be thankful that, as Milton Friedman and some others believe, central bankers have built or helped to build into their economies enough stabilisers to prevent any major depression.

70. The international financial system appears, by my earlier description, to be chaotic. But still, it has absorbed and re-cycled oil revenues on an unprecedented scale; and

the threatened disasters, arising out of balance of payments difficulties, liquidity crises for central and commercial banks and the drift of oil funds in search of higher interest rates of exchange stability or merely for political reasons, has failed to materialise.

71. One of the difficulties, when the international monetary order collapsed in 1931 was that facilities in the forward market for foreign exchange were then primitive. The facilities for buying and selling the major foreign currencies, both spot and forward and for covered arbitrage are now world-wide. They are available round the clock, and regardless of geographical or time differences, as banking has become international, with some business being transacted somewhere in the world by every major bank every minute. The contribution by the major central banks, by way of dismantling exchange controls from about 1958 onwards, official interventions in the market, with massive swap lines of credit arranged between themselves, the provision of long-term forward cover for deferred payment exports and the policing and supervision of the foreign exchange business of commercial banks since 1974 has aided this development. In consequence, the international foreign exchange market is now of a size and dimension, which would have been incredible even a few years ago. There were some shocks to the market in 1974. But they have proved only to be salutary. It is broad based and strong. The facilities, which it offers, are very considerable and are of immense value from the point of view of those, who are charged with the responsibility of managing foreign exchange funds and balances, including in particular the central banks and the treasurers of the giant multinational companies.

72. In 1931, in the first month after Britain went off the gold standard, 522 marginal banks, with nearly half a billion dollars in deposits, suspended payments in the United States. In contrast, the Federal Reserve supported the Franklin National Bank in 1974 with the unprecedented

amount of about \$ 1.5 billion dollars in loans, in addition to arrangements for taking over its foreign exchange commitments, at the risk of criticism to the effect that the Fed was losing a great deal of money by way of interest income. The Fed was not alone. 1974 was a disastrous year for the Euro-Banks. It was the year of the Herstatt failure preceded and followed by others. It is a tribute to the maturity and experience of the central banks concerned that the crisis did not spread and that the Euro-banks emerged from this period somewhat stronger, with better discipline and tighter control over their foreign exchange transactions.

73. Around this time, there was a liquidity crisis in British industry, accompanied by a secondary banking crisis. The worst was expected and predicted, but the Bank of England took certain unprecedented steps and the crisis passed.

74. The record of achievement is not confined to central banks of advanced countries either. The adjustment by central banks of the less developed countries to the phasing out of sterling as a reserve currency has been remarkably smooth. The number and variety of currency baskets are without precedent, but the central banks have learned to operate this system and also to shield their exporters and importers from the impact of fluctuating exchange rates in a floating world.

75. In the early history of the development of commercial banking in our own country, it was believed that exchange banking was risky and called for some special enterprise and that domestic banks, incorporated within the country should be shielded from these dangers. The Presidency Banks Act of 1876 accordingly prohibited the predecessors of the State Bank of India from dealing in any instrument, which was not payable in India — a disability, which was not removed for a number of decades thereafter. Today, with a range of fluctuations in exchange rates, which might have brought trade and payments to a standstill in

ordinary circumstances, the Reserve Bank of India has diversified its operations in foreign exchange, providing comprehensive forward cover for exporters, of a kind for which there can be few parallels, if any, elsewhere in the world.

76. Whatever else might have been the record of central banks in the past, within the present generation, their achievements have been commendable. The disappearance of the bias in favour of deflations, and the prevention of major depressions, the reduction of the levels of unemployment, the concern for the poorer and weaker sections of society, the swift transfer of funds within and across the national frontiers, the rapid development of a broad-based international foreign exchange market, the expert handling of problems relating to capital flows and the Euro-dollar market, and the prevention of bank failures are items on the credit side.

77. The debits are world inflation and the persistence of poverty at various levels in a considerable part of the world, but central banks cannot be wholly blamed either for the consequences of or the failure to rise upto, the rising level of expectations all over the world. On the whole, the world monetary system has been much more orderly than it might have been, if such a large number of central banks had not been brought into existence.

78. As the problems of central banking are seen in the proper perspective and not in the light of the attempted generalisation of British experience during a few fortunate decades before 1914, or in the light of the disastrous experiences during a few years immediately preceding the great depression, (neither the attempted generalisation nor the experiences in question being relevant to the circumstances of today), the achievements and record of the central banks can be appraised somewhat more objectively.

79. Politics, it has been said, is the art of the possible. The art of central banking is an art of the possible, like politics, with which it is mixed up. Once this is realised and there is a proper appreciation of the burdens and role of central banks, their capacity to serve their respective countries and the world and their effectiveness can be increased.

\* \* \*

**VOTE OF THANKS**

by

**Shri SHANTANU N. DESAI,**  
**President, Indian Merchants' Chamber**

I have a very pleasant duty to perform and that is to express my sincere thanks both on behalf of the IMC Economic Research and Training Foundation and myself to Shri R. K. Seshadri for delivering such a learned and thought-provoking speech and for taking special trouble to come all the way from Madras to deliver the Madon Memorial Lecture.

I entirely agree with the speaker that the credit policy of the Reserve Bank of India has been extremely important in the present context and that the dear money policy resulting in high interest rates by the commercial banks, has actually started starving the private sector industries of the required funds. I am also in agreement with the speaker when he said that the interest rates mechanism has been overused in preference to fiscal measures.

I am sure the Government will take note of the views expressed by an authority of the stature of Shri R. K. Seshadri on the availability of funds and high interest rate in the context of inflationary trends in our country and take some immediate remedial measures. Our thanks are also due to the Press for their everwilling co-operation and to the listeners who have gathered here this evening to listen to this learned address.

---

**Previous B. F. Madon Memorial Lectures :**

- 1 H. V. R. Iengar:  
*Some Aspects of Economic Growth in India* 1961
- 2 Sir A. Ramaswami Mudaliar:  
*Economic and Financial Aspects of the Present Crisis* 1963
- 3 S. G. Barve:  
*Some Aspects of the Dynamics of Economic Growth* 1964
- 4 Dr. V. K. R. V. Rao:  
*Banking Policies in a Developing Economy, with Special Reference to India* 1964
- 5 P. C. Bhattacharyya:  
*Monetary Policy and Economic Development* 1966
- 6 C. D. Deshmukh:  
*Role of Education in Development* 1967
- 7 L. K. Jha:  
*The International Monetary Scene* 1968
- 8 B. K. Nehru:  
*The First Priority* 1971
- 9 Jagdish N. Bhagwati:  
*The International Crisis and The Developing Countries* 1974

## **I.M.C. Economic Research & Training Foundation**

Established in 1959, the Foundation is an independent non-official agency functioning in three areas: (i) sponsored economic surveys, (ii) applied economic research and (iii) seminars and training courses.

The Sir Purshotamdas Thakurdas Research Wing of the Foundation has so far published 12 research studies, the latest of these being Valuation of Stocks and Work in Progress.

Training courses and discussion sessions have been held on subjects like: working capital management, industrial relations, Investment Policy of Financial Institutions, etc.

The Foundation is also responsible for organising the B. F. Madon Memorial Lectures.

### **The Publications released by the Foundation are :**

1. Taxation of Income of Joint Stock Companies and Dividend Income in the Hands of the Shareholders 1959
2. Inflation in a Developing Economy ... .. 1961
3. Resources for the Third Five-Year Plan ... .. 1961
4. National Income of India (1950-51 to 1960-61) — Growth and Distribution — Facts and Problems ... 1963
5. Union Budgets — A Factual Study of Finances of Government of India (1950-51 to 1964-65) ... 1964
6. A Quarter Century of Direct Taxation in India 1939-1964 ... .. 1965
7. Price Fixation in Indian Industries ... .. 1967
8. Taxation of Agriculture in India — A Critical Survey of Agricultural Taxes on Land, Income and Wealth ... .. 1970
9. Chambers of Commerce and Business Associations in India ... .. 1971
10. Industrial Licensing Policy ... .. 1971
11. Offshore Oil Exploration & Indian Industry ... 1974
12. Valuation of Stocks and Work in Progress — Normally Accepted Accounting Principles ... 1976

*Available at:*

**IMC ECONOMIC RESEARCH & TRAINING FOUNDATION,**  
76, Veer Nariman Road, Churchgate, Bombay 400 020.

Telephone: 296633