SOME PRACTICAL ISSUES IN MONETARY POLICY MAKING *

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I deem it a great privilege to be here to give the valedictory address to this Workshop which has proved to be creative and stimulating. The title of the Workshop is challenging, requiring us to give a close thought to some of the practical macroeconomic issues of the day, so that the future course of actions could be charted in a more meaningful way. My focus today is on monetary policy - an area with which I am familiar for obvious reasons. You will, I hope, pardon me if I take up in this address some questions that are posed frequently, but not pursued because they seem to be apparently not so exciting. But I believe they are important and at the end of the day can make a difference to the perspectives that one needs to carry of policy.

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The debate today in economic policy making is not whether macroeconomic policies are more important than structural policies or *vice vers*a but how best to combine both in a manner that ensures an efficient realisation of the objectives within the determined time horizon. Within the macroeconomic policies, the debate today is not one of choosing either the fiscal or monetary policies - as primordial and as worthy of giving emphasis. "Macroeconomic success", as Stiglitz (1998) argued, "depended on co-ordination of the monetary and fiscal instruments. It was the two working together" (p.200).[1] But it must be recognised that fiscal policy in democratic societies often gets constrained by the processes that underlie budget approvals, and monetary policy, therefore, becomes a key factor in the economy's macroeconomic performance. This is irrespective of whether central banks are 'independent' as in Germany and in the United States, or otherwise. If this is correct, how monetary policy gets formulated and how it responds to anticipated changes and 'shocks' are key questions that need to be posed. The answers are not easy but the concerns and problems that practitioners of monetary policy face are several and need to be appreciated with an understanding of the Indian context. The availability of data in particular is limited and in some areas, absent. In view of the limited time series data on a number of financial variables, and in the context of the evolving policy regimes, market behaviour patterns are not definitively known.

1. Stiglitz, Joseph. (1988): "Central Banking in a Democratic Society", *De Economist*, Vol.146, No.2, pp.199-226.

The concerns thus boil down to a correct appreciation of objectives, targets and instruments of monetary policy and the transmission channels of policy. But this is too

vast a subject. One can hardly do justice to it in one address. I shall, therefore, touch upon only a few aspects of operational import today by way of raising some practical questions and associated analytical concerns.

The well known approach to the relationship between instruments and objectives, *a la* Tinbergen, is the centre of focus as much in academic writings as in policy making. But problems crop up where coherence or clarity on final objectives is not present and intermediate targets are specified on the basis of a theoretical proposition to realise the not-so-explicitly defined final objectives. More fundamentally, if the impact of an instrument or instrument-set on the intermediate target is not visible in the short run and can be captured only after a long time lag, the effectiveness of policy would be open to question. Moreover, the economy could, in the intervening period, be subjected to disturbances or shocks, posing a question mark on not only the credibility of policy but also the processes that underlie the formulation of policy.

In the Indian context, much of the analytical debate on monetary policy frame work began with the publication of the Chakravarty Report (1985).[2] Official pronouncements of annual money supply targets are a more recent phenomenon. Money supply references since early 'eighties have been only to broad money. Monetary policy is said to have two *final* objectives *viz.*, price stability and supply of enough credit for undertaking 'genuinely productive' activities of the economy. The latter objective is interpreted as referring to economic growth, though the evidence of it being a robust proxy of economic growth is yet to be irrefutably established. But one rarely finds in either the academic or official writings in India any concrete meaning being ascribed to these objectives. One is, in fact, struck by the remarkable indifference being shown to this aspect. Let us examine the kind of practical questions that one confronts in the face of absence of information on what constitutes these objectives.

2.   *Report of the Committee to Review the Working of the Monetary System* (Chairman: Sukhamoy Chakravarty), 1985, Reserve Bank of India, Mumbai.

First, let me take up the so called growth objective. The 'genuinely productive' activities are understood by many to refer mainly to those activities which help generate physical goods -farm produce or industrial output. The contribution of the 'services' sector to real GDP, which has shown particular buoyancy in recent years, is rarely mentioned in the Indian writings on monetary policy as constituting 'genuinely productive' activity. One interpretation of the objective as stated would be to let the bank credit flow into only those commodity producing and traditional trading and services sectors which form the *organised* segment of the economy. This might mean, in so far as credit to industry is concerned, that consideration would be given only to credit disbursed to public sector units and units in the corporate private sector and perhaps a few others which have relatively large market share in the products they generate and sell.

To the practitioner of policy, this would imply that bank credit cannot finance *all* activities in the economy. It also means that an increase in bank credit would not necessarily imply a commensurate or an increase in overall output. For, it all depends on

the output response to credit availability, given the technical inputs including capital and labour and, on the share of that part of output which is considered as not productive in total output. Where the latter is large, the impact of credit on real sector should, logically speaking, be relatively low.

The practical issue is: how do we translate the idea of genuine productive activity financing into a larger one of financing of overall growth or of all activities that help to provide for alleviation of unemployment or activity financing to arrive at some variant of the non-accelerating inflation rate of unemployment (NAIRU). This poser is necessary because the unemployment level has grown over time with the increase in population and with the relatively limited availability of employment opportunities. Should monetary policy be unconcerned about the unemployment problem ? Should it merely aim at a certain feasible rate of growth by assuming that it is predominantly determined by the increase in the output of productive activities, and growth and employment generation are positively related ? Should not monetary policy look ahead in terms of realising *potential* output ? If realisation of potential output is accepted as the ultimate or final objective, how does one measure it in concrete numbers ? Should it represent full capacity or full employment output ?

There is no instance of any study in India which uses potential output as the final objective. There are also not many serious attempts in India to study the relationship between output growth and bank credit expansion. The results were not satisfactory in the limited instances of writings where production functions included, besides capital and labour, finance or bank credit as an argument. Besides, whatever results were obtained by the few studies conducted elsewhere were also not encouraging.[3]

3. See, Borio (1995) for a discussion on the relevant issues for the developed economies. Borio, Claudio E.V.(1995): *The Structure of Credit to the Non-Government Sector and the Transmission Mechanism of Monetary Policy: A Cross Country Comparison*, Bank for International Settlements, Basle.

Let us take up the meaning that can be ascribed to the price stability objective. This is often loosely described as inflation targeting, but this could, so described, give rise to a number of practical problems. Should one have as final objective or target a price *level* or a rate of increase in the all commodities index [see Fischer (1994)] ?[4] The general preference in most studies, however, is for targetting the overall inflation rate. One nonetheless needs to be clear as to which inflation rate one is targetting in the Indian context. Is it the rate of increase in the wholesale price index (WPI) or consumer price index (CPI) for industrial workers or some 'core' inflation within the WPI ? Most studies in India favour the use of WPI for its high frequency and for the fact that the WPI includes a variety of commodities - primary articles, fuel products and manufactured items. But the WPI represents neither a producer price nor a price that a consumer pays.

4. Fischer, Stanley. (1994): "Modern Central Banking", in *The Future of Central Banking,* by F.Capie, C.Goodhart, S.Fischer and N.Schnadt (Cambridge: Cambridge University Press), pp.262-308.

Surprisingly enough, no asset price is considered as either an alternative or a complement to WPI/CPI. However, it is recognised that expectation of changes in prices of future stream of goods and services (which are taken to be represented by asset prices) is necessary for a critical appreciation of the expectation formation processes. Asset prices often influence aggregate spending which in turn impacts on output, financial markets as well as commodity prices. But the data on asset prices are extremely fragile and are not available on a high frequency basis. Nor does one find time series data on asset prices. Without the use of asset prices, the relative efficiency of alternative transmission channels of policy and the importance of wealth as an influence in the transmission mechanism may not be appreciated.

The implicit acceptance of WPI as the only feasible measure of inflation in the Indian context ignores the estimated biases that arise on account of elongated updates of base weighting and other statistical problems connected with the construction of the WPI (for example, formula bias). In an economy where 'new' goods are introduced in a continuous fashion and quality changes occur fairly regularly, the estimated losses could be quite significant. Charles Freedman (1996) reported that the best estimate of CPI bias is well under one percentage point in most industrialised countries, although some observers in the United States have suggested that it could be as much as two percentage points.[5] 'True' price stability can be obtained only if the selected measure of inflation is corrected for the bias. In the Indian context, no good estimate of such a bias is available, but the fact that the differences between the provisional and final index numbers of wholesale prices of all commodities are significant and the dissonance in the movements of WPI and CPI is substantial in recent years seems to suggest that the bias could be large, constraining one's judgements about the targetted percentage increase in the price level.

5.   Freedman, Charles. (1996): "What Operating Procedures Should Be Adopted to Maintain Price Stability - *Practical Issues in Achieving Price Stability"* - A Symposium sponsored by The Federal Reserve Bank of Kansas City, Jackson Hole, Wyoming.

Any announcement of a tolerable rate of inflation for the period ahead is fraught with risks where 'administered' prices are made flexible at irregular intervals without a preannounced sequence of such administered commodities that are chosen for free market price determination. Besides, where wages and other factor prices are sticky and are bound by contractual arrangements, downward rigidities would set in in the pricing process. In the result, any expectation that consumption expenditures would get postponed on account of explicit inflation target announcements would have little chance of materialising. If this argument is correct, then downward demand disturbances could be ruled out.

These are some of the problems which most professionals in policy-making bodies face. They may appear superficially as a mere nuts and bolts story. But without addressing them in some way or the other, one cannot work out with any reasonable

degree of confidence the nature and degree of instrument responses needed to realise the output growth and price stability objectives. In the circumstances, the only option - the second best, so to say - available is to make continuous assessment of the economic and financial conditions and market behaviour, and make improvements in the empirical methodologies underlying the operating procedures in place in support of final or intermediate targetting.

This takes us to monetary or money supply targetting set as intermediate target, and adopted in India since the middle of the 'eighties. A number of empirical studies on the demand for money in India since the 'fifties have shown that it is stable [see Vasudevan (1977), Jadhav (1994) and Arif (1996)].[6] The theoretical viewpoint is that where money demand is stable, it is relatively easy and opportune for central banks to target money supply. The operating procedure of monetary policy, centred as it is on monetary targetting, is essentially to manage bank reserves at a level that helps to *determine* the ability of banks to create credit and investments in line with the demand for credit and investments. Once bank reserves are determined, and given the amount of issue of currency, it will be easy to derive the high powered money (HM). The determination of the level of bank reserves can be secured by operating on one of the two levers of reserve requirements namely, the cash reserve ratio (CRR). But as the Indian experience so far shows, the ability of banks to exercise their control over loan and investment portfolio was further constrained by operating upon the statutory liquidity ratio (SLR) as a supplementary reserve requirement, tempered though by flexible use of refinancing mechanism. This operating procedure of monetary policy is very much in existence ever since the activisation of monetary policy in 1973-74. This procedure in its essence is in vogue even now, though since 1992-93, as a part of financial liberalisation, the maximum SLR was gradually reduced and finally pegged at the legal minimum (of 25 per cent of net demand and time liabilities); CRR has been tilted downward; and refinancing facilities curtailed. Bank reserve determination is theoretically defended as important to secure the level of HM which in its turn helps to determine Money Supply (MS) through the money multiplier.

6.   Vasudevan, A. (1977): "Demand for Money in India - A Survey of Literature", *Reserve Bank Staff Occasional Papers*, Vol.2, No.1.
Jadhav, Narendra. (1994): *Monetary Economics for India*, Delhi: Macmillan.
Arif, R.R. (1996): *Money Demand Stability: Myth or Reality - An Econometric Analysis*, Development Research Group Study 13, Reserve Bank of India, Mumbai.

The decision as to *when* to effect a shift in the supply of bank reserves would depend upon the information emitted each fortnight by the data on MS. This is the feedback mechanism in monetary targetting. Money supply expansion above the target will normally elicit policy response. MS thus becomes an information variable.

In practice, MS growth target in India is not worked out on the basis of the money multiplier approach of first determining the HM and making assumptions about the trends in currency - deposits ratio and the policy induced reserve-deposits ratio. MS

growth target is essentially derived from the long run money demand function wherein the coefficient reflecting the income elasticity of demand for money plays a critical role. The income here is represented by the exogenously given 'anticipated' growth rate and 'tolerable' rate of inflation. There are thus two *expectational* variables, namely, the growth rate and the inflation rate and the *long run* income elasticity in the exercise leading to projections of money supply growth *for the short run* of one year.

Such a target has to be consistent with the projected movements in credit and investments and in foreign exchange asset accumulation of the banking system. One of the features of monetary targetting in the typical institutional setting of the Indian economy is the constrained ability of the monetary authority to contain monetisation of Government deficit, an information variable which is regularly fed into monetary projections. Since credit to Government is outside the control of the banking system, logically, all that the monetary authority should aim to realise in the existing framework would be to ensure that banks have only *that* quantum of reserves that would be equal to 'genuine' credit demand from 'productive' activities, *not* the credit demand warranted by overall growth requirements. If this perception is valid, monetary targetting in India should be regarded as not going far enough to address growth and price stability, and supply of reserves - the variable which is tracked continuously as part of the operating procedure - is not positioned to equilibrate with the *total* demand for reserves which, as the theoretical expectations go, should take care of the credit and investment requirements consistent with growth. But is this argument in sync with the fact that the actual MS growth has exceeded the announced targets in most years ?

This question raises doubts about either the stability of the money demand function or the correctness in adopting the operating procedure of targetting bank reserves. Most critics of monetary targetting believe that it sacrifices growth objective for the objective of price stability, with some suggesting that the projected MS growth is derived from a mechanistic application of the money multiplier approach. Neither of these criticisms, however, can satisfactorily address the problem of overshooting of actual MS growth over the MS growth targets.

The reality is that it is difficult to target MS growth through the money multiplier for two reasons: one, the opportunity cost that needs to be considered in explaining the currency to deposits and reserves to deposits ratios is *not* market determined till recently; and secondly, the institutional problems in maintaining the required average daily balances as cash reserves constrain the economisation of excess reserves.

The argument that monetary targetting has not as much focussed on growth as on inflation control is being countered by the argument that inflation has consequences for the level of output and growth. Fischer (1993) and later Barro (1997) using cross-country growth regressions, found that high inflation is in general harmful to growth.[7] In the Indian case there are not many studies on this subject but two articles by Vasudevan (1998) and Kannan and Joshi (1998) show that at 6-7 per cent inflation, economic growth is optimal.[8]

Interestingly enough, the threshold rate is less than the long-term rate of inflation of nearly 8 per cent. The long-run rate of MS growth is about 17 per cent while the long run real GDP growth has been less than 5 per cent. While decade-wise MS growth rates tend to be rigid at about 17 per cent, rates of increase in prices and output vary depending on the period chosen for assessing trends in them. This would give the impression that policies - macroeconomic and structural - need to be directed toward reduction of prices so that output gets maximised. But it is not clear whether targetting of the threshold rate of inflation *alone* will help to get at optimal growth. It is also not clear whether such an "optimal" growth is equivalent of growth in potential output.

7.   Fischer, S. (1993): "The Role of Macroeconomic Factors in Growth", *Journal of Monetary Economics*, 32, pp.485-512.

        Barro, R. (1997): *Determinants of Economic Growth*, MIT Press, Cambridge, MA.

8.   Vasudevan, A. (1998): "Analytical Issues in Monetary Policy in Transition", C.N.Vakil Memorial Lecture delivered at the Indian Economic Association Conference on December 28, 1997, *RBI Bulletin*, January, Vol.52, pp. 45-52. Kannan, R. and Himanshu, Joshi. (1998): "Growth-Inflation Trade Off" Empirical Estimation of Threshold Rate of Inflation for India", *Economic and Political Weekly*, Vol.XXXIII, Nos.42-43, October 17-24, 1998.

        Having moved a great deal towards financial liberalisation, where do we stand now in regard to monetary policy framework ? Should we abandon monetary targetting in view of its limitations and go wholesale for interest rate targetting ? Is this a feasible proposition when there is no benchmark rate that reflects the interest rate effects on output and prices ? The markets in India are not as yet fully integrated and interest rate sensitivity is *not* always present in *all* investment decisions. In the circumstances, it is a matter of taking a view as to whether monetary target should be used as any more than a conditional projection and complement it with a host of other indicators. This probably would be a practical course to follow and may become necessary during the transitional phase till full market integration sets in, in which case monetary policy may need to be conducted on the principle of 'just go' till a whole new edifice of objectives and instruments is built.