MONETARY POLICY IN AN ISLAMIC ECONOMY*

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Monetary policy has to be as important an instrument of public policy in an Islamic economy as it is in its capitalist counterpart. The objectives and tools must, however, be different because of the differences in the goals and the nature of the two systems and because of the prohibition of interest in Islam while it is a key ingredient in the capitalist system. This paper represents an attempt to highlight the role that monetary policy should be designed to play in an Islamic economy and to show how it can be made to play its role effectively if interest is abolished and two important instruments of monetary policy in the capitalist economy, discount rate and open market operations in interest-bearing government securities, are not available. The paper also discusses the mechanism for equating the supply of money with its demand in the absence of interest as a regulating mechanism and the feasible alternative to interest-bearing government securities for financing government budgetary deficits in a non-inflationary framework.

THE ROLE

There can be no question that monetary policy in an Islamic economy should not only be in conformity with the ethos of Islam but should also help realise the socio-economic goals that Islam emphasises. Some of the most important goals may be briefly stated as:

1 .Economic well-being with full employment and optimum rate of economic growth;

2. Socio-economic justice and equitable distribution of income and wealth; and

3. Stability in the value of money to enable the medium of exchange to be a reliable unit of account, a just standard of deferred payments and a stable store of value.

It may be argued that the goals of monetary policy in the Islamic economic system, as stated above, are the same as those of capitalism. Such a statement would not be correct because even though there is an apparent similarity; there is in fact a significant difference in emphasis arising from the divergence in the commitment of the two systems to spiritual values, socio-economic justice and human brotherhood. The ensuing discussion should make this point clear.

1. Economic Well-being with Full Employment and High Rate of Growth

The inevitable outcome of the Islamic belief that human beings are the vicegerents of God, is that they must lead a life that befits their status. The Divine Guidance embodied in Islamic teachings is intended to help them in the realisation of this objective. Muslim jurists have unanimously held the view that welfare of the people and relief of their hardships is the basic objective of the *Shar'īah.* This view would, in the economic field, necessitate economic well-being through satisfaction of all basic human needs, removal of all major sources of hardship and discomfort, and improvement in the quality of life, morally as well as materially. Hence full and efficient employment of human resources would be an indispensable goal of the Islamic system, because it would help realise not only the objective of broad-based economic well-being but also impart to human beings the dignity demanded by their status as God's vicegerents. Full and efficient employment of material resources would also be an essential goal because, according to Islam, all resources in the heavens and the earth are meant for human welfare and need to be exploited adequately, without excess or wastefulness, for the purpose for which they have been created.

While a reasonably high rate of economic growth should be the natural outcome of policies leading to full and efficient employment of human and material resources and to broad-based economic well-being, the high rate of growth is by itself not of prime importance. This is because the requirement to attain material prosperity within the framework of Islamic values requires that it should not be attained through the production of inessential or morally questionable goods and services, should not lead to an excessive and overly rapid use of God given resources at the expense of future generations who are equal owners of these resources, and should not harm present or future generations by degenerating their moral or physical environment.[1] Hence, while full employment and material well-being are essential in an Islamic context, a high rate of growth is only essential to the extent to which it contributes to full employment and broad-based economic well-being. Beyond this, its importance would have to be carefully weighed against all its other implications.

2. Socio-economic Justice and Equitable Distribution of Income and Wealth

The goals of socio-economic justice and equitable distribution of income and wealth are an integral part of the moral philosophy of Islam and are based on its unflinching commitment to human brotherhood. The capitalist system's conversion to socio-economic justice and equitable distribution of income is, on the contrary, not based on a spiritual commitment to human brotherhood; it is rather the outcome of group pressures. Accordingly, the system as a whole, particularly its money and banking arrangement, is not geared to these goals and glaring disparities of income and wealth continue to be generated. Nevertheless, because of the influence of socialism and political pressures, some of these inequalities are being partly reduced by taxation and transfer payments. In contrast to this, Islam tries to uproot the causes of gross inequalities at their source and also uses *Zakah,* taxation, and transfer payments as additional measures to reduce inequalities even further to bring about a distribution of income which is in conformity with its concept of human brotherhood. Hence it is essential that even the money and banking system and monetary policy are so designed that they are finely interwoven into the fabric of Islamic values and contribute positively to the reduction of inequalities.

3. Stability in the Value of Money

Stability in the value of money should be accorded high priority in the Islamic frame of reference because of the unequivocal stress of Islam on honesty and fairness in all human dealings and because of the negative impact of inflation on socio-economic justice and general welfare.[2] It has been suggested that in the current world-wide inflationary climate, the Islamic imperative of socio-economic justice could be satisfied by indexation of all incomes and monetary assets including *qurū¼-Êasanah - loans* extended without interest or profit-sharing.[3]

While indexation might help ameliorate partially the inequities arising from inflation, it is not a cure for inflation. It may, in fact, tend to accelerate inflation[4] and be self-defeating unless inflation is on the decline and remedial monetary, fiscal and incomes policies are being adopted.[5] It seems, therefore, that while indexation could be examined as a temporary sedative for the pain of inflation, the policy alternative which would best conform to the norm of socio-economic justice in Islam is price stability and not indexation. However, it is important to note that indexation of loans has so far not received the blessing of any school of Muslim jurisprudence.

While inflation is in conflict with Islamic values, prolonged recession and unemployment are also unacceptable because they bring misery to certain sectors of the population and also act counter to the goal of broad-based economic well-being. Recession also tends to increase uncertainty and discourages investors from undertaking risk associated with projects that earn a return over many years. Hence, in the interest of achieving overall objectives of Islam, it would be necessary for the Islamic State to adopt all available measures to minimize economic fluctuations and to stabilise the value of money.

A generally accepted principle in capitalist economies is a trade-off between unemployment and inflation. In the context of Islamic values the concept of such a trade-off is questionable. While inflation is iniquitous and against the interest of long-term well-being, unemployment of human resources is inequitable and not only conflicts with dignity of God's vicegerent but also vitiates the realisation of equitable distribution of income. One may also question whether it is necessary to have inflation to achieve full employment and whether it is essential to have unemployment to avoid inflation.[6]

In the Islamic system both unemployment and inflation are undesirable, and both need to be eschewed. If aggregate demand is to be contained or lowered to avoid inflation then, in the overall interest of social justice and broad-based economic welfare, a value judgement needs to be made about what kind of demand should be contained or reduced and how best this can be attained. In a value-oriented system it would be indefensible to allow demand to expand in inessential directions to attain a high rate of economic growth and, if this generates inflation, it would be equally indefensible to try to control it by reducing aggregate demand in a general, across-the-board manner by creating human unemployment. Similarly, full employment must be ensured even if this demands a restructuring of production and designing of suitable technology. It would be essential to regulate aggregate demand, restructure production, design a suitable technology, and develop an appropriate mix of monetary, fiscal and incomes policies to avoid both inflation and unemployment, and to ensure broad-based economic well-being for adequately satisfying the essential needs of all individuals in keeping with Islamic teachings.

Achievement of the whole range of objectives mentioned above would require a fundamental reform of the entire economic system, including its money and banking framework. The reform of the latter would include the abolition of *ribā* and the reform of banks to minimise their financial power and their role in skewed income distribution.'[7] It would also include a change in the strategy and instruments of monetary policy aimed at regulating the expansion of overall credit in accordance with the non-inflationary needs of the economy as well as the value-oriented allocation of credit to attain the desired socio-economic goals of Islam. It is with the strategy and instruments of monetary policy that the following discussion will be concerned.

II
THE STRATEGY*

In an Islamic economy, the demand for money will arise basically from the transactions and precautionary needs which are determined largely by the level of money income and its distribution.[8] The abolition of interest and the levy of *Zakah* at the rate of two-and-a-half per cent will tend to minimise the speculative demand for money because of a number of reasons including:

(1) Interest-bearing assets would just not be available; leaving the holder of liquid funds

the option of either holding them in the form of cash with no return or investing them in profit earning assets to get at least some return.

(2) Short-term as well as long-term investment opportunities with varying degrees *of* risk will presumably be available to all investors whether they are high or low risk takers, the extent *of* foreseeable risk being offset by the expected rate *of* return.[9]

(3) It may be safely assumed that no holder *of* funds would be so irrational as to 'hoard' balances in excess *of* transactions and precautionary needs as long as he could use the idle balances to invest in profit-earning assets to offset at least partly the erosive effect *of* *Zakah,* and *of* inflation, to the extent to which it persists even in an Islamic economy. Liquidity preference arising from the speculative motive, may hence tend to be insignificant. The demand for funds for equity-oriented investments would constitute a part *of* the total transactions demand and would depend on the expected rate *of* profit which will not be predetermined.[10] Since expectations about rates *of* profit, unlike the rate *of* interest, do not fluctuate daily or weekly, the aggregate demand for transactions needs would tend to be more stable and will be determined by the value of aggregate output[11], with an appropriate weight given to the distribution of income, which will materialise gradually in an Islamic economy depending on the extent of the government's commitment to this goal and the policies it adopts for this purpose.

The Islamic central bank should estimate the demand for money at full employment within the framework of stable prices and other socio-economic goals of Islam and try to regulate the supply of money accordingly. Hence the variable in terms of which monetary policy should be formulated should be the desired stock of money and not the rate of interest.[12] The objective should be to ensure that monetary expansion is neither "inadequate" nor "excessive" as compared to the capacity of the economy to supply goods and services at stable prices.

While the above strategy does recognise the importance of regulating the stock of money in the successful management of the economy, it does not necessarily imply a simple monetarist approach or any commitment to its ideological overtones. There is no presumption that market forces left to themselves will be able to generate sustained non-inflationary growth, remove unemployment, reduce external imbalances and help realise the other desired goals if the growth in money supply is appropriately regulated. It should, in fact, be emphasised that for a full realisation of the Islamic goals, it will be not only indispensable to reform the economy and the society along Islamic lines but also necessary for the state to play a positive role. All state policies, including fiscal, monetary and incomes policies, would have to converge in the same direction. Structural rigidities and monopolistic practices should also be removed and all factors capable of generating increased supplies of essential commodities and services should be allowed to play their natural role.

1. Sources of Monetary Expansion

To ensure that monetary growth is 'adequate' and not 'excessive', it would be important to monitor carefully all the three major sources of monetary expansion. Two of these are domestic and are: one, financing of government budgetary deficits by borrowing from the central bank; and two, expansion of deposits through commercial bank credit creation. The third source of monetary growth is external and is 'monetization' of the balance of payments surplus.

(a) Fiscal Deficits

There is no controversy among economists that fiscal deficits can be, and have been, an important source of 'excessive' monetary expansion. Attempts by the government to extract real resources at a faster rate than is sustainable at a stable price level could lead to continually rising fiscal deficits and accelerated increases in money supply thus contributing to an inflationary spiral.[13] This destabilising tendency of fiscal deficits underscores the need for a realistic and non-inflationary fiscal policy in Muslim countries. Therefore, a conscientious Muslim government committed to the achievement of the goals of an Islamic economy should pursue a fiscal policy which is consistent with its goals. This does not necessarily rule out fiscal deficits but imposes the constraint that deficits be allowed only to the extent necessary to achieve broad-based well-being within the framework of stable prices.

However, the removal of 'excessive' fiscal deficits could remain a pious hope in Muslim countries as long as the primary causes of deficits are not remedied. These are: firstly, lack of willingness on the part of governments to eliminate or reduce substantially their unproductive and wasteful spending, and secondly, the inability of governments to raise adequate finance through taxation and other non-inflationary sources to meet their essential and productive expenditures. Therefore, an Islamic government must, if it wishes to be true to its name, eliminate unproductive and wasteful spending. It is something required by Islam from all Muslims, but particularly from the government because it uses resources provided by the people as a trust and using these wastefully or unproductively would be a breach of this trust. The government may, nevertheless, be constrained to borrow to finance its unavoidable deficits. Arrangements must be made to enable the government to do so in a non-inflationary manner.

How will the genuine borrowing needs of the government be satisfied? In the absence of interest it may not be possible for the government to borrow from the private sector unless it uses coercion which may not be practical or desirable except in national emergencies, like war. Not all public sector projects are amenable to equity financing and even if equity financing is possible in some public works projects it may not be either possible to determine the economic return or desirable (as in certain educational and health projects) to price the services rendered because of the Islamic emphasis on social welfare and equitable distribution of income and wealth. The importance attached to price stability will also prevent the state from resorting to inflationary financing. How then will the deficits be financed? The answer lies in: firstly, minimising all wasteful spending both in the public and the private sectors to reduce the demand for credit, and secondly, restructuring the entire financial system to enable it to meet the genuine funding needs of the public sector within a non-inflationary framework without depriving the private sector of adequate liquidity. This would, no doubt, also necessitate the striking of a 'social balance' between public services and private production in the light of Islamic teachings.[14]

(b) Commercial Bank Credit Creation

Commercial bank deposits constitute a significant part of money supply. These deposits may, for the sake of analysis, be divided into two parts: firstly, 'primary deposits' which provide the banking system with the base money (cash in vault plus deposits with the central bank) and 'derivative deposits' which in a proportional reserve system represent money created by commercial banks in the process of credit extension and constitute a major source of monetary expansion in economics with well-developed banking habits. Since derivative deposits lead to an increase in money supply in the same manner as currency issued by the government or the central bank and since this expansion, just like government deficits, has the potential of being inflationary in the absence of an offsetting growth in output, the expansion in derivative deposits must be regulated if the desired monetary growth is to be achieved. This could be accomplished by regulating the availability of base money to commercial banks. For this purpose the absence of interest as a regulating mechanism would not be a disadvantage as will be discussed later.

(c) Balance of Payments Surplus

This source of monetary expansion will be discussed only briefly in this paper, because most Muslim countries are experiencing balance of payments deficits and in the few that do have a surplus, the surplus does not originate in the private sector. Hence it does not lead to an automatic expansion in money supply. It does so only if the government spends its surplus domestically and the private sector balance of payments deficit does not offset this adequately. If in countries with a surplus, government spending is regulated in accordance with the capacity of the economy to generate real supplies, there should be no inflation resulting from the balance of payments surplus.

2. Instruments of Monetary Policy

Within the framework of the rationale provided above, it may be possible to suggest the mechanics for monetary policy which may not only help regulate money supply in accordance with real money demand but also help fulfil the need for financing the government's "genuine" deficits and achieve the other socio-economic goals of the Islamic society. The mechanics should consist of five elements.

(a) Target Growth in M and M_O

The central bank should determine annually the desired growth in money supply (M) in the light of national economic goals including stability in the value of money. [15] This target growth in M should be reviewed quarterly, or as often as necessary, in the light of the performance of the economy and the trend of important variables. It is well recognised that the growth in M is closely related to the growth in M_o or high-powered money, defined as currency in circulation plus commercial banks deposits at the central bank, and hence the central bank should closely regulate the availability and growth of M_o. [16]

Since the creation of M_O by the central. bank results from the exercise, by the central bank of the power to create money, which is a purely social prerogative, the resources derived from this power should be used, in the social-welfare-oriented value system of Islam only for accomplishing the goals of the Islamic society. They should be used particularly for financing projects that would help realise the Islamic ideal of an *Ummah, all* of whose members are brethren, not separated by a widening gulf of income and wealth inequalities.

To bring the above goal to a reality, the central bank should make the total M_O created by it available partly to the government and partly to the commercial banks and the specialised financial institutions. The proportion of M_O diverted by the central bank to each of these three sectors should, like the total size of M_O, be determined by economic conditions, goals of the Islamic economy, and the dictates of monetary policy. The part of M_O made available to the government should be an interest-free loan to enable the government to finance its social welfare projects. The part of M_O made available to the commercial banks should be treated as *mudarabah* advances and the profits realised from these should be made available to the government to finance projects designed to reduce poverty and income inequalities. The part of M_O made available to specialised credit institutions should also be a *mudarabah* advance and be used mainly for financing productive activities of self-employed persons, farmers, cottage industries and other small businesses which, though viable and socially necessary, are unable to obtain funds from commercial banks.

(b) Public Share of Demand Deposits

A certain proportion of commercial bank demand deposits, up to a maximum of, say, 25 per cent, should be diverted to the government to enable it to finance socially beneficial projects in which profit-sharing is not feasible or desirable. This should be in addition to the amount diverted to the government by the central bank for expanding the monetary base M_O. The rationale behind this proposal is that firstly, the commercial banks act as agents of the public for mobilizing the society's idle resources; secondly, the banks do not pay any return on demand deposits; and, thirdly, the public does not bear any risk on these deposits if these are fully insured. Hence it would be fair to expect that the society's idle resources thus mobilized should be used for social benefit except to the extent to which the society permits the commercial banks to use them for private benefit in the larger social interest. One of the important ways of using them for social benefit would be to divert a part of the demand deposits thus mobilized to the public treasury to finance socially beneficial projects without imposing any interest burden on the public exchequer.

It would, however, be fair to demand that the government should pay a service charge on the resources thus made available to it. The charge should be equal to at least 25 per cent of the total cost of mobilising demand deposits, including the cost of rendering all services to the depositors related to these deposits. This service charge would not be in conflict with the abolition of *ribā* because the government would only be reimbursing the commercial banks on a *pro-rata* basis for actual costs incurred by them in acting as agents for the government in mobilising the idle funds of the public. In addition to pay this service charge, the government should also bear, on a *pro-rata* basis, the cost of insuring demand deposits.

(c) Statutory Reserve Requirement

Commercial banks should be required to hold a certain proportion, say, 10-20 per cent, of their deposit liabilities with the central bank as statutory reserves. The central bank should pay the commercial banks the cost of mobilising these deposits just as the government would pay the cost of mobilising 25 per cent of demand deposits diverted to the government. This statutory reserve requirement could be varied by the central bank in accordance with the dictates of monetary policy. The rationale behind a statutory reserve requirement only against demand deposits is that the *mudarabah* deposits would constitute a part of bank equity in an Islamic economy and, since there is no statutory reserve requirement against other forms of equity, there is no reason why *mudarabah* deposits should be subject to such a requirement. This should not adversely affect the control of money supply, which must be accomplished through the control of high-powered money at source as indicated earlier.

The funds thus received by the central bank could be partly used by it to enable it to serve as lender of last resort and partly invested to derive income for covering its expenses. The Islamic commercial banks, with their resources employed in a profit-and-loss-sharing framework, may not be able to predict their liquidity needs with precision and would stand in need of assistance from a lender of last resort if, for some unforeseen reason, they run short of liquidity. In the conventional interest-based commercial banking system it is possible for banks to borrow from the central bank or from the inter-bank money market to offset such liquidity shortages. The Islamic banks should also have some mechanism whereby they can have temporary access to funds if their liquidity position becomes tight. A built-in arrangement for such eventualities could be made by diverting a certain part of the commercial bank statutory reserves to a common pool, the main function of which would be to enable the central bank to serve as lender of last resort within certain agreed limits and constraints to avoid the misuse of this facility.

The balance of the funds raised through reserve requirements could be invested by the Islamic central banks as is done by their capitalist counterparts. Since interest-bearing government securities would not be available, the Islamic central bank would have to find alternative avenues for investment. It should, however, withhold from investment funds it considers necessary for management of monetary policy.

(d) Credit Ceilings

While the above-mentioned tools would facilitate the central bank in bringing about the desired expansion in high-powered money, credit expansion could still exceed the desired limit because, firstly, it is not possible to determine accurately the flow of reserves to the banking system, other than those provided by the *mudarabah* advances of the central bank, and, secondly, the relationship between commercial bank reserves and credit expansion is not very precise. The behaviour of the money supply reflects a complex interaction of the various sectors of the economy. Hence, it would be desirable to fix ceilings on commercial bank credit to ensure that total credit creation is consistent with monetary targets. In the allocation of this ceiling among individual commercial banks appropriate care should be taken to ensure that it does not harm healthy competition among banks.

(e) Value-oriented Allocation of Credit

Since bank credit comes out of funds belonging to the public, it should be so allocated that it helps realise 'general social welfare. The criteria for its allocation, as for other God-given resources, should be first, the realisation of the goals of the Islamic society and then the maximisation of private profit. This could be attained by ensuring that:

(i) Credit allocation leads to an optimum production and distribution of goods and services needed by the majority of society, and

(ii) The benefit of credit goes to an optimum number of businesses in society.

The appropriate way to achieve the first objective would be to prepare a value-oriented plan and then to dovetail this plan with the commercial banking system for its efficient implementation. The approach should be, firstly, to make it clear to the commercial banks what sectors and areas of the economy are to be promoted through commercial bank financing and what goals are to be realised and, secondly, to adopt the institutional measures necessary for this purpose, as discussed below. No effort should be made to tie the commercial banks with an elaborate network of controls.

The reason normally given by the commercial banks for diverting a very small proportion of their funds to small- and medium-sized businesses is the greater risk and expense involved in such financing.[17] Hence small firms are either unable to get finances from banks or do so at highly unfavourable terms (in terms of cost and security) compared with their larger counterparts.[18] Thus the growth and survival of small firms is jeopardised even though they carry a great potential for increased employment and improved income distribution. It would, therefore, be desirable to reduce the risk and expense of such financing for banks. The risk may be reduced by introducing a loan guarantee scheme[19], underwritten partly by the government and partly by the commercial banks. The additional expense incurred by the commercial banks in financing small businesses should be partly or wholly offset by the government, depending on the nature of the case and objectives to be served. The cost to the government exchequer arising from the above two schemes is justifiable in the larger interest of the goals of the Islamic economy.

It is not being claimed here that private demand for money can be forecast precisely by the central bank. All that the proposal implies is that given the capacity of the economy to generate real growth and the government's determined policy not to allow its fiscal deficit to exceed the limits dictated by price stability, the central bank can (within a margin of error) estimate the high-powered money needed to generate the target rate of growth in money supply and the amount of mudara*bah* credit it can make available to the commercial banks during a given period. Since the projection may not always turn out to be correct because of errors in forecasting or changes in important economic variables, the targets should be reviewed and revised periodically. Central bank credit availability to commercial banks, statutory reserve ratios, and credit ceilings should be changed and reinforced by other instruments of monetary policy like the liquidity ratio, specific directives, moral suasion and selective controls. It may also be possible to consider the simpler Friedman rule of adopting a fixed annual rate of growth in M in keeping with the secular growth in output and decline in velocity to avoid the frequent 'tinkering' which is otherwise necessary.[20] However, if such a formula is adopted it should be without Friedman's excessive free-market commitment. The positive role of the state and of fiscal policy cannot be dispensed with.

The non-availability of some of the traditional instruments of monetary policy should hence not pose any serious problem in managing an effective monetary policy provided that the generation of high-powered money is appropriately regulated at source. This necessarily implies that in the Islamic system, like in any other system, co-operation between the central bank and. the government is absolutely essential. Unless the government is determined to have price stability as an indispensable goal of policy and to regulate its spending accordingly, it would be impossible to have an effective monetary policy. Once high-powered money has been regulated at source, the minor adjustments that may be necessary due to changing economic conditions or errors of forecasting may be made as indicated above.[21]

Some questions that may be asked here are: Even if it is possible to control inflation in an Islamic economy, will it be possible to overcome a recession? What if prospects for making profit are dim and the commercial banks and the associated private sector are not willing to expand their *mudarabah* investments? It is of course true that the central bank can only extend credit it cannot force the private sector to invest when business prospects are not bright. Under such circumstances the government can always review its expenditure programme and try to offset any deficiency in private sector aggregate demand by arranging a greater proportion of the increase in high-powered money through its fiscal deficit.

The external sector can no doubt create movements in money supply through capital flows. These movements may be due to a number of reasons which it is not possible to examine in this paper. The most disturbing capital movements are the 'hot' speculative capital flows arising from interest rate differentials and exchange rate expectations. These need not be a problem for an Islamic economy. For countries having a strong balance of payments position there is little likelihood of hot capital inflows arising from interest rate differentials because demand deposits would pay no interest and time deposits would not only be equity-oriented and committed for relatively longer periods but would also be accepted by financial institutions only if they could be gainfully absorbed in a profit-sharing framework. Hot money inflows due to prospective currency appreciation could be discouraged by disincentives and controls and their monetary effect may be neutralised by subjecting such flows to prohibitively high statutory reserve requirements. The stress on price stability in an Islamic economy should also help minimise current account deficits and the resulting currency depreciation and capital outflows.

III

AN APPRAISAL

The question now is: How will the proposed monetary policy help the Islamic economy to achieve its goals?

The money supply would be regulated by the central authority in accordance with the needs and goals of the Muslim society. The growth in M would be regulated to achieve the goal of attaining broad-based well-being and an optimum but realistic rate of growth within the context of price stability. This target growth in M could be achieved by generating the required growth in high-powered money through a combination of fiscal deficit and central bank lending to financial institutions. However, there could still be excessive or deficient expansion in money supply because of the effect of a number of variables which are difficult to predict or control. Such excesses or deficiencies could be evened out with the help of changes in central bank *mudarabah* advances to commercial banks, statutory reserve requirements and ceilings on credit expansion. It is assumed that the government would be committed to Islamic goals and would not adopt policies which conflict with them. It is also assumed that all government policies would converge on the achievement of these goals and that monopolistic and oligopolistic practices and structural rigidities would also be removed.

The created money or the profit arising from it would go mainly to the public exchequer to be utilised for social welfare objectives of eradicating poverty, attaining a high rate of economic growth and low rate of unemployment, and fostering socio-economic justice. It would not serve vested interests or contribute to concentration of wealth. Thus the implementation of this scheme would help to reduce concentration of wealth to the extent to which it is brought about by the commercial banking system in the capitalist society.

The government financial problems would also be solved partly because, firstly, additional interest-free resources would be made available to the government in the form of created money, and secondly, a certain proportion of all commercial bank demand deposits would also be made available to the government. This would carry a service charge which would be considerably smaller than the heavy interest burden which makes the rich richer through interest receipts and the poor poorer through additional taxes levied to service the public debt.

The scheme need not reduce the overall volume of funds available to the private sector. It would, however, lead to a redistribution of these funds through a reduction in inequalities of income and concentration of wealth and a dispersal of total credit among a larger number of people along with its reallocation among various sectors of the economy to ensure an adequate production and distribution of goods and services needed by the majority of the society in conformity with a value-oriented plan. Since a preponderant part of the financial needs of business would come out of equity, there would be no fixed interest cost to be added by firms to the cost of goods.

The ability of the government to obtain funds without the high cost of interest along with the imperative that these funds be invested in projects of high social priority should help eradicate poverty, increase employment, provide essential social and economic services and raise the rate of economic growth to an appropriate level thus contributing to general social welfare.

Hence it appears that the proposed scheme would operate to the greater overall benefit of the economy and help the Islamic State to realise its short-term as well as long-term social and economic objectives.

COMMENTS

Dr. **Mohamed Ariff***

Dr. Chapra's excellent paper entitled "Monetary Policy in an Islamic Economy" represents a valuable contribution to the growing Islamic economics literature. The significance of this paper lies in that it attempts not only to design a monetary policy that is truly Islamic in character but also to assign to it a role that is quite novel and unique. To appreciate the paper and to do justice to it, one must also read Dr. Chapra's earlier seminal work on "Money and Banking in an Islamic Economy", which was presented to the Seminar on "Monetary and Fiscal Economics of Islam" in Makkah in October 1978. However, my comments here will be confined to policy matters discussed in his present paper.

The ingenuity of the author is clearly manifested in the manner in which he has approached the whole subject, by injecting an Islamic flavour into the objectives which he sets out to achieve with the help of 'unconventional' monetary instruments in an interestless environment.

I am as strongly convinced, as the author himself indeed is, that all these socio-economic goals can be achieved efficiently and effectively in an interest-free system. However, I am inclined to think that the author has quite unnecessarily overburdened the monetary policy by assigning to it too many objectives. I do not suggest that monetary policy instruments are not capable of achieving a number of objectives simultaneously in certain circumstances either independently or with the assistance of other policy tools. Nor do I suggest that all these objectives are unnecessary or unimportant. As a Muslim economist, I whole-heartedly subscribe to each and every objective that Dr. Chapra has listed out. But, I do question the wisdom and the practicality of expecting the monetary policy to achieve all of these objectives at the same time. It is only in this sense as I feel that Dr. Chapra has been rather unfair or unkind to the monetary policy in an Islamic framework.

It is of relevance to note that according to the famous Meade-Tinbergen principle, the number of policy instruments should equal the number of policy objectives, if multiple objectives are to be simultaneously achieved. Otherwise, there may be conflicts of policy goals. In this regard, it is also pertinent to bear in mind the Mundellian principle of "effective market classification" which stresses the importance of. appropriate pairing of policy objectives with policy instruments. It is, therefore, imperative that we assign to monetary policy what it can best achieve and leave the rest for other policy instruments. Thus, too much concern for redistributive justice in formulating and implementing the monetary policy may impose constraints which may adversely affect its overall efficiency and effectiveness. I am not at all implying that this concern for redistributive justice is wrong or misplaced. Rather, the point I wish to drive home is that it may be best achieved by activating other policy tools.

Having made my preliminary remarks on the scheme outlined by Dr. Chapra, let me come to the monetary policy itself. My general impression is that the monetary policy in Dr. Chapra's model plays a somewhat passive role, especially with regards to the regulating of money supply, i.e. the role of avoiding liquidity shortage and liquidity glut so as to ensure stability in the value of money. Dr. Chapra's prescription that the central bank adjusts the money stock in such a way as to keep pace with the secular growth of output implies a passive role, not one of actively influencing the level of national output and employment.

Perhaps Dr. Chapra has been strongly influenced by Friedman in this regard.

Dr. Chapra also seems to believe that the control of money supply can be accomplished by merely regulating the high-powered money (*Mo*) at the source. He recommends a statutory reserve requirement against demand deposits only. But *Mo* in a modern economy accounts for only a small proportion of the total money supply, and as such the central bank's control of Mo alone may not be sufficient. It is, therefore, necessary for the central bank to exercise similar controls on the deposit money component of the aggregate money supply as well.

The author has suggested two alternatives both of which have been motivated by his genuine concern for Islamic redistributive justice. The first alternative is to impose a 100 per cent reserve requirement on the commercial banks. This really means that the commercial banks will be reduced to safe-keeping institutions. For, then, the commercial banks cannot even invest the funds deposited with them, let alone ‘create' deposits. This alternative, however, permits the central bank to create ‘credit’ which will be channelled through the commercial banks on a *mudarabah* basis.

The second alternative is to allow the commercial banks to 'create' deposits. The redistributive justice will be taken care of either by nationalising the commercial banks or by forcing the banks to pass on to the state the net income arising from 'derivative' deposits after allowing for the *mudarabah* share of the commercial banks. It is not clear to me how this 'net' income is to be divided among the shareholders, the depositors and the government. Since the sum of the *mudarabah* shares must add up to 100 per cent, it begs the question what should be the share of the state which has not injected funds of its own into the commercial banking operation? Does this mean that the share of the state can be fixed arbitrarily and varied at will? Does not this amount to taxing the incomes of commercial banks? If so, are we not really speaking of fiscal measures rather than monetary economics proper?

Dr. Chapra carefully mentions the various pros and cons of these alternatives, without committing himself to any one of these. It will be of interest to know which of the two he really opts for and why.

Of the various monetary instruments discussed in Dr. Chapra's stimulating paper, the suggestion that a maximum of 25 per cent of the demand deposits of the commercial banks be earmarked for providing interest-free loans to the government, deserves a special mention. The novelty of this proposal lies in that this source of financing, which is interest-free, is not costless, as the government, will have to bear at least 25 per cent of the total cost of mobilizing the demand deposits and rendering services related to these deposits *and* the cost of deposit insurance. This is certainly a non-inflationary way of financing government expenditures, unlike his other suggestion that a part of the *Mo* created by the central bank is made available to the government.

As mentioned earlier, Dr. Chapra restricts the statutory reserve requirement of 10-20 per cent to the demand deposits only without extending it to cover other deposits as well. His argument is that the *mudarabah* deposits, which constitute a part of the equity in an Islamic economy, should not be subject to any reserve requirement, unless similar requirements are imposed also on other forms of equity. I think that it is important here to make a distinction between *mudarabah* deposits and other forms of equity. *Mudarabah* deposits in a banking system play a more crucial role than direct equity participation elsewhere in the economy. Hence, there is no basis for equating the two in considering the merit of the statutory reserve requirement. I also think that the statutory reserve requirement against *mudarabah* deposits is far more important than that against the demand deposits. The commercial banks normally hold a large proportion of the demand deposits in liquid form, as these deposits can be withdrawn at any moment. Since the twin purposes of the statutory reserve requirement are to ensure that the financial institutions remain reasonably liquid and that they do not over-expand credit, such a statutory requirement becomes all the more important and necessary for the *mudarabah* deposits. Since the *mudarabah* deposit cannot be withdrawn immediately, the banks will tend to commit these funds on long-term projects which are profitable at the expense of liquidity considerations. In such circumstances, the statutory reserve requirement against the *mudarabah* deposits will force the banks to keep a part of these deposits in liquid form and limit their scope of credit expansion.

With regards to the 10-20 per cent statutory reserve requirement against the demand deposits, Dr. Chapra's suggestion is that the central bank should invest these funds to derive income for covering its expenses. In the present-day set-up, the central bank invests such funds in interest-bearing government securities which can be easily converted into cash. But, in an Islamic economy where such interest-bearing securities are out of question, what alternatives are really available to the central bank for investing these funds, without jeopardising the liquidity of the reserves? I am thus inclined to think that investing these funds is not as simple as Dr. Chapra seems to suggest.

The other suggestion of Dr. Chapra that "the central bank does not invest these funds directly but makes them available to commercial banks and other financial institutions on the basis of profit-sharing" is even more objectionable on a number of grounds.[*] First, it will imply that the central bank relinquishes its control on how these funds should be invested, thereby totally disregarding liquidity aspect, which in my opinion is of over-riding importance in the case of such reserve funds. Second, to make these funds available again to the banks will defeat the very purpose of the statutory reserve requirement and will amount to a dilution and even a negation of the monetary control implicit in the instrument of statutory reserve requirement. Third, it is morally wrong for the central bank to enter into profit-sharing arrangement with the commercial banks using funds that really belong to the latter.

The statutory reserve requirement can be a powerful instrument of monetary control, and its importance to the Islamic monetary system, where the instrument of interest rate is not permissible, is readily obvious. Extreme care should, therefore, be exercised so as not to blunt the statutory reserve ratio instrument in any way.

There are a number of other monetary instruments which have not been mentioned in Dr. Chapra's paper. These instruments were discussed in the Makkah Seminar in October 1978. These include: (a) refinance ratio, which refers to the central bank's refinancing of a part of the interest-free loans provided by commercial banks, (b) *"qard-hasnah" ratio,* by which is meant the percentage of demand deposits that commercial banks are obliged to lend at an interest-free loan, (c) "profit-sharing ratio", which forms the basis on which *mudarabah* investments are to take place between the banks and the clients in the economy, and (d) the ratio of interest-less government securities in the advances portfolio of financial institutions. All these ratios, which can be varied or adjusted by the central bank in such a way as to regulate the money supply, represent potent instruments of monetary control in an Islamic economy.

Finally, Dr. Chapra does conclude that monetary policy will be asymmetrical in its impact, since it will not be as effective in a recession as in inflation. This leads him to suggest that the government should offset deficiency in aggregate demand by undertaking fiscal deficits financed by an increase in the supply of M.. That fiscal measures are more effective than the monetary ones in overcoming recessions has been acknowledged not only by the Keynesians but also by the Monetarists themselves. Nonetheless, it may be in order for us to question whether the monetary policy in an interest-free Islamic economy will be as weak as that in an interest-ridden capitalist economy in times of recession. The current weakness of the monetary policy as an anti-recessionary device may be attributed to: (a) interest inelasticity of investments, and (b) passive role played by the financial institutions. But, in an Islamic economy, interest is no longer a cost to the entrepreneur and the risk borne by the entrepreneur in times of recession is much less under the *mudarabah* system than in the capitalistic order. Thus, entrepreneurs in an Islamic economy will be less cautious and more adventurous even in times of recession than their counterparts in the capitalist system. Moreover, the financial institutions in an Islamic framework play a more active role than do their counterparts elsewhere. As we all know, the financial institutions in an Islamic economy are envisaged to take on an entrepreneurial role by being a partner in *mudarabah* investments, quite unlike the present day financial institutions which merely provide funds for investment. It is in this sense that the Islamic financial institutions can be expected to lead the business community and actively influence the business outlook by injecting confidence and stimulating investments in times of economic downturn.

My final comment relates to the speculative demand for money. The author seems to completely dismiss the speculative motive out of consideration in an Islamic system. I think that speculation of all kinds is not un-Islamic. I do not think that there is anything wrong or un-Islamic for me if I want to have my assets in a liquid form if I think that it is not the best time to buy property. If I could buy it next month may be I stand a better chance of profit. This is really speculative motive for holding money and I do not think there is anything un-Islamic about it. So in my view the speculative motive should be taken into account in formulating the demand function for money.

I believe that my comments do not in any way undermine the value of Dr. Chapra's paper which undoubtedly is an excellent piece of work. I do hope that the criticisms offered here will provide further impetus for the author in his relentless efforts to formulate a workable and meaningful monetary policy framework for an Islamic economy.

Dr. Munawar Iqbal*

Dr. Umer Chapra's paper, "Monetary Policy in an Islamic Economy" is a useful contribution to the literature on Islamic Economics. It addresses some very important theoretical issues and policy problems. It also contains concrete policy proposals to solve the problems discussed. However, this is not to suggest that the paper is the last word on the question of monetary policy in an Islamic Economy, nor is it to say that every word of it is correct. In my view the contribution of the paper is to identify the real issues and to set the stage for further debate and research by providing policy recommendations which in his view will resolve the problems. One may disagree with any of his proposals or add new dimension to it but the fact remains that Dr. Umer Chapra has provided enlightening ideas and exciting proposals.

In the section on the goals of monetary policy in an Islamic economy he enumerates three goals namely: full employment and high rate of growth; socio-economic justice and equitable distribution of income; and stability in the value of money. As the author notes these objectives appear on the face to be the same as those of capitalism but there are fundamental differences in their interpretations. The author adequately explains those differences. What the paper lacks is, in my view, a discussion of the relative importance of various objectives.

There is one supreme objective of all economic activity - rather all human activity -that is to maximize human welfare. The various objectives enumerated are simply the "means" or "semi-objectives" and not the ultimate "goals". The concept of welfare is different in different systems and hence the importance or "weight" of the different tributories to the ocean of welfare will also be different. This difference in emphasis is one of the things that distinguish one system from the other. It is well known that these "objectives" are not always compatible with one another. There are many trade-offs involved and the "rate of substitution" of one objective for the other depends on the social and ethical values of the society.

In the same section the author raises a very interesting question i.e. the position of inflation in an Islamic economy. The author states* that "any continuous and significant erosion in its (money's) value should be interpreted in the light of Islamic teachings to be tantamount to ‘corrupting’ the world because of the adverse effect this erosion has on social justice and general welfare." The quotation is undoubtedly true but this does not give inflation position which is much different from its position in other systems. What makes inflation really repugnant to the Islamic economy is the fact noted later, that is inflation conflicts with *riba*-free economy because inflation involves injustice to the *ribā*-free lender by reducing the real value of the amount he has lent. The question is how to avoid any injustice to a person advancing a goodly loan *(qard-hasanah). The* author suggests that price stability is the best answer. Sounds great. However, when it comes to practice it possesses many problems. In this regard I would request the learned author to elaborate a few points. Firstly, what is his interpretation of price stability? Usually a mild rate of inflation (2-3 per cent) is not considered to be incompatible with price stability. Should the author accept this definition, then the question of injustice to the *ribā*-free lender rises again. Islam prohibits injustice irrespective of its degree. On the other hand if he implies zero rate of inflation, then, is he recommending absolutely rigid prices? If so, would not it be harmful for the investment activity? More importantly, how would the government achieve a zero rate of inflation? In today's work most of the inflation in less-developed countries is of foreign origin which is not easy to control by domestic policies. Thus, if the objective is to avoid injustice to any party, would it be permissible to “index" loans to the extent that inflation persists.

Now I come to what I consider to be the most important contribution of the paper. This is the section dealing with the public share of demand deposits. Because of the immense practical importance * the issue may become a subject of considerable debate. I will, therefore, deal with it at some length.

Let me start by recording my broad agreement with the proposal. I have some differences with regard to its implementation which are noted later. I fully endorse the view, that since the funds available through demand deposits belong to the public, a part of the benefit should go to the public.

Under multiple credit creation the banks receive a regular flow of resources which may be called "seigniorage", by analogy to the resources which used to accrue to sovereign rulers of the past who had the right to mint coin with a face value larger than the intrinsic metal value in the coin and the cost of manufacturing etc. The present value of the social seigniorage (SS) arising from the issue of D units of credit money is equal to:

$$SS = \left[\frac{R-C}{1=\mathrm{D}} + \frac{R-C}{(1=D)^{2}} + \frac{R-C}{(1+d)^{3}} + \ldots\ldots + \frac{\mathrm{R - C}}{1+\mathrm{D})^{n}} \right] x\, D$$

where n is the period in which the paper money has to be "retired" or is replaced by a commodity substitute; R is the marginal social productivity of the resources; C is the social unit cost of servicing the fiat money, (if interest is paid on deposits then that will be included in C) and d is the social discount rate.

In reference to the capitalist economies, it is maintained that this seigniorage gets distributed to the depositors through the payment of interest on deposits and through other banking services. Specifically, assuming n to be infinite.

$$SS = \frac{(R - r - C)D}{d}$$

where r is the rate of interest on deposits and if r = R - C then SS = 0. It is claimed that competition among the banks will assure that r approaches (R-C). There are two problems with this solution. First, historically banks have been earning extraordinarily high profits. This is because it is very difficult to achieve competitive conditions in the banking industry. Secondly the payment of interest is out of question in an Islamic economy, Now it is possible to pay out *mudarabah* share instead of the rate of interest but the nature of demand deposits is such that the holders either need immediate liquidity or they are risk-avert. In both cases it is not possible to invest them on profit-sharing basis. The alternative is to divert these resources to the government which can spend it in accordance with social priorities. Thus the author's proposal makes a lot of sense.

Another advantage of the scheme is that making the public share of demand deposits a variable provides the authorities with another policy tool which may be valuable in the absence of some other policy tools available to the monetary authorities in a *ribā*-free economy. In this regard I do not quite understand the author's recommendation* that in a period of recession, the government may use a higher proportion than that in conditions of full employment. In my view it should be exactly the opposite. A higher percentage will have a contractional effect since the money multiplier will be reduced. In its effect on money market, the public share of demand deposits is similar to statutory reserves and in recession we reduce the statutory reserve requirement, not raise it.

A related point is that apart from any counter -cyclical manipulation the rate of the public share of demand deposits should not be very high because the higher the share of government in demand deposits, the lower will be the money multiplier. This is critical because the profit-sharing system which will replace the present *ribā*-ridden system, already involves under-expansion of credit for many reasons. These include: (i) The ratio of demand deposits to total deposits will increase, since the perfect risk averters will put their savings in demand deposits; (E) The demand by banks for "excess reserves" may increase because of the greater uncertainty under the profit-sharing system, since deposit variations arising from cyclical change will increase; and (iii) Loaning operations of the commercial banks will also be limited since considerable loaning is at present done on a riskless basis, which allows the commercial banks to maximize profits and to decrease their demand for liquidity.

In the framework of the paper under discussion, the provision of enough money will necessitate printing more money which will have an inflationary effect. Elsewhere in the paper the author has very effectively made a case against inflation in an Islamic economy.

Another point on which I would beg to differ with the learned author is his assertion that the proposed model would not seriously affect the profits of banks.* I feel that it would. This is nothing to be regretted, however. Rather I consider it to be another attractive feature of the model. In view of the extraordinarily high profits of the banking industry it is very much desirable to siphon off excess profits of the bank and distribute them to the poorer sections of the society. The scheme is thus in line with the equity objective of the Islamic economy.

To sum the discussion on public share of demand deposits, I feel that the proposal is very useful. It provides the monetary authorities with a much needed tool and the government with much needed funds. The rationale for the scheme is well justified. However, the implications of the proposed scheme for money multiplier call for a cautious approach in determining both the level and the counter-cyclical variation of the public share.

In the end I would like to suggest a few extensions of the present analysis which should be considered by the author and other researchers in the field.

Firstly, it should be investigated how the suggested policy proposals will affect the "real" sector of the economy. In a capitalist economy the monetary policy affects the real sector only through the rate of interest. In an Islamic economy the rate of interest will be replaced by the rate of profit. The rate of profit, however, depends on the business conditions. Thus the saving, investment decisions in an Islamic economy would not depend on the rate of interest but only on the expectations about business prospects. How, then the monetary policy will have any bearing on the real sector? (Incidentally the achievement of a desirable rate of growth would depend on this.)

Secondly, the nature of the *mudarabah* advances of the central bank and their role in the management of the monetary policy should be explored in greater detail. Suppose there is an excess demand for liquidity for whatever reasons, e.g. crisis of confidence, change in expectations etc. The discount window is not available to the banks. They approach the central bank for additional funds. On what terms will the central bank make funds available to them? Since the commercial banks would not be investing these funds, the question of profit-sharing does not arise. For another example suppose there is recessionary trend in the economy. The central bank wants to follow an expansionary policy. In the framework of the present paper, it offers more funds to the commercial banks. Would it solve the problem? Obviously not. The problem in a recession is not that commercial bank do not have funds to lend. The problem is that people are not willing to borrow due to slack business expectations. What role, then the *mudarabah* advances can play and how?

Thirdly, some analysis is required to determine the implications for monetary policy of the replacement of interest-bearing assets by non-interest-bearing assets. In an Islamic economy securities, treasury bills, bonds debentures will all have to go. The predominant asset will take the form of equities. Now equities have different characteristics than the securities. The change will, therefore, have important implications for the conduct and effectiveness of monetary policy as well as the working of the other monetary institutions.

DISCUSSION

Chairman (Dr. Ziauddin Ahmed)

Before I ask for comments, I would like to highlight some of the areas in which it will be useful to have comments, rather than repetition of the arguments already made. As you may have noted, there are a few areas of disagreement between the author and the discussants. One is that monetary policy should not be over-burdened with too many objectives. The second is on the question of indexation. The third point is whether or not in Islamic economic system there are valid reasons for having speculative demand for money. Another important point for further discussion is whether the methods suggested for financing government deficits, particularly by earmarking 25 per cent of the commercial bank demand deposits, is really the right way to go about it and whether it makes any substantial difference or not. Finally, the assertion that the Islamic monetary policy plays a more active role in a period of recession. I would suggest that these points should be given a greater weight in the ensuing discussion.

M. Akram Khan

About the goals stated by Dr. Chapra, I would like to know what is the authority from the *Shaīi'ah* in support of these objectives, because some of the Western writers have said that recently Muslim thinkers have started saying good things about social justice, full employment and distribution of income. They say that these ideas have been borrowed from the West. I want to know the reference from the *Sharī'ah.*

Agha M. Ghouse

In an Islamic economic system, the function of money is essentially as a medium of exchange rather than a store of value because Islamic economic system is essentially an expenditure-oriented system. The moment we consider money as a medium of exchange rather than the store of value, we can easily see that indexation may not be necessary to. compensate for inflation.

Dr. **Monzer Kahf**

I have two short comments. First is on Indexation. In this regard I want to bring your attention to two points: First, the alternative use of the money lent. If the alternative is to keep it in demand deposits or in the money form, then we are not doing any injustice to the lender. The second point on indexation is the saying of the Holy Prophet (Peace Be Upon Him) on the matter which is called *Riba-al-Fadal* by the *Fuqaha* wherein the difference in value of the same quantity caused by time is not recognised. Even with a time lag no additional quantity should be given. The second point that I have, is concerning the speculative demand. The author recognises the possibility of the Islamic central bank using open market operations. He should then, recognise with it, the speculative demand, because open market operations imply the speculative demand of the other party in that transaction.

Dr. **Neyzat Yalcintas**

I would like to draw the attention of Dr. Umer Chapra to three problems. One is how to define the area for inessential investment. This will be decided by investors, whether they are private or public. If there is emphasise upon solving the problem of unemployment, there can be some field of investment where the main aim could be creation of more employment. This is why the definition of inessential investment poses problems.

Another problem is that there are many people who do not have any deposits in the bank. How to compensate those people for inflation? This is why I think that instead of indexation it is better to use other tools of social policy like raising of wages and salaries or raising the pension when the inflation rate is high. Finally, I am doubtful whether it will be useful to give the government the right to have 25 per cent of the demand deposits of commercial banks. It is better to keep the government out of the banking system as far as possible. Another related question is that when will the government return that 25 per cent? In abstraction the model may sound very well. But in practice what will happen is that after one year or two, the government will say that we are not paying back the 25 per cent borrowed.

Dr. **Sultan Abu Ali**

I do not think that Dr. Chapra is over-burdening the monetary policy by having multiple objectives. We should look at these objectives as the objectives of government policy and what he is trying to show is what role monetary policy should play in achieving those and he is correct in that. My second point relates to the matter of finding resources to finance government activity. I think if *Zakah is* properly collected, it would not be necessary for the government to resort to deficit financing. His suggestion of diverting 25 per cent demand deposits to the government, means that he is accepting the government deficit as a means for achieving economic objectives. But I think deficit financing is the main source of the rate of inflation that we are experiencing. If we make more resources available to the government, this will aggravate the situation of inflation further.

Thirdly, about speculative motive, I would like to agree with Dr. Ariff. I think in Islamic economy, the speculative motive will still exist. What might be the reason for some of us not accepting the speculative motive, is that when Keynes was talking about the liquidity preference he compared money as a store of value with bonds and bonds are not permissible in Islam. But this does not mean that this is the only form of assets which should be considered. You may very well hold money till you have a more appropriate asset to invest in and this is speculative motive. As for *Zakah* and its effect on speculative demand, I do not agree that the *Zakah* would reduce the speculative demand. *Zakah* will be imposed on assets which are lying idle for one full year. It will not be imposed on deposits which are lying idle for less than one year. On the question of indexation, I disagree with Monzer Kahf. Actually, indexation makes more justice because we are trying to return the same purchasing power and this is also implied by so many *Ahadith* and by the principle of Islamic justice.

Dr. **Syed Aftab Ali**

In case of indexation, shall I assume that you would be just talking about indexation in terms of the value of money and ignoring the indexation of income and prices which also play a rather integral role in any economic system including the Islamic economic system. Secondly, I have an observation with respect to the speculative demand for money. Is it because we do not know enough about the nature of risks and uncertainties involved in the speculative demand that this aspect has completely been ignored by Dr. Chapra?

My third, observation relates to the role of investment which the central bank will probably assume. (i) What will happen to the decisions that would have to be taken in terms of various types of portfolio investment if any? (ii) What will be the role of the central bank in terms of getting involved into some very sophisticated industrial investment decisions? I assume that if that happens to be the case then a certain amount of technological expertise would be required either in the central bank, or in the commercial banks where investment decisions have to be ultimately taken.

Dr. **Anas Zarqa**

The paper by Dr. Chapra is an excellent one. I would like to mention three important points which were well argued in the paper, before I take exception to another point. First, the multiplicity of the objectives is crucial and should be kept in the forefront all the time.

The second important point is the idea that the central bank can provide finances to commercial banks *through mudarabah advances.* This answers the question of how can we affect the supply of money without interest-bearing instruments. Another significant point is the question of financing part of the government deficit. Here, I think what Dr. Chapra should have said is that we can make use of a certain proportion of the *growth* in deposits to finance government deficit. Deficit is a flow, whereas deposits are stocks. So only the growth in the stock of deposits can finance part of the government deficit on a permanent basis.

The exception I want to take is about the question of indexation where a satisfactory treatment requires a separate paper. An Islamic position on indexation can be reached only after careful assessment of its economic implications in the light of both *Sharī'ah* principles and the alternatives to indexation. Regarding alternatives, it is worth remembering that *Sharī'ah* permits interest-free loans *in kind* where repayment is also made in kind (an equal quantity of the same commodity). Another alternative to indexation of loans is to facilitate real investments in small units through suitable kinds of mutual funds. The assets of such funds are well diversified in real investments or in shares of productive enterprises. Such assets usually appreciate during inflation. This is entirely acceptable in *Shari'ah* (whereas outright general indexation of loans is not - as far as I know) and should be seriously considered by those who claim that permitting interest is the only way to protect the small saver. More research is required in this area, and I hope Dr. Chapra and other competent Muslim economists and jurists would scrutinise the issue.

Dr. Omar Zubair

I have a couple of points to make. First of all, the question of indexation, the *Fuqaha* do not accept it generally. However, as Dr. Anas Zarqa has pointed out loan in kind is acceptable. So that may be one possibility. As for the definition of inflation, I think a mild rate of inflation may be acceptable in an Islamic economy but we must try to minimize it since a high rate of inflation involves injustice to the lender in an interest-free system. Multiple credit creation by banks also leads to inflation. As a matter of fact less than 100 per cent reserve requirement is not permissible in the Islamic economic system.

Dr. **M. M. Metwally**

I have three points. First, the rate of interest in a capitalist economy performs the function of achieving equilibrium in the money market. In Islamic economy there would not be interest. How would we achieve equilibrium in the money market? The rate of profit would not do it. We have to find some other alternative. My second point is that in Islamic economy there would not be any short-term bonds. Some substitute is required. Finally, I agree with the view that speculative demand for money can exist in an Islamic economy.

Dr. M. A. Mannan

My first point is that indexation is justified in Islamic economy. It will protect the value of money and bring more justice to the lender in an interest-free system. Secondly, a view was expressed here that in Islamic economy, money has only a medium of exchange function. I do not agree with that. I think there is also a store of value function for money in an Islamic economy. Also, there is a role of speculative demand for money.

Dr. Anas Zarqa

Both Dr. Munawar Iqbal and Dr. Ariff have raised very thought-provoking comments. A big question that was raised by Dr. lqbal is that we need to spell out the effect of money on the real sector of the economy in Islamic framework. This is a very important theoretical question. I will offer a very very small answer, though partial, building on the paper of Dr. Nejatullah Siddiqi. When the central bank decides to expand the money supply to provide more funds to commercial banks as *mudarabah* funds, the commercial banks will be willing to accept a smaller share to profit when they provide these funds to investors and that is how you can affect the real sector. The businessmen will realise more net profits even if the profit expectations are low. There is a financing partner who is willing to accept a lower profit share so the net profit accruing to the businessmen will be affected. Thus, we have a sort of uni-directional effect of monetary expansion on the profits of business.

Professor Syed Nawab Haider Naqvi

I want to draw the attention of the author to a fundamental fallacy in his paper where he talked of a trade-off between inflation and unemployment that he thinks is a characteristic of the capitalist economy, and which he does not like. I do not like it either, but it does not mean that it will automatically go away. In an Islamic economy the trade-off between inflation and unemployment will not vanish. What the author implies is a vertical Phillips curve, which will obtain in case of price rigidity, because price rigidity means perfect foresight. In practice, however, neither complete price rigidity nor perfect foresight is possible. So Phillips curve will have a negative slope and the trade-off between inflation and unemployment will exist.

Dr. Sharafat Ali Hashmi

The experience of last 50 years shows that inflation is going to persist for quite a long time. In this condition of persistent inflation what would be the motivation for interest-free saver? My personal view is that the capital should be protected from inflationary erosion. Some kind of indexation would be necessary at least during transitory period.

Dr. A. R. Kermal

There has been a discussion on multiple policy objectives. Hoping to do every thing with one policy is all right but the question is whether we are going to achieve the target or not? I agree with Dr. Ariff that we should use one policy instrument for one policy objective. I also agree with Dr. Munawar Iqbal that we should rank the objectives. My second point is concerning indexation. I think it is permissible in an Islamic framework. If we have a basket of goods and we use it as a means to index the loans then we will be able to protect the value of the loans over time.

Dr. Mahfooz Ali

There is a built-in element of indexation in an interest-free economy in case of fixed investment under *mudarabah* as well as under *sharakah* enterprises. This can be clearly seen in case of liquidation of the enterprise. For settlement of accounts in the event of dissolution of *sharakah,* the issue will be settled by the valuation of assets, and liabilities so as to determine the net realisable worth. This will have a built-in element of indexation. The problem of indexation in interest-free economy, therefore, mainly relates to working capital financing. If there is indexation in case of fixed investment how can we weed out indexation from working capital financing? To do so will be inequitable to the providers of working capital. Also in interest-free banking the general mode of *mudarabah* as well as *sharakah* will be that of transitive *mudarabah* and transitive *sharakah* between deposit holders and users of bank credit via financial mediation by banks. it is simple to see that banks will be protected by built-in indexation. This benefit must be passed on by the banks to the deposit holders. To do so will sustain the confidence of the depositors and encourage savings rate and also achieve justice by protecting the real value of savings.

Dr. Masudul Alam Choudhry

I would like to make a point about the effect of monetary policy on unemployment. There is a kind of unemployment known as structural unemployment and this kind of unemployment is a very large segment of the unemployment picture. But neither monetary nor fiscal policy has an effect on this kind of unemployment. I would like the author to explain how will monetary policy in an Islamic framework improve the situation of structural unemployment. I think what we need in that case is a manpower policy.

Dr. A. A. Rushdi

I congratulate Dr. Chapra for his very illuminating and scholarly paper without repeating what has already been said. One point I would like to know from the learned author is whether in his opinion the present *credit* creating power of the commercial banking system will continue in the Islamic system? As we know, the commercial banks in the process of multiple credit creation, create money for which neither the banks nor their depositors make any *sacrifice. By* doing so the commercial banks exercise a power which should be a prerogative only of the state or its agent, the *central bank.* I think the suggestion for handing over to the government a percentage of the demand deposits is very much innovative. Now, if this is against the *created deposits,* government may *not* be liable to pay any service charge as prescribed by the learned speaker. Moreover, exact apportioning of the cost of mobilizing demand deposits may not be practicable either. As regards created deposits or the 'derivative deposits', the learned speaker has suggested to regulate this through controlling *base money. As* a matter of fact the main source of base money for the commercial banks is not the central bank, it is rather public deposits. The central bank's regulatory power over the supply of base money by variation of reserve requirement and by denying or granting a loan to the commercial banks is recognised. In an Islamic system, central bank's loans to commercial banks are supposed to be limited, as financial assets in general are likely to be risk-bearing and central bank's involvement in risk-bearing financing may reduce its status as the regulatory authority. However, loans may be sanctioned against reserves with the central bank. In the present system it is an injustice to the borrowing commercial banks to charge interest while their money is lying idle with the central bank in the form of reserves. However, the reserve requirement is a strong instrument to control the size of money multiplier (m) provided the proportion of M held by public as cash remains constant. In the Islamic system if the multiple is taken away by the government, the reserves with the central bank may be used for granting loans in emergency and for facilitating inter-bank transactions only.

Another point related to this is how the commercial banks in the Islamic system would utilize their current account balances. If the balance is utilized for short-term profit-bearing advances, then the depositors will have to bear risk which they may not be willing to do. If 100 per cent cash is maintained, the cost of transactions on current account may be too high for smooth commercial functioning. In the present system the real interest given to current account holders is sometimes more than the nominal interest given to saving depositors this is what has been revealed by a survey made by the *Guardian* of London in 1971. Under these circumstances it may be worth considering that a certain portion of current account balances be utilized to meet the emergency withdrawal of PLS accounts and margin of benefit may be provided to even C/A holders. This will provide incentives to many to keep their balances with banks rather than keeping idle with themselves. As such this would provide a more favourable condition for central bank to control the overall monetary situation. My fourth point is related to maintaining the external value of currency, which is one of the very important objectives of present-day system. Monetary policy in Islamic framework cannot overlook this either. Moreover, in UDCs, internal value is also closely related to the external value of the currency. Today throughout the Muslim World we use dollar and sterling as our reserve currencies. It is a pity that the Muslim countries use U.S. dollar even for transactions among themselves. Thus the total demand for U.S. dollars appears more than what it is in fact. This puts them in an advantageous position to have their currency recognised as reserve currency and thus they can meet their international commitments simply by running deficit and thus exporting inflation to others. Muslim countries together have a very substantial balance of payments surplus. If all the Muslim countries could form an institution like Islamic Monetary Fund in line with IMF, I think most of our problems in international transactions would be solved even without resorting to very high interest-bearing SDR. I am sure, this would help us a lot towards stability in the value of money both home and abroad.

Dr. N. Vagar

Previously we used to manipulate rate of interest to control the monetary sector and to control the money supply. Now it is exactly opposite, i.e. we control the money supply and that will take care of the rate of interest.

Dr. Mohamed Ariff

I want to emphasize the point whether or not we can assign more than one policy objectives to monetary policy. In some cases that may be possible. But sometimes there are policy crisis when you assign a number of policy objectives to one instrument. So it is imperative for us to identify the situations when such policy crisis can occur and what to do about these crisis. I want to emphasize the relationship between the right kind of policy objectives to the right kind of instruments. But that does not mean that you assign only one policy objective to one instrument. Monetary policy instrument can tackle more than one objectives at certain times. But the point I want to make is that some policy instruments are better suited to achieve certain objectives. Mundell has demonstrated that fiscal policy instruments are better suited to achieve internal equilibrium and monetary policy is better for achieving external equilibrium and if you pair them wrongly, you have an explosive situation where you move away from general equilibrium. Let us see what are the objectives which can be better tackled by monetary policy and what are the objectives which should be left for other policy instruments.

Dr. Umer Chapra (Winding up)

I am grateful for a number of comments which are extremely valuable and which I will certainly take into account. However, I must point out that some of the comments were not relevant. This may be because the speakers did not have the time to go through the paper before making their comments and they relied only on the presentation that I made which was very brief. For instance, Dr. Vagar has raised the point about the shift in monetary policy these days from the regulation of the rate of interest to the quantity of money; this has been quite elaborately given in the paper and I did not bring it in the presentation because I assumed that everybody has studied this point. Now, of course, some of the points are certainly going to remain as points of dispute between us now and, may be, even in future. This is something really healthy. We cannot create a unanimity on a number of points which have come up in the discussion.

I must point out the reason for the multiplicity of objectives and particularly my stress on the distributional aspect of monetary policy. This is because I believe that the banking system has been one of the major sources of inequalities of income and concentration of wealth and unless monetary policy addresses itself to this subject, we will be just beating about the bush. We have to use the banking system for reducing inequalities and concentration of wealth. In the other two objectives there was no major disagreement. But I would insist that if we want to bring about equitable distribution of income in the Islamic economy, we have to tackle the major sources of these inequalities and we cannot do so without proper handling of the banking system. As to the stability of the value of money, I have stated price stability as our ideal. How far can we achieve it, is of course a different thing. But we must try to check it. There are questions raised as to whether the mild inflation is good or bad and what are the safe limits. These are of course points which need to be given necessary attention. The fact is that it can mean different things at different times. There was a time when 1-1½ per cent was considered to be mild but now in some countries even ten per cent may be accepted. Regarding the external value of money, it is generally realised that if you do not have inflation in the domestic economy, then the external stability in the value of money may not be a problem. Coming to Dr. Naqvi's point about the Phillips curve, it is now generally realised that the emphasis that he placed is not right and in fact it has been empirically proved to be wrong. There has been a lot of discussion on this question and there have been periods in the past when there has been inflation or a rising rate of prices accompanied by rising rate of unemployment. So the validity of the Phillips curves has not been as secure as he tried to point out.

A question has been raised about the use of money for speculative purposes. I think if this concept is applied to the Islamic economy we are bound to get into a number of problems. One of the reasons for large volume of speculative funds available, is the unrealistic tax structure in a number of developing countries. The tax structure is such that it generates black money and this black money cannot be used for productive purposes. So the only use you are left with for it is either to indulge in luxury consumption or speculation of various types, because it can only go in the areas where it is difficult for the government to detect. So if we want to talk in terms of these elements, we shall have to talk about removing these problems which our economies have created for themselves. Whether there is Islam or no Islam we have to solve these problems and then comes the question of applying the Islamic ideals to our economies which would take us even a step further towards our goals.

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* This is the revised version of a paper presented by the author at the International Seminar on Monetary and Fiscal Economics of Islam held in Islamabad in January 1981. It was published, along with the discussion, in the second volume of the Seminar Proceedings (Ziauddin Ahmed, at. al., eds., *Money and Banking in Islam,* Jeddah: International Centre for Research in Islamic Economics, 1983, pp.27-68). The author wishes to record his indebtedness to Mr. Mobin Ahmad for the secretarial assistance rendered by him during the preparation of this paper. In writing this paper the author

has drawn heavily on the revised version of his paper:"Money and Banking in an Islamic Economy" published in the first volume of the Seminar Proceedings, (M. Ariff, ed., *Monetary and Fiscal Economic of Islam,* Jeddah, International Centre for Research in Islamic Economics, 1982, pp.145-86). The author is grateful to Dr. Anas Zarka for his valuable comments on an earlier draft which have helped improve the presentation.

[1]

It may be argued that while the production of a bewildering assortment of conspicuous consumption goods raises the rate of economic growth, it does not contribute to real welfare. In fact it generates social tensions by accentuating unhealthy competition to keep up with the pace-setting consumption of neighbours. For example, if a comfortable, frequent and efficient public transport service (bus, train, or tube) is provided, it may reduce the production of cars and also reduce spending on the development and marketing of new models of cars. This may lower the rate of economic growth to the extent to which it is not offset by the increased production of public transport vehicles. However, there will be: (i) lower traffic congestion; (ii) less pollution of air; (iii) reduced consumption and, hence, conservation of fuel, and (iv) lower spending on continued widening of roads, enabling public authorities to economise on spending and reduce deficit financing. Similarly, if women's ever-changing fashions are discouraged, the unnecessary spending on keeping in fashion would decline. This might lower the growth rate but would also reduce social tensions, and conserve resources for satisfying the essential needs of the majority of the population.

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For a more elaborate discussion of this point, see the author's papers: (1) "The Islamic Welfare State and its Role in the Economy" in K. Ahmad and Z. I. Ansari, *Islamic Perspectives* (Leicester, UK: The Islamic Foundation, 1979), pp. 204-5; and (2) 'Money and Banking in an Islamic Economy, op. cit., pp. 145-86.

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1n the discussion following Chapra's paper "Moneyand Banking in an Islamic Framework", *op. cit.,* Sultan Abu Ali suggested indexation. This became the subject of a heated discussion. See Chapra, *op. cit.*

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William Fellner, "The Controversial Issue of Comprehensive Indexation" in Essays on Indexation and Inflation, *op. cit., pp. 63-70.* See also *G. D. Jud, Inflation and the Use of Indexing in Developing Countries* (New York: Praeger, *1978) p. 144.*

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R. Jackman and K. Klappholz, "The Case for Indexing Wages and Salaries" in *T.* Liesner and M. King (eds.), *Indexing for Inflation* (London: Institute *of* Fiscal Studies, *1975), pp. 20-25.* See also Fellner, *op. cit.*

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The recent experience of stagflation, high rates of unemployment existing simultaneously with high rates of inflation, has raised serious doubts about the validity and usefulness of the celebrated Phillips curve which postulated a stable trade-off between inflation and unemployment. See, Thomas M. Humphry, 'Changing Views of the Phillips Curve' Federal Reserve Bank of Richmond, *Monthly Review,* July 1973, pp. 1-13; Charles N. Henning, *et. al. Financial Markets and the Economy* (Englewood Cliffs, NJ, 1975), pp. 350-55; and Morgan Guaranty Trust Co. of New York, *World Financial Markets,* February, 1978, p. 3. The postulate has received increasing internment over the last decade from the Economics profession (See, M. Friedman, 'Monetarism' a reply to the critics *The Times,* March 3, 1980). This internment reached its climax when the Heads of State or Government of seven major industrial countries (the United States, the United Kingdom, France, the Federal Republic of Germany, Italy, Canada and Japan) concluded, at their May 1977 Summit meeting in London that 'Our most urgent task is to create more jobs while continuing to reduce inflation. *Inflation does not reduce unemployment. On the contrary it is one of its maior causes'* (Bank for International Settlements: Basle, *Press Review,* 9th May 1977 (italics introduced by the author). William Poole went even to the extent of observing at a conference sponsored by the Federal Reserve Bank of Boston that "The Phillips Curve is dead - long live the Phillips curve". He argues that "Belief in a stable trade-off between inflation and unemployment has had much to do with the persistence of excessively expansionary policies since 1965" (William Poole "Summary and Evaluation" in Federal Reserve Bank of Boston, *After the Phillips Curve.. Persistence of High Inflation and High Unemployment,* proceedings of a conference held in June 1978.)

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This reform has been discussed by the author in his paper 'Money and Banking in an Islamic Economy', op. cit.

*The analysis in this section has been revised in the light of the discussion in the Seminar (Editors).

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The more equitable the distribution of income, the greater will be the demand for money for a given level of aggregate income. See David Laidler, *The Demand for Money: Theories and Evidence,* (Bombay: Allied Publishers, *1972) p. 66.*

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Keynes original formulation of the theory of liquidity preference implies an "all"or-nothing" choice between money and long-term bonds. See Byron Higgins, "Velocity: Money's Second Dimension" in Federal Reserve Bank of Kansas City, *Issues in Monetary Policy* (1980), p. 16. See also James Tobin, "Liquidity Preference as Behaviour Toward Risk", *Review of Economic Studies,* February *1958.* Tobin assumed that investors are concerned with the expected return as well as the riskiness of alternative assets, and most investors, instead of adopting the "all-or-nothing" attitude, may be willing to accept a lower return on a low risk investment in preference to money which has no return. It may be expected that in an Islamic economy with *Zakah,* even an otherwise risk-averter may be inclined to get into low-risk investments to offset the effect of *Zakah* on his money balances. It may also be safely assumed that on low-risk investments, interest + profit would rarely be negative (See Footnote 10).

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operational costs (including interest) have been paid. It will rather be the sum of what constitutes interest and profit in the capitalist system. Hence the rate of profit *will* not fluctuate with the erratic and frequent movements of the rate of interest. In addition, the capitalist will not be assured of a predetermined rate of return in the form of interest. He will have to share with the entrepreneur the risks of business. The total profit (interest and profit) will be divided among the capitalists on the basis of the principles of socio-economic justice in the Islamic value framework.

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The Keynesian variant of the demand for money, which is Md = kY + L(i) becomes reduced to Md = kY if it is assumed that the speculative demand for money, or L(i), is insignificant. Thus the demand for money in an Islamic economy would be represented by the equation Md = kY, which is the same as the 'Cambridge equation with k being the reciprocal V in the 'quantity equation'. Both the 'Cambridge' and the 'quantity' variants of the demand for money disregard the existence of the speculative demand for money. In contrast with the concept of constant velocity in the original quantity theory, income velocity may be assumed to be predictable, though not constant, as is being done now by most monetary economists (See Higgins, op. *cit., p. 23).* In the Keynesian transmission process, changes in the money stock operate via the interest rate. A rise in the stock of money brings about a fall in the interest rate and a rise in investment in bonds and securities. Hence (M-i-I-Y). Equilibrium is restored in the monetary sector when the amount of money demanded for transactions and liquidity purposes is equal to that supplied. In the monetarist transmission process, changes in the money stock operate via changes in prices, as V is assumed to remain constant and full employment Y has already been attained. Hence (M-P). The crux of the difference between the two approaches is that Keynesians regard the interest rate as the price of money held while the monetarists regard the interest rate as the price of credit and the inverse of the price level as the price of money. See, Thomas Mayer, *The Structure of Monetarism* (New York: W. W. Norton, *1978) pp. 6-14,* and Brian Morgan, *Monetarists and Keynesians* (London: Maclliflan, *1978) p. 9-42.* The transmission process even in the Islamic economy would tend to be through prices, the price of access to the use of liquid funds being the share in profit and the price of holding liquid balances being the *Zakah* payable on these

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Even in the OECD countries there has been a shift away from interest rates as intermediate targets of monetary policy towards quantitative norms for the growth of money stock (See, OECD, *Monetary Targets and Inflation Control,* Paris: OECD, 1979, p. 2). This Report argues that "Manipulation of Interest rates has not in all cases proved a satisfactory way *of* achieving monetary restraint or of stabilising monetary expansion under expansionary conditions" and that 'Policies which are guided by quantitative objectives for the monetary base (or bank reserves) and under which interest rate levels are - or can be seen to be - a by-product have, therefore, come to seem increasingly attractive in some countries.' (Ibid., p. 1.2). Even the Federal Reserve Bank announced in October 1979 its decision to *focus* attention on the reserves *of*