4. Monetary Control Consultations

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MONETARY CONTROL CONSULTATIONS

PAPER BY DAVID LOMAX

Note by the Secretaries

The attached paper "Monetary Policy" by David Lomax is circulated for information. It is a much more comprehensive discussion of the Green Paper and the Bank's liquidity proposals than his paper that was circulated as MCC(80)4.

M D K W FOOT
M L WILLIAMS

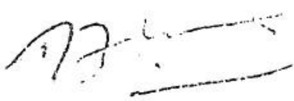
H M Treasury

MONETARY POLICY

Attached is a paper "Monetary Policy" which I have prepared for possible publication in a forthcoming issue of the National Westminster Bank Quarterly Review, or as a separate monograph.

As you will see, it is at present in provisional form, and is being sent round at this stage so that it may be considered in the discussion of these issues taking place over the summer months.

The paper is subject to amendment before publication, possibly on grounds of length or because various issues might seem more or less important at the relevant time. Comments would therefore be welcomed.



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- AUG 1980

Monetary Policy

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Introduction

It is only a slight exaggeration to say that the City of London has recently been put into turmoil by the various proposals from the authorities for recasting the system of monetary control and for enhancing the present system of supervision over the banking system. These proposals have been incorporated in four papers, the Green Paper on 'Monetary Control', 'The Measurement of Capital', 'Foreign Currency Exposure', and 'The Measurement of Liquidity'. These should be taken together in assessing the new stance of the authorities towards the banking system. The three papers on prudential control, the last three just mentioned, clearly form part of a coordinated policy package. 'The Measurement of Capital' and 'Foreign Currency Exposure' have not so far been published, but have been issued to interested parties for discussion. They are more or less open knowledge in the City. I am not concerned in this paper to give away any secrets by premature disclosure of details, but need to consider the logic of all these papers since they form an integrated structure. Some may argue that 'Monetary Control' should be separated from the others as it is not about supervision, but to my mind this view is false. 'The Monetary Control' and the other three papers form the opposite sides of the same phenomenon. 'Monetary Control' indicates the way the authorities intend to operate the monetary system, and the guidelines which will determine their own action: the prudential control papers indicate correspondingly how the banking system will be forced to react to various stimuli from the authorities, and correspondingly how interest rates and balance sheet totals (which include the money supply) will move in response to official policy. Since the rules of the game are being changed both for the authorities and for the banking system, one is thus setting out a new system to which all four papers make a contribution.

Monetary control

If asked for a one sentence judgement on the future development of monetary policy, I should say that the authorities appear to have little intention of introducing monetary base control, so one could regard the questions and arguments within the Green Paper as somewhat superfluous. But this view could be in error, and in any case the issues regarding the proper form of monetary control are important in their own right for the authorities, the public at large, and the banking system. The issues presented in the Green Paper are mainly four, the underlying structure and targets of monetary policy, whether one should have a monetary base system, whether one should use indicator systems in determining interest rates, and whether one should operate on the demand for money rather than on the supply.

On the first point the paper comes to the broad conclusion that monetary

targets are of value in curbing inflation and creating stable expectations, and that £M3 should remain the appropriate monetary measure for targeting purposes. This is not a point to which I wish to devote much space and I agree with the desirability of monetary targets. Sterling M3 is a monetary measure which has its critics. It is an uneasy half-way house between M1, which is clearly linked with transactions, and the wider measures of money and of liquidity, such as those which incorporate deposits with the Building Societies and holdings of short-term money market instruments which have many of the attributes of certificates of deposit. Sterling M3 has one particular advantage in that it fits with measurements of the balance of payments and of the government's own financing, so providing certain accounting conveniences. It would not be desirable to have targets for a wide range of measures, since the government would almost certainly be faced with the likelihood of succeeding with some targets and not with others, and be forced to make invidious distinctions as to whether policy should be changed or was in fact succeeding. It would seem reasonable to continue to use £M3, providing that other measures of the money supply and of credit are monitored (including DCE) and that the appropriate counter measures are taken if those measures appear to indicate that sterling M3 is being unduly distorted, or that other unwelcome events are taking place within the financial markets.

Monetary base

The proposal for a monetary base, which has had many advocates in the academic world and in the City, is the most important underlying issue as regards potential changes in the system of monetary control. Under this proposal the authorities would ration the cash and deposits at the Bank of England available to the banking system and the banks would correspondingly be forced to adapt their balance sheet totals to the monetary base. There is potential controversy regarding the exact definition of an appropriate monetary base, whether it should consist only of the liabilities of the central bank, or whether cash held by banks should also be included. It seems to be accepted by protagonists on both sides of the argument that this issue of definition is not crucial, and could be left aside in the interests of furthering the debate. A further detailed issue is whether the base reserves to be held by the banking system should be related to the banks' balance sheets on a previous date, on the coincident date, or on some future date. Which system one chooses has implications for the mechanics of the base system and for the banks' mode of operation. I remain of the view that the importance of these minutiae can be exaggerated. Although one can see clearly particular problems and pressure points that may be created, these are similar or equivalent to other problems and pressure points which would be created almost inevitably by various aspects of any monetary base system, and need not require a detailed assessment at this level of debate.

Mandatory or voluntary?

A more important choice is whether the monetary base should be mandatory or voluntary – that is, whether the banks should be

compelled to hold, say, 1 per cent of their assets in the form of deposits with the authorities, or whether each bank should be allowed to choose its own ratio. I will continue the argument in terms of a mandatory system, but at this stage would just say that a voluntary system would appear to give the authorities too unstable a system to operate on, and there would be greater problems for them in predicting the behaviour pattern of the banking system and in controlling the monetary environment. This is related to a separate point which is emphasized by certain commentators, namely the relative stability of the distribution of cash as between the public and the banking system. If cash flows freely between the public and the banks in response to interest rate incentives, or in an unstable pattern, then the Bank of England's leverage over the banking system through monetary base control is substantially weakened. This problem seems largely to have been ignored by protagonists of monetary base control, and it would be more acute if the monetary base were voluntary.

Advantages

The main monetary base proposal is that banks should be required to keep a certain amount of cash with the Bank of England (or possibly in tills depending on the detailed rules) in relation to their balance sheets. What are the advantages and disadvantages of this system of controlling the money supply? The claimed advantages are that the authorities would be in a position to determine the monetary base through their own transactions in the markets, and consequently by a process of arithmetic to control the total balance sheets of the banks and hence the money supply. This procedure has one advantage, which I think even the opponents of monetary base control accept, namely that it forces the authorities to act resolutely on interest rates when credit needs tightening. In the Green Paper the authorities mention the 'bias towards delay' in increasing interest rates when monetary conditions need to be tightened, stemming largely from the perceived unpopularity of higher interest rates and hence the consequent political pressures to delay rises. A monetary base system overcomes this problem, since once the demand for money and credit become greater than that allowed by the authorities' policy as regards the expansion of the monetary base, interest rates are inevitably forced up.

Interest rate movements

In a technical sense, and depending on the rigidity with which the monetary base policy is applied, short-term interest rates are in the short term more volatile than under the alternative system. Does this matter? It is the natural preoccupation of central banks to be closely involved with the organizations dealing in the very short-term money markets, and to have a tendency towards an exaggerated concern over the very short-term stability in those markets. I am somewhat sceptical of arguments for the maintenance of existing arrangements which are couched largely or significantly in terms of institutional stability. There is the strong argument, which cannot be rebutted formally – that any change might produce unknown adverse effects. But there are two reasons why one is somewhat sceptical of arguments couched purely in

these terms. First, as one looks around the world one sees a wide variety of institutional arrangements for handling the short-term money markets, and it is surprising how adaptable central banks and money markets are in operating different 'rules of the game'. Second, it is the nature of financial institutions to be adaptable, and we have, for example, seen the development of several new markets in London in recent years. The authorities have recently made innovations in the system for selling long-term debt which seem to have worked relatively smoothly. The concern of the authorities with the volatility of short-term interest rates might be associated with their natural bias towards orderliness in these markets, and should not be regarded as an overriding objection. In the United States we have recently seen very substantial changes in interest rates, and whatever their economic implications there is little evidence that they were linked with any disorderliness in the markets.

A second issue concerns the longer-term volatility of interest rates, and here the American experience, with rates falling by over 10 per cent within two months following the increase in the discount rate to 17 per cent on 14 March, is an example of what could happen. One has to accept this example of interest rate movement as a fact, and if one wishes to brush it aside the argument would seem to be to ask whether it matters a great deal or not. Short-term markets are short-term markets, and in those time periods one expects such movements.One problem is that short-term interest rates are now the determinant of the cost of what is in effect long-term credit. In this country to a greater extent than in the United States the long-term debenture markets have ceased to exist as far as companies are concerned, so companies rely for a greater proportion of their external finance on the banking system, and this credit is granted at a cost determined by short-term interest rates. The entire gamut of corporate finance would be affected by volatility of these rates. This is a factor of some practical importance to the corporate sector, but not necessarily an overriding argument. This factor would be much less important if there were the necessary revivial of the long-term bond markets, as has recently been recommended by various commentators, including the Wilson Committee. If the present administration are successful in their objective of reducing public sector borrowing, money supply growth, and inflation, with the inevitable downward effect upon interest rates, it is to be hoped that they will then set their minds towards restoring the corporate bond market.

There are two further factors to take into account as regards the volatility of interest rates. Even under the present system of monetary policy interest rates have been extremely volatile in recent years. Second, given that a monetary base system must, if applied vigorously, be a successful means of controlling money supply growth, and hence ultimately of bringing down inflation, over the medium term one should expect a lower average level of interest rates. The volatility we have seen recently in the United States could be the result of having let the monetary situation get out of hand. Once the situation were under control, and were kept under control, then one would see no such gyrations.

Flexibility or rigidity

A further problem which arises from a monetary base concerns the degree of flexibility or rigidity in enforcing it. It could often happen that the monetary authorities wished to supply an amount of monetary base which differed from what the banking system needed to fit in with its desired or actual balance sheet structure. How would this difference be reconciled? Are there to be fines on banks which are out of line? Would the authorities allow some derogation from the monetary base figures? Would the authorities enable the banks to have the appropriate monetary base, but at a price which gave them a strong incentive to come into line? In this last case funds may be made available to the banks either by purchasing assets from them at penal rates, or by allowing them to rediscount with the Bank of England at interest rates which become increasingly penal. Various significant practical points have been made concerning these issues, and I should be reluctant to have the monetary base idea dismissed or accepted simply because of these considerations. In other countries, such as the United States and Australia, policies such as these are in existence and they seem to work tolerably well. It is impractical for the authorities to set a rigid monetary base figure and expect the banking system to keep to it to a pound. The other extreme is for the authorities to undermine their monetary base control by an unlimited willingness to purchase short-term paper from the banking system, or to lend the banking system money, at non-penal rates of interest. One can envisage a large number of possible arrangements between these two extremes, which have the effect of forcing the banking system within the monetary base guidelines, without having too disruptive an effect upon the system.

A more powerful argument against using a monetary base is also somewhat more subtle. This relates to the lags in the economic system between changes in interest rates, money supply movements, prices and economic activity. Under the present system, and under one of those which the authorities propose, the authorities set interest rates at a level which they regard as appropriate for the development of the economy in terms of prices and output over a period six months or more ahead. In as far as the economy appears not to be moving towards the desired outturn, interest rates may be changed, again looking to the effect over a period of time and taking into account the appropriate lags. But if one has a monetary base system with interest rates determined by the short-term excess or shortage of monetary base assets, then one is establishing a series of short-term interest rates which as they work through with the appropriate lags into the economy as a whole may give a more unpredictable and possibly unstable path for the rest of the economy. This argument is thus that interest rates should be set with a view to the appropriate lags in the system. But under a monetary base system this is impossible as interest rates are determined by short-term events in the short-term markets with no cognizance of any lags or any forethought as regards the development of the economy as a whole.

The banks

A monetary base system is likely to cause greater difficulties for the banking system, and notably for the clearing banks, given their role in the economy as a whole. The clearing banks are unable to control in the short term their advances, and their deposits or their contribution to the money supply. One may argue that the present overdraft system, now widely used by customers of the clearing banks, is almost uniquely biased towards giving a lack of control over advances in the short term. But even if one were to tighten this system up the clearing banks are the residual source of finance to the rest of the economy, and it is not possible to control in detail the level of advances and of deposits without creating damaging rigidities as regards the financial behaviour of participants throughout the economy. If a monetary base system, at the possible cost of interest rate volatility, is used to set the availability of monetary reserve assets, dislocation and pressures are transferred to the interface between the clearing banks and the rest of the economy. I mention the clearing banks not out of bias, but because their role is unique as the private sector's lender of last resort. The other banks in the system can in almost all cases control their balance sheet structures in considerable detail or do not face such volatile pressures. It is a moot point whether the clearing banks should try to move towards a system which gives them greater control over their balance sheets in the short term, implying for example some changes in the overdraft system. But whether one does that or not the clearing banks' natural role does not change. The application of a monetary base system would cause volatility and dislocation between the clearing banks and their customers, and also complicate asset and liability management within the banks. It might be a good thing for clearing banks to be forced to a much tighter system of asset and liability management, but the flexibility of banking arrangments as seen by the customers would be affected adversely.

My views regarding a monetary base system are somewhat ambivalent, and a great deal depends on the way in which it is managed, and the institutional arrangments set up. On balance I oppose its introduction, providing that alternative systems are applied effectively. But there is one form of a monetary base proposal on which the adverse arguments are much more clear cut.

Special base assets – licences

Proposals have been made that the reserve assets of the banking system should consist of special assets, either a particular category of Treasury Bill, or a special document, to be held only by the banking system, and which would be the unique reserve asset. By definition the balance sheets of the banks would have to be no more than some multiple of the amount of this particular paper in their possession. By controlling the supply of these documents, in effect licences, the authorities would control the money supply within close limits. If the authorities wished to expand the money supply they would make available more of these

licences. The main argument in favour of this proposal is that it gives a clear and firm control over banks' balance sheets and hence over the money supply.

There are various and substantial disadvantages of such a system. It would be extremely rigid with corresponding volatility of the relevant interest rate. Indeed, since it is not practical for the clearing banks to control their balance sheets closely in the short term, this system would make even worse the problem under any monetary base system of dealing with short-term disequilibria in the banks' balance sheets. This system would also lead very quickly to disintermediation as other financial institutions were set up, and other finacial channels developed, to enable credit to flow without going through the banking system. One could hardly envisage a system better designed to accelerate the process of disintermediation and the creation of new financial organizations. The authorities would be forced to carry out two separate monetary policies, one in these licenses as regards their relations with the banking system, and another in real money in dealing with such matters as fiscal revenue, sales of gilt-edged stock, and trading in the short-term money markets. The use of these licences would not take away from the government the responsibility of formulating a monetary policy in real money, and it is difficult to see how the two policies would fit together.

Such a system would lead at times to severe problems as regards perverse movements of interest rates. When there was a strong demand for funds from the banks, at remunerative interest rates, the banks would compete for these licences, and so bid their price up. Interest rates on these licences would thus fall at the same time as the government wished to tighten monetary policy, and the public wished to borrow at relatively high interest rates. This problem has been identified in the Green Paper as occurring at times under Competition and Credit Control, when occasionally one saw shortages of reserve assets and perverse movements between interest rates on reserve assets and on assets and liabilities elsewhere in the banking system. This caused the authorities considerable difficulty. The use of licences would re-create this problem in an even more acute form.

There would also be a corresponding rather random impact on bank profitability, and the responsibility for setting interest rates paid by the private sector would be shifted from the authorities to the commercial banks. There may or may not be arguments in favour of this, but it is not a responsibility they would welcome. At present clearing bank interest rates are influenced heavily by the authorities' determination of overall monetary conditions, and interest rates elsewhere in the economy are largely set by local financial and market conditions, with administrative arrangements in particular sectors. Under a licence system the banks would be forced to formulate and carry out the authorities' monetary policy for them by trying to determine the appropriate level of interest rates to achieve the desired balance sheet growth. Whatever the success or otherwise of achieving this in practice, a cheaper and simpler way for

banks to deal with such difficulties would be to study and facilitate ways of disintermediation to take the credit flows off their own balance sheets.

Under the present system or a normal monetary base system there is an organic link between the financial pressure exerted throughout the system and hence between the availability of credit and the movement of interest rates in different financial markets. Under a licence system the authorities would have some direct control over the balance sheets of the banking system, but the monetary conditions in the rest of the economy would be influenced by a wide range of other factors, including the monetary policy the authorities pursued when they dealt in 'real money' as regards fiscal policy and the selling of government debt. This fragmentation of the organic structure of the financial system would be a severe loss. In short, I regard this proposal as largely without merit and am surprised at the credence it has been given.

An indicator system

A further suggestion in the Green Paper is that interest rates be determined by some kind of indicator system, with the authorities increasing rates in some predetermined manner if the money supply, or some other indicator, moved outside a target range. Engagingly, the Green Paper mentions that this proposal deals with the 'bias for delay' in the formulation of monetary policy, particularly when tightening is required, as governments are unwilling to adopt what they regard as politically unpopular measures. The ideas of some automaticity in the system has some superficial attraction, but on reflection one comes to the conclusion that such a proposal is unlikely to be effective. One of the ideas mentioned in passing is that the indicator could be an excess or deficiency in the monetary base. One has to disregard this proposal immediately, since the amount of cash held by the banks depends on the authorities' own policy in dealing in prime liquid assets. Thus the authorities would in effect be setting the indicator which would be used to indicate to themselves the way in which interest rates should move. The policy would become wholly circular. If one were able to confuse people enough, so that they were not aware of what was going on, one could see certain advantages for the authorities in being able to manipulate an indicator which they could then use to justify the policy they had in mind all the time, but one fears that such subtlety could not be carried through in practice.

Thus one comes to the proposal for an indicator system based on excesses or undershooting of the growth of the main money supply indicator, £M3. Here the proposal for interest rate movements is prima facie in line with one's natural presumptions. If the money supply is growing too rapidly then interest rates should be increased, and if it is growing too slowly then one should consider reducing them. At this point a diversion in the argument is what interest rates should be changed by the authorities in response to the indicator.

There is the possibility that the central interest rates, such as MLR would not be changed, but that the authorities amend a supplementary interest rate to be used, for example, in dealing at penal rates with the banks in certain assets and liabilities. Here one can discern the temptation to try to invent a non-fattening chocolate cake with double whipped cream, in other words to try and find a way of changing interest rates which would have an effect on the banks, without having an effect on the overall structure of interest rates. It is difficult to have it both ways – either the indicator is used in such a way as to 'bite', in which case it must have an effect on the structure of interest rates, or it is liable to be ineffective.

There are two main arguments against the use of an indicator. The first is that even if one accepts the idea in principle, there is the difficulty of deciding a rule which one is willing to accept on economic grounds in all circumstances. I should like to challenge people to write out such a rule. The problem is complicated by the lags in the system regarding the effectiveness of interest rate policy. If one puts forward a simple rule that interest rates increase by 2 per cent in any month in which £M3 is above the target range, one might find that it takes six months to get £M3 under control, with the result that the rule implies a 12 per cent increase in interest rates. This is perhaps an extreme example, but the underlying point is serious in that it is very difficult to define a rule which one is willing to operate on economic grounds (ignoring politics for the moment) under most circumstances.

The second argument is that politics and the wider social considerations would not go away merely because one had invented a rule. Governments will not abdicate their overall responsibility for the economy and for their own political health to automatic money market rules.

Weekly money supply statistics

A further consideration is whether the authorities should publish weekly money supply figures, seasonally adjusted or not, and whether the movement of interest rates should be based upon indicators related to those weekly figures. There is little benefit from publishing such figures, which would be of low statistical quality, and it is almost certainly impossible to adjust them seasonally or make them viable as reliable indicators. The normal time period between action in the money markets and the impact on the economy is several months, and there is no benefit to be derived from the production of frequent low quality monetary data.

If such data were produced as the basis for changes in interest rates, whether or not using an indicator system, then we are creating a situation as in New York, where a great deal of activity in the money markets takes place on the basis of 'Fed. Watching' and a zero sum game is set up in the money markets to no general benefit.

There is a more important aspect of this. There is no reason why decisions by the authorities on monetary policy need reflect information available to the public. The authorities' responsibility is to carry out monetary policy on the basis of all the information available to them (and they themselves have some weekly monetary data), and to use whatever evidence is available to convince the government of the appropriate monetary policy measures. This responsibility could not be taken away from the authorities, nor are they under any obligation to show their hand or to show their reasoning to the markets before they take action.

The demand for money

Having discussed and ruled out monetary base and indicator systems we are left with the main policy formulation of the authorities, that they operate on the demand for money by setting the level of interest rates to influence borrowing and asset holding in such a way as to have the appropriate effect upon inflation and the economy as a whole. This formulation of policy is based on the view that it is not possible to control the supply of money made available in a competitive banking system in accordance with the demand for funds. It is not regarded as reasonable, possible, or fair, to expect the banking system to ration credit between different borrowers and in any case rationing is the responsibility of the authorities rather than of the commercial banks. Although there is a certain tendency to regard the clearing banks as forming an oligopoly or as having an institutional status which gives them the ability to ration credit, in fact we have a widely diversified credit system, including wholesale banks, building societies, hire purchase companies, legal rights to take credit such as on credit cards, and a host of other flexible financial arrangements which mean that the private sector as a whole is not in a position to ration credit. Ultimately the amount supplied depends upon the amount demanded.

Under this assumption the authorities' success would depend entirely upon their willingness and ability to determine the appropriate level of interest rates so as to influence the demand for money. There are two main difficulties. The first is that the definition of prime liquid assets as assets which should be convertible at all times into cash, implies a tendency or temptation on the part of the authorities to be insufficiently vigorous in changing interest rates as required in accordance with monetary policy needs. The second point is that made by advocates of a monetary base system who ask how the authorities can know the appropriate interest rate to choose in varying monetary circumstances. In their view this is one of the main arguments for using a monetary base – the authorities can only answer that they do their best to find out, if need be by a process of trial and error. If the focus of monetary policy is interest rates as determined by the authorities in their dealings in prime liquid assets, this system is similar to the old 8 per cent cash ratio system, which was superseded by the 28 per cent liquidity ratio system, which in turn was superseded by Competition and Credit Control. The 8 per cent cash ratio system broke down because of excessive willingness on the part of the authorities to convert prime liquid assets into cash at

inappropriate interest rates, so the authorities have before them the precise historical lesson as to the policies they must not pursue if they wish what appears to be their preferred system to be a success.

Prudential supervision

If one can discern substantial traditional thinking in the authorities' approach to monetary policy in the Green Paper, the new approach to prudential supervision in the other three papers are more experimental and more radical. In as far as these papers, 'The Measurement of Capital', 'Foreign Currency Exposure', and 'The Measurement of Liquidity' have created doubts within the banking system the reasons may be divided into three main categories:

☐ Disagreement on conceptual grounds;
☐ Fear that particular banks or categories of banks could be unusually (and unfairly) hit by the new controls; and
☐ Concern that the new measures may have certain practical effects which could be damaging to the interests of certain markets and the City of London.

The conceptual structure of these papers is more complicated and more original than that of the monetary policy paper, which covers a great deal of familiar ground. One could consider these papers purely in terms of their likely ultimate impact on the banking system, and the desirability or otherwise of the objectives they have in mind, but in view of their profound impact upon different categories of financial organizations, and because they incorporate the first public airing of the new concepts as regards supervision, it is preferable to try to obtain a reasonably rigorous intellectual comprehension of the issues and the approach.

The measurement of capital

'The Measurement of Capital' sets out two considerations to measure a bank's appropriate capital. The first is that it should 'test the adequacy of capital in relation to the risk of losses which may be sustained' and the second that it should 'ensure that the capital position of an institution remains acceptable to its depositors and other creditors'. This second test is called the gearing ratio, and is set largely by conventional criteria as interpreted by the authorities. For certain banks the gearing ratio may be applied as a more stringent test than the other, but no rationale is set out for the determination of the relative gearing ratios for particular types of banks. Most of the analysis is concerned with the first test, adequacy in relation to the risk of losses.

In the interest of space I have no comments about the definitional issues involved in 'The Measurement of Capital', although these are of importance to particular institutions. I also propose to say nothing more about the gearing ratio, except that a ratio of capital to liabilities is of benefit to the authorities in setting a ceiling on the rate of growth of banks' balance sheets, and hence on the growth in the money supply. A relatively small, but stable, capital ratio has the effect of disciplining

banks and making them conscious of the marginal profit per use of capital in different parts of the balance sheet. This is a safeguard against an over-rapid expansion of the money supply, although it is not suitable for fine tuning monetary policy.

The main interest in the capital paper and the aspect which looks forward to issues raised in the liquidity paper concerns capital in relation to the risk of losses which may be sustained in a bank's portfolio. Capital fulfils a function akin to the reserves of an insurance company. If banks bear major losses and have to write off the corresponding capital then their ability to fulfil business at the same scale or to expand is correspondingly impaired. In their treatment of this issue the paper sets out a set of coefficients as regards the relative risk of different types of asset, with for example assets such as Bank of England notes and coin having a nil weight, market loans with UK residents 1.0, and property loans having 2.0. There is a certain room for argument over the relative riskiness of particular assets, with gold, for example, being given a nil weight although it has a substantial risk of change in value, as recent price movements have shown. But the more important point is that these weights are presumably related essentially to the *average expected loss* on holdings of those assets. This is the only quantitative calculation set out in the paper. In qualitative terms the paper mentions that banks with large and diversified portfolios require less capital in relation to assets than banks of more narrow portfolios, but this is in no sense quantified. Thus we have a very detailed quantification of risk related to average expected losses on certain assets, but only a qualitative comment as regards size and diversification of portfolio.

This formulation leaves a certain amount to be desired. The amount of capital kept in relation to assets, viewed as a concept linked to an insurance company's reserves, should be related not to the average expected loss on a portfolio (which in any case should be taken into account in the margins on loans), but to the possibility of variability and bunching of losses in particular years. The amount of capital reserves required to cover risk assets should be calculated as an integrated function of the expected average loss on assets, the number and diversity of assets, their size distribution, and the expected co-variance between losses in different parts of the portfolio. Of these factors the expected average loss on different parts of a portfolio is only one, and perhaps the least important. A more rigorous formulation of the issues, based on portfolio theory, is more powerful and more relevant than a statement based on a detailed calculation of only one aspect of the situation, expected losses, combined with a qualitative comment on much more important factors, namely the number of assets, their diversity, and the likelihood or not of co-variance between loan losses.

Foreign currency exposure

The foreign currency paper need not concern us greatly here, although there is room for questioning whether the maximum limits upon exposure in particular currencies need necessarily be as tight as is

suggested and whether it applies the proper criteria as regards what should be incorporated in the structural situation of a bank and what represents financial exposure.

Liquidity – the wider objectives

The liquidity paper implies the most stringent changes for particular banks, and has aroused the greatest controversy, in some cases related to issues which are also relevant to 'The Measurement of Capital'. Four apparent objectives of the proposals are, to exercise greater prudential control over the banking system, to discourage the ballooning of balance sheets as banks compete for funds in order to rebuild their reserve assets at times, to force banks to move more towards asset management and away from liability management, and to prevent the apparent creation of excessive but spurious liquidity in the banking system through the inter-bank market. These objectives are widely accepted throughout the City of London. Such comments as follow are related to matters of degree and to the question whether the proposals achieve them in the most effective way with the minimum of adverse side effects.

The proposals for sterling markets are that banks should have some 40 per cent of their liquidity in what are termed prime liquid assets, a grouping very similar to reserve assets under Competition and Credit Control, and the remainder in secondary liquid assets, which include a wide variety of short-term private sector instruments and short- and longer-term public sector instruments. The methodology of the paper is, as with the capital paper, to state coefficients of liquidity which need to be maintained against particular liabilities, and to determine the appropriate amount of liquidity as multiples of particular liabilities in the balance sheets. There is room for argument whether the relative coefficients as between particular liabilities reflect the appropriate 'risk', and whether the impact of the measures as a whole is or is not as severe as was intended. Let us look first at the concept of building up liquidity requirements through coefficients applied to particular liabilities.

Function of liquidity

In testing the liquidity which a bank should have, one is assessing a bank's relative chances of obtaining the money it needs as its share of the claims for money or bids for money in the banking system. It is the responsibility of the authorities to ensure that the overall liquidity in the system is appropriate, since if the banking system as a whole is short it is impossible for banks to obtain the liquidity they require. One is concerned with a situation in which the banks as a whole have adequate liquidity, and one then needs to assess the factors which determine the ability of any bank to obtain the funds it requires, its 'fair share'. One factor is the frequency with which a bank has to go to the market, and the amount it wishes to take in relation to its total balance sheet. This means that a bank with a shorter-term liability structure needs to go to the market more often, and therefore in principle faces greater risks as regards obtaining the funds it requires. Putting it this way is not quite the same as saying that a bank's liquidity requirements are a proportion of

particular liabilities, but the shorter the term of the liabilities the more frequently a bank needs to go to the market and hence the greater its liquidity risk. But this phenomenon has not stopped many substantial and reputable banks of various sizes from having funded themselves successfully in the market in recent years on a short-term basis. Banks have limits on the amount they place with each other, related to the recipient's size and standing. Providing a bank's claims on the market are adequately below the collective limits which the rest of the banking system has for it, it has no difficulty in raising finance as required, even on a short-term basis.

The factors which the market takes into account in determining the limits for a particular bank include the strength and diversity of its portfolio, its size, its capital, the perceived view of its profitability and the quality of its management, and any backing which it is seen to have from the authorities. For example, membership of the Accepting Houses Committee gives a bank enhanced status as against banks of similar size which do not have that cachet. The market regards it as inconceivable that sterling deposits with the clearing banks carry any risk, on the assumption that the banks are well enough run to ensure that there is no commercial risk, and that if there were any problems with a clearing bank the Bank of England would put its weight behind that bank until the problems had been dealt with. Corresponding situations apply to the major American money centre banks as regards dollar deposits. In taking deposits in non-home currencies, a bank is more vulnerable, but the mutual support which is perceived to exist between major banks is a considerable factor. The sterling deposits of Chase Manhattan Bank and the dollar deposits of National Westminster are supported by the overall strength of those banks' worldwide balance sheets and by the lines of credit in the relevant currencies which the banks have from other banks.

Creation of liquidity

While it is right that the authorities be concerned with the creation of spurious or illusory liquidity through banks depositing excessively with each other, nevertheless one can challenge the argument that the banking system cannot create genuine liquidity for itself. We are concerned here with any one bank's ability to raise funds within the banking system, on the assumption that the banking system as a whole is not short. The banking system is unable to create genuine liquidity only on the extreme assumption that every bank is already borrowing up to the hilt from the market-place in accordance with the market's assessment of its strength. For example, if Bank XYZ is having a difficult time and deposits are taken away from it the deposits with XYZ need to find a home somewhere else, and go to stronger banks, say ABC and DEF. The banking system continues to function, with ABC and DEF carrying XYZ. It is an extreme assumption that every bank is always borrowing from the market-place up to its limits. There is always spare capacity in the banking system, so lines of credit and short-term placings create genuine liquidity. Under these circumstances, a failure, or a perception of possible failure, does not have a domino effect on the system as a

whole. The system of lines and placings has the effect of spreading risks over the banking system.

One may argue that the liquidity a bank keeps should be an integrated function of the amount and frequency of its borrowings in the market, its size, its standing in that particular currency in relation to the authorities, its capital, its quality of management, the diversification of its portfolio, and the backing it is perceived to have from other banks and the authorities. These statements are qualitative. Nevertheless, banking is about confidence, and although these arguments refer to qualities, they are about qualities which are subject to critical analysis. The liquidity assessment could also be based on a comprehensive integrated assessment of these factors, and it seems over simple to carry out a detailed study of quantitative relationships as regards particular liabilities and to disregard these other factors. If one carries out the quantitative calculation for each bank, and then says that certain banks need keep different proportions of that quantitative calculation, one might in the end reach what would be regarded as an acceptable solution. Even if on average banks need to keep only some proportion of the calculated liquidity requirements, giving an acceptable average ratio, the structure of the liquidity requirements has a drastic effect upon the cost at the margin of carrying on certain types of business.

The liquidity coefficients

The starting point for the liquidity calculation is the liquidity requirement on maturity-uncertain liabilities, linked to the traditional 1:3 quick assets ratio and the 28 per cent liquid assets ratio observed previously by the London clearing banks. Two comments are relevant here. The clearing banks had not been aware that the 28 per cent liquid assets ratio was of such fundamental importance from the point of view of supervision. It was associated also with particular systems for financing the government and for supporting the institutional structure of the London market. The 30 per cent and then 28 per cent liquid assets ratios developed in a period when the banks were under heavily conventional forms of control, and indeed when business conditions were entirely different from the present day.

Retail and wholesale deposits

Whatever the ratio to be applied over the clearing banks' maturity-uncertain business, these assets' most striking quality is not that they are maturity-uncertain but that they are retail. The retail base, current accounts and 7-day notice deposit accounts, is extremely stable for the statistical reasons that they include an enormous number of deposits, often of relatively small size, in the hands of people who have no reason to doubt the underlying soundness of the banks in question. One could take this point further and say that although one might have some difficulty in specifying precisely the appropriate liquidity ratio as regards retail deposits, it is possible to make a fairly accurate calculation of the relative stability of current accounts as against 7-day notice deposit

accounts for a particular bank, and as between different banks. One expects the larger banks to show greater stability and hence to need lower liquidity. One would expect the risk related to maturity-uncertain wholesale deposits to be different from that of the maturity-uncertain retail books of the major banks. One could argue that maturity-uncertain wholesale liabilities should have a different ratio from maturity-uncertain retail liabilities, and not the same 25 per cent, and/or that 25 per cent was too high for retail deposits.

I have no specific comment on the coefficients on maturity-certain liabilities of different maturities, except that the figures are inevitably somewhat arbitrary. There is widely thought to be a slip in the calculation, in that although the paper asserts that a six-month deposit taken from the market should have the same liquidity requirement as maturity-uncertain liabilities, as the calculation is presented the equivalence is between a fifteen-month deposit (approximately) and maturity-uncertain liabilities. This is because the liquidity requirement increases as a deposit moves nearer to maturity.

The assertion of the paper that banks should keep some 40 per cent of their liquidity needs in the form of primary liquidity must be regarded again as somewhat arbitrary, and one comes back to the need or otherwise for justifications of matters which the banks would on the whole regard as perfectly acceptable. The banks saw no objection to having to hold 12½ per cent reserve assets under Competition and Credit Control, and since these assets were on the whole interest bearing this requirement did not form too onerous a tax. This requirement might simply be reasserted.

Wholesale banking

The practical effect of these liquidity requirements, and one must remember that the authorities have the right not to demand from any particular bank the full liquidity figure determined by the coefficients, appears relatively straightforward as regards the large retail banks, but imposes severe constraints on wholesale banks which take their funds from the inter-bank market. That this new system gives the authorities a greater grip on the expansion of bank balance sheets in the wholesale markets is probably regarded widely as beneficial, and the questions which arise are whether the implicit tax on wholesale banks is too high, and whether the particular calculations and coefficients distort certain aspects of the wholesale banking business. In principle if the authorities demand funds from the banks in the form of deposits on which no interest, or reduced interest, is paid it is evident that a tax is being levied. But if the authorities impose regulations on the banks, in ways analogous to the costs of regulation on other parts of the economy, then the banks are also being taxed but the incidence and beneficiaries are less clear. The beneficiary may be the peace of mind of the community at large, because of their understanding that the banking system is sounder. But in view of

the diffuseness of the tax incidence and uncertainty as regards the beneficiaries, it is important to make sure that the cost of the taxes is fully justified by corresponding benefits in terms of regulatory soundness. If the authorities miscalculate the result is inequity as between different banks in different parts of the market, and some impact on the depth and liquidity of the London sterling markets.

Currency liquidity

In the case of currency, issues of different magnitude arise. The intention is that foreign banks with currency banking should have more relaxed liquidity requirements in as far as they deal in their own currency in the London markets. There is no intention of requiring business in currency to be backed by primary liquid assets. One must recall that the only effective jurisdiction of the authorities is over banking transactions physically done in London, and over the activities of the British banks worldwide. The Bank of England is in no position to lay down conditions for the conduct of business in the euro-currency markets, and we can for the time being rule out the possibility that other central banks have any inteniton of imposing similar controls. The powers of the Bank of England are over the apportionment of the euro-currency market between London and other countries, and over the relative competitiveness of the British banks as against banks from other countries.

In this field the issue of the relative tax imposed by the regulatory proposals, in relation to any benefits, is acute. If the tax impact of the range of proposals bears heavily upon British banks, then it will be taken by a reduction in profits or by not doing the business, since the British banks have little influence over the competitive margins at which euro-currency business is done.

In this area the liquidity paper faces perhaps its greatest challenge. If one wished to argue the matter through, there is an excellent case for saying that the British, non-dollar, banks should keep more stringent liquidity requirements in dollars, since that is not their natural currency, than in sterling which is, and for which the clearing banks are the pivot of the system. As suggested the proposals are the reverse. The British banks have competed and participated in the euro-currency market very successfully, with no doubt over their soundness, for many years. By opening up this issue in this way, the authorities are putting themselves in a difficult position. If they apply stringent liquidity controls to currency, then they will drive business away from London and adversely affect the competitive position of British banks. If they do nothing, they have identified and put forward a problem, yet been unable to take any action.

Liquidity requirements as taxes

Certain other problems emerge should the liquidity requirements be set at an unnecessarily stringent level. There is a significant risk of disintermediation from the British based sterling banking system, either

through domestic channels such as acceptances, commercial bills and/or inter-company lending, or through offshore transactions in sterling, such as in the euro-sterling market. These are now much easier because of the lack of exchange control. By imposing a significant tax on the banking system, we should be following the policies of the Americans and Germans which led to the well-known migration of their banks and to the difficulties which have been discussed by central bank governors at the Bank for International Settlements in the context of the regulation of the euro-markets. A further issue is that if liquidity controls were too tight, then any given amount of commercial lending would have to be supported by building up the balance sheet so as to accommodate the necessary liquid assets. This substantial increase in balance sheets to finance a given portfolio of commercial lending from wholesale banking would imply in turn, through the capital adequacy tests, the need for more capital to maintain the correct gearing ratio. This would add a further constraint, a further 'tax', on bank business in the United Kingdom.

Norm or requirement

Whether or not the liquidity tests are treated as a norm or as a requirement has implications for possible make-up day distortions and for the stability of behaviour patterns within the banking sector. This must be an important consideration in determining the predictability of the private sector and hence the ease of management by the authorities of monetary policy. On these grounds there is a strong case for making the liquidity criteria firm requirements, rather than approximate guidelines.

Other important issues arise as regards prime liquidity. The qualities which make an asset prime liquidity depend heavily on the policy of the authorities as regards intervention in the financial market-place. Any assets which they are prepared to trade in are or can become prime liquidity. There is a widespread view within the banking system that there could be advantages if the authorities were to widen their intervention techniques, and to operate more directly on interest rates in the inter-bank market. Under present intervention techniques the authorities deal in a limited range of assets and with the discount houses. Given the limitations of this approach, when major issues of monetary control arise they use also other techniques which have little standing in their formal policy arrangements – such as sale and repurchase agreements in gilt-edged stock with the clearing banks and direct negotiation with the clearing banks as in the secondary banking crisis. If intervention techniques were adopted in markets which had a greater capacity the definition of prime liquid assets might need to be amended correspondingly.

Fiscal policy and gilt-edged stock

The authorities' present method of control over the money supply and that likely to be applied in the future relates to a combination of fiscal policy, the sale of government stock and the application of interest rates to influence the demand for credit from the banking system.

Interest rate policy has to fulfil two separate functions, with rates being set so as to influence the demand for credit from the banks and thus the banking system's creation of money, and at the same time to have the desired effect upon the sale of gilt-edged stocks. These separate requirements at times put different constraints upon interest rate levels. Short-term interest rates are more closely associated with the requirements of selling gilt-edged stock than in many other countries. There is a widespread view in the banking system that it could be beneficial if the authorities were to experiment further with ways of changing the system of selling government stocks, so as to lessen the pressures on short-term interest rates. This point, the requirement that policy towards short-term interest rates look two ways – towards the banking system and the gilt-edged market – is a major reason why the authorities are not keen on a monetary base system, in which case interest rates would be determined almost entirely by money supply growth, with no particular reference to the wider circumstances of any particular markets. It would ease the banks' situation and their relationship with their customers if there were a greater separation between the long-term and short-term markets, and interest rates in the short markets were set more in relation to the private sector creation of credit, than in relation to the needs of the longer-term market.

Summary and conclusions

☐ The four papers recently published or issued as discussion documents by the authorities, 'Monetary Control', 'The Measurement of Capital', 'Foreign Currency Exposure', and 'The Measurement of Liquidity' form an integrated approach towards both the formulation of monetary policy and the supervision of the banking system.

☐ The continued use of monetary targets, and of £M3 as the main monetary target, is desirable.

☐ A monetary base system is on balance not desirable. It could lead to some greater volatility of interest rates, an undesirable time path of interest rates, and greater difficulties for the authorities in selling government stock. It could also lead to greater difficulties for the banking system, and in particular the clearing banks, in their control over assets and liabilities. Nevertheless, arguments based on concern over the orderliness and the institutional structure of short-term money markets are often exaggerated. The arguments against the monetary base are not justified unless the authorities pursue an alternative policy with full vigour.

☐ A monetary base system related to the issue of special documents (in effect licences), which banks must hold in relation to the size of their balance sheets, is largely without merit.

☐ An indicator system for determining interest rates has some superficial attraction, but is likely to be unacceptable because it would not be possible to set out in advance a satisfactory formula for changing interest rates, while the political and other social factors affecting interest rate policy would still be present even if an indicator system were created.

☐ It would not be desirable to publish weekly monetary supply figures, nor to base policy on them. These figures would probably be of low statistical quality and their publication is not necessary in order to give the authorities such information as they require.

☐ A money supply policy based on operating on the demand for money is in principle effective, providing that the authorities apply their interest rate policy with sufficient vigour. The historical evidence of the demise of the 8 per cent cash ratio indicates the mistakes which must not be made, and in particular the authorities must resist the temptation to turn prime liquid assets into cash too readily at inappropriate interest rates.

☐ There is wide acceptance within the banking system of the main four objectives of the prudential proposals, to exercise greater prudential control over the banking system, to discourage the ballooning of balance sheets as banks compete for funds, to force banks to move more towards asset management, and to prevent the creation of spurious liquidity through the inter-bank market. Discussion has focused on the conceptual approach of the authorities, fears that particular banks or categories of banks could be unusually (and unfairly) hit, and concern that the new measures may be damaging to the interests of certain markets and the City of London.

☐ It is widely regarded as over simplified to consider in detail the appropriate ratio or coefficient between capital reserves held in relation to particular assets while ignoring the appropriate portfolio approach to capital adequacy, which would regard the desired capital as being an integrated function of the expected average loss on assets, the number and diversity of assets, the size distribution of assets, and the expected co-variance between losses in different parts of the portfolio.

☐ The assessment of liquidity requirement should include the frequency with which a bank needs to come to the market and the amount it needs to take in relation to its size, but also other vital matters such as the strength and diversity of its portfolio, its size, its capital, the perceived view of its profitability and the quality of its management, and any backing which it is seen to have from the authorities. These factors should be taken in an integrated fashion into the analysis, rather than being referred to in passing or used subconsciously to adapt the liquidity a bank is required to keep from the figure given by the coefficients.

☐ The banking system can to a limited extent create genuine liquidity among itself through the use of short-term deposits and lines of credit, unless all the banks are borrowing to their limits from the markets.

☐ Maturity-uncertain retail and wholesale liabilities have quite different characteristics. The factor which gives the Clearing Banks' maturity-uncertain liabilities their stability is that they are retail. It is possible to make a fairly exact comparison of the relative volatility of retail current accounts and deposit accounts within and between banks.

☐ The proposed liquidity requirements would impose significant costs on wholesale banks and could require substantial increases in their balance sheets in order to accommodate their existing commercial lending. There is some doubt within the banking system whether costs of this policy – the implicit tax levied on the banks – is not greater than is necessary to achieve the desired objective of greater prudential control.

☐ The requirement for liquidity to be held against currency liabilities would have a significant effect upon the competitive position of British banks in the euro-currency market and on London's share of euro-currency business. The only options open to the British authorities, in imposing regulatory 'taxes' on euro-currency business, is to determine the competitive position of British banks and the relative attractiveness of London. It is possible to make a case that the major British banks should have imposed on them stronger liquidity requirements in the euro-currency than in sterling markets. If one follows this logic then either the proposed sterling liquidity requirements are appropriate, in which case the British banks would be unable to compete in the euro-currency market, or the present practices in the euro-currency market are adequate, in which case the proposed sterling liquidity requirement could be regarded as excessive. Being faced with this uncomfortable logic could have been avoided if the liquidity paper had overtly concerned itself with the health of the sterling financial markets and structures, as well as with potential supervision.

☐ The definition of prime liquid assets is determined by the authorities' intervention tactics in the money market. The banks would welcome a widening of intervention to include possibly the inter-bank market at times: the banks would also see merit in further experimentation with new systems of funding the government debt.

☐ The main aim of this paper has been to incorporate in one document a reasonably comprehensive summary of the complicated, and in cases novel, issues raised by the recently published regulatory and supervisory papers. Many points of detail, many operating procedures, and many arguments and doctrines, need to be discussed and decided, in view of the comprehensive and in some cases experimental nature of the proposals. The goals of a sound system for monetary policy and effective continuing supervision of the City's financial markets and institutions are shared by market participants.