

8. Monetary Control

Consultants

13 May 1980

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M. K. H. H. H.
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COPY NO. 5

HER MAJESTY'S TREASURY

MONETARY CONTROL CONSULTATIONS

LOCAL AUTHORITY ASSOCIATIONS

Note by the Secretaries

The attached paper is circulated for information. It has been prepared by the Local Authority Side of the Treasury/Local Authority Committee on Local Authority Borrowing and is being sent for information to the financial advisers of the local authority associations. The local authority side have agreed that any response to the Green Paper on Liquidity proposals would be made to the Treasury and Bank by the individual associations.

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9/52

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1. Mr. Bates
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cc 1. Mr. Ward
2. Mr. Stonecroft

Dear Michael

MONETARY CONTROL

The Local authority side of the Treasury Committee on Local Authority Borrowing met recently to discuss the green paper "Monetary Control" and the Bank of England document "The Measurement of Liquidity". Although the financial advisers were unanimous in their views, it was agreed that any response from the local authority associations would be on an individual basis to the Treasury and to the Bank of England.

I am enclosing a copy of the paper agreed by the financial advisers and sent to each of the associations for information. Paragraphs 1-9 summarise the contents of the green paper and the Bank of England document, and paragraphs 10-14 give the implications for local government as seen by the financial advisers.

Yours sincerely,

M.F. STONECROFT

CHAIRMAN, LOCAL AUTHORITY SIDE
TREASURY COMMITTEE ON LOCAL AUTHORITY BORROWING

LOCAL AUTHORITY BORROWING COMMITTEE

MONETARY CONTROL

Paper by the financial advisers to the Local Authority Associations

1. The press statement from H.M. Treasury issued on 20 March 1980 outlines the contents of the Green Paper "Monetary Control" produced by the Bank of England and the Treasury. It invites written comments, especially on Monetary Base Control and Indicator Systems (another method of achieving short term control of the money supply) by the end of May. The Bank of England document "The Measurement of Liquidity" is relevant to the proposed changes in monetary control. This paper summarises these documents in paragraphs 2-8 and sets out some implications for local government in paragraphs 9-14.

2. Purpose of the Green Paper

The Green Paper discusses possible changes in the methods of short term control of the money supply. That is, it considers the ways in which changes in short term interest rates can be brought about. This short term control, together with fiscal and interest rate policies for the medium term, is fundamental to the Government's commitment to reduce inflation.

3. Control of the Money Supply

In the Paper it is proposed that sterling M₃ (M3) is the most suitable measure of the money supply for the U.K. This comprises notes and coin in circulation with the public plus all sterling deposits held by UK residents in the public and private sectors. The Bank of England is aware that with any permanent measure of control, financial institutions are likely to disintermediate funds (i.e. to find ways of moving them out of the 'controlled' sector so distorting the measure).

4. The money supply is currently controlled by the Bank of England with a combination of methods which include reserve assets ratio, cash requirement, call for special deposits, the supplementary special deposits schemes (the corset) and MLR. The Paper proposes some changes to these methods:

- (a) to end the requirement for banks to meet the reserve assets ratio for monetary control purposes, although banks are likely to achieve similar results for prudent banking practice;
- (b) that the cash requirement should not only apply to Clearing Banks but to all recognised banks and to the larger licensed deposit taking institutions;
- (c) special deposits with the Bank of England should be retained as a way of smoothing conditions in the London Money Market, and could later apply to all banks and licensed deposit taking institutions;

- (d) the supplementary special deposits scheme should be discontinued.

The Bank of England, while recognising that the 'reserve assets ratio' is no longer necessary for monetary control, is concerned that the ratio should be replaced by some identifiable policy by the banks on liquidity. Hence the importance of the Bank of England's document on the measurement of liquidity - see section 8 below.

5. Monetary Base Control

The Green Paper discusses how the current controls could be replaced by a system of monetary base control. That is, banks would keep at least an agreed proportion of their deposits in base money, which includes bankers' deposits at the Bank of England and could also include notes and coin held by either or both the banks and the public. The Bank of England would either

- (a) control the amount of base money and so control the total growth of the money supply, or
- (b) use divergences from the targeted amount of the base money figure as a trigger for a change in interest rates.

Either of these systems could be developed with or without a mandatory requirement for the proportion of deposits in base money. The Paper appears to favour a mandatory requirement to maintain a flexible money market, but doubts are expressed as to whether it, or indeed any system of monetary base control, would produce the required results.

6. The mandatory relationship between the money base and bank deposits could be expressed in 3 ways, although there are difficulties with each:

- (a) lagged accounting (where current base requirements are fixed by reference to deposits in a previous period). However, the conditions of the previous make-up day and the current period could be quite different.
- (b) current accounting (where the required base assets relate to the same make-up day as the relevant deposits). But the exact amount of deposits is difficult to establish until after close of business on the day, by which time it is too late to alter the proportion of base assets.
- (c) lead accounting (where the holding of base assets would put a limit on deposits at some future date). If penalties were introduced which could arise from bad forecasting by the banks, this would probably lead to disintermediation.

In practice, if the banking system did not achieve the mandatory relationship, the Bank of England could either:

provide the banks with the assets they needed by lending to the system on a scale of progressively penal rates,

or

have increasing penalties on individual banks for divergences from the norm.

7. Indicator Systems

The Paper also discusses using either the monetary base or £M3 as an indicator system. That is, the monetary base or £M3 would not be directly controlled but would be measured in arrears (perhaps weekly) and divergences from the desired level used to change the lending rate to the Discount Houses, and consequently other interest rates. The target path for the base or for £M3 would be calculated to correspond to a smooth path, seasonally adjusted, for the growth of £M3. A divergence would trigger an adjustment by the Bank of England of its lending rate (but could be overridden by the authorities, e.g. by a fiscal change), the size of the adjustment related to the amount of divergence by a predetermined scale (initially a stated upper limit; to be developed as experience is gained). This could lead to quicker adjustments to short term interest rates than at present. The green paper appears to favour using £M3 as the indicator, which would not be very different from the current situation. Adjustments to MLR would be automatic rather than discretionary.

8. The Measurement of Liquidity

The proposals for the introduction of monetary base control or for an indicator system using a monetary base, rely on banks keeping a certain proportion of their deposits in base money (i.e. as liquid assets). The purpose of the Bank of England's document on the measurement of liquidity is to consider what proportion of deposits should be held in liquid assets by the banking system for prudent banking, as an alternative to the reserve assets ratio.

The Bank of England proposes to develop a measure of the likely liquidity needs of a bank as a sum of 2 parts: one satisfying its needs for immediate liquidity e.g. in cases of withdrawal of sight deposits, and the other satisfying needs for liquidity arising because of unforeseeable difficulties in financing the bank's known future commitments.

It wants the liquidity requirement expressed as a norm, rather than as a minimum, and to be applicable to all recognised banks and licensed deposit taking institutions. In the paper it proposes the following integrated measure:

- a proportion (25%) of each bank's gross maturity uncertain liabilities,
- plus
- a proportion of any net liability position arising from its maturity certain liabilities and assets in a range of time-bands (from up to 8 days, to over one year), with the proportions relating to the net liability positions in the nearer bands being larger (90%) than those in the later bands (down to 5%).

Gross market deposits from banks up to 1 month, and irrevocable undrawn standbys given to banks, would have expected liquid asset cover of 100% because in the hands of counter-party banks these are treated as liquid assets.

The proposed list of liquid assets includes all the current eligible reserve assets (all of which would be primary liquid assets), namely -

- balances with the Bank of England (excluding special deposits)
- call money with the London Discount Market Association
- UK and Northern Ireland Treasury Bills
- local authority bills and bank bills eligible for re-discount at the Bank of England
- British Government stocks with less than 1 year to maturity.

The list also includes:

- cash (a primary liquid asset)
- market loans to banks up to 1 month
- loans to local authorities up to 1 month
- non-eligible bills with less than 3 months to maturity
- U.K. Government stocks with less than 5 years to maturity
- local authority and public corporation marketable securities with less than 5 years to maturity
- gold
- irrevocable undrawn standby facilities from other banks.

Special deposits, which for monetary policy will continue to be required to be held on a daily basis, will not be liquid assets. The Bank proposes that in addition to the proportions set out above all banks should maintain on an average basis over a period 40% of their deposits (including foreign currency business) in the form of primary liquidity. The Bank has still to decide on the method and frequency of the calculation of each bank's holding of primary and secondary liquid asset cover, but intends to implement the primary liquidity requirement as soon as is practicable.

9. Some Implications for Local Government

Local authorities will share the Government's wish to bring down inflation. Although economists differ as to the extent to which economic stability is dependent upon monetary control and the form of control, there is no disagreement that the control of the money supply is one means of contributing to stability and careful consideration needs to be given by local government to the proposals in the Green Paper.

10. While local authorities remain so active in the Money Market, any system of monetary control will be an indirect control on local government borrowing. Yet the capital expenditure of authorities, and hence their borrowing limit, will be directly controlled by Government. Furthermore, their actual borrowing is already controlled in a number of ways (e.g. loan sanctions, 20% limit on temporary borrowing). As most local authority Market borrowing is for the refinancing of existing debt, they have a continuing commitment to the Market which would be difficult to relinquish however stringent the new controls. For comparison, industrial and commercial companies finance over 60% of their capital requirements from internal funds, whereas local government meets only 15% of its annual borrowing requirement from internal sources. Thus, it is essential for local government to be consulted when the new system of monetary control is being worked out in detail. There are three areas for concern, which are set out below.

11. Local authorities rely heavily on the banking system for the management of daily cash balances, overdraft facilities, the transmission of funds and for loans. It is important that there is sufficient liquidity in the banking system to meet the regular requirements of local government as well as the extraordinary needs in unusual circumstances. Local government has confidence in the current liquidity requirements and will be satisfied on prudential grounds with a similar liquidity measure. Too strict a measure could be costly to the banks who would no doubt pass the cost on to their customers. As a result of the Bank of England's document

on liquidity, some banks have already indicated that in future they will not offer one month as an interest period for variable rate loans: currently a useful option for local authorities when there is a general expectation that interest rates are about to fall.

12. Local authorities are unable to function efficiently without the Money Market: income is received in a way that necessitates short term borrowing by even the smallest authority. Monetary base control and indicator systems in particular would affect day to day conditions in the money market, making short term borrowing more difficult and expensive if there were economic factors pushing up inflation. If increased interest rates were used to reduce the growth of £M3, local government would have no alternative but to pay the price. Local authorities require a smooth and more predictable money market without the current pressures experienced round bank make-up day.

13. While relying on the banking system for a proportion of their loans, local authorities also need negotiable instruments from the Money Market. A group chaired by the Bank of England is currently looking at the marketability of local authority loans. The inclusion of local authorities' marketable securities with under 5 years to maturity as a liquid asset enhances the status of such instruments. This should lead to increased demand for, and therefore cheaper, stock issues in future, although there is likely to be a conflict over the period of an issue: the Code of Practice as against the requirement of the lenders. An important improvement for local government would be the classification of local authority marketable securities with less than 7 years to run (rather than 5) as liquid assets. A new local authority instrument might be developed (say for local authority loans of up to 3 months) which was so marketable that it could be classified as a primary liquid asset, thus reducing the cost of local authorities' temporary borrowing. The status of local authority unquoted bonds and mortgages which now have their own secondary market will need to be considered by the group mentioned above.

Conclusion

14. As can be seen from paragraphs 9-13, any change in monetary control will directly affect local government. The papers are largely concerned with principles and with questions as to the forms of measurement. Until detailed proposals for the implementation of monetary base control, an indicator system or some other change, are put forward, it is not possible to assess in practical terms the implications for local government. Thus it is of the utmost importance that local government is consulted early, at each stage by the Treasury and the Bank of England on ^{the specific} proposals for changes in the operation of monetary control.

MCC(80)16
19 May 1980

COPY NO. 3

HER MAJESTY'S TREASURY
MONETARY CONTROL CONSULTATIONS

COMMENT BY DR LEWIS

Note by the Secretaries

The attached note by Dr Mervyn Lewis is circulated for information. It comments on the notes by Pepper and Foot which have been circulated as TR(Mon)5 and MCC(80)9 respectively.

M D K W FOOT
M L WILLIAMS

H M Treasury

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THE MONETARY CONTROL DEBATE: WHAT ARE THE AUTHORITIES DOING?

1 This note is an attempt to provide a simple money supply-money demand framework to analyse the authorities' monetary control methods, prompted by the attempts of G Pepper and M D K W Foot to do so. In particular, it endeavours to show how a "demand-side" approach differs from a "supply-side" approach, and that this distinction has nothing to do with acceptance or not of monetary base control.

Demand side

2 This approach involves treating the financial system as an equilibrium system, so that the stock of money is always at a level consistent with the public's demand. Suppose we begin (see the chart attached at the end of this note) with stock of OM and interest rate R_1 . Let the stock which the authorities are aiming for be OM^1 . With income given, so that the demand curve is D_1 , the idea of a demand-side approach is to raise interest rates to R_2 , and induce a movement from A to C along the demand curve. We can envisage that interest rates are raised simply by using changes in MLR as a signal for other rates to rise. In general terms, this is the model outlined in the Mais lecture, and there are three problems with it.

3 The first of these problems is the behaviour of relative interest rates. Much the greater part of the bank deposits consists of interest-bearing financial assets which compete with other interest-bearing financial assets for a place in people's portfolios. Consequently, the interest rates which influence this choice are bank deposit rates relative to those on competing assets. If the competing assets are short-term paper (Treasury bills, local authority), then the differential does not widen much in response to increases in MLR. If the differential is that between bank time deposits and long-term bonds, the differential could behave perversely in response to MLR, as it did in 1976 and 1978/79. This possibility was illustrated in my earlier paper. The general problem for policy makers is that these differentials are not readily amenable to policy influence.

4 A second problem is how the supply of money adjusts to demand, assuming in contradiction to the previous paragraph that demand does change. Interest rates are raised from R_1 to R_2 inducing a movement in desired balances from A to C. What induces actual balances to

to respond so that the supply curve shifts from S_1 to S_2 ? The initial effect of raising rates is to create an excess supply of money at R_2 of AB, when the money supply is still at S_1 , because desired balances are now less than actual balances. This excess supply of money could be disposed of in several ways. One is by acquiring foreign securities, in which case money flows overseas at an unchanged exchange rate. A second possibility is for advances to decline, as people use an excess supply of money to repay loans or to reduce borrowings. This supposes an inter-dependence between the demand for deposits and the demand for credit. A third possibility is for the excess supply of money to raise the demand for gilts, which the authorities meet from their portfolio. In these three ways - reserve flows, bank lending, gilts sales - the stock of money would decline from OM to OM^1 . Typically, in models of the demand for money, this adjustment is allowed to proceed over several quarters, as the supply of money adjusts gradually to demand. There is, however, a fourth possible adjustment mechanism, for the excess supply of money might be used to increase expenditures. It is this channel which is emphasised in the "small monetary model". The excess supply of money would spill over into goods markets, raising prices and shifting the demand curve to the right to absorb some or all of the excess supply. Restrictive policy has an inflationary effect!

5 If this is what the authorities believe they are doing, it is a strange result. One must either drop the notion of monetary disequilibrium or query the way in which monetary policy in our description has been implemented. This query arises because monetary policy has been instituted by effecting a change in MLR, treated as a fiat rate, which is simply declared and to which other rates adjust, rather than as a rate which is determined in the market by open-market operations. In one conception of the processes involved in open-market operations, whether conducted in bills or gilts (generally termed bonds), demand and supply should be thought of as jointly determined by the equilibrium of demand and supply, not by demand or supply separately.

Equilibrium approach

6 We commence again at position A, and the authorities enter "the" market with the aim of contracting the stock of money by MM^1 . The number of securities sold will depend upon the extent to which bond (or bill) prices must be bid up to induce holders of money to become

holders of bonds. In the standard story, information on the interest rate change which is needed is given by the slope of the demand for money schedule. For the case at hand, interest rates must increase from R_1 to R_2 . A shift in the supply curve initiates a movement along the demand curve. This appears to be the basis of Foot's reply to Pepper. There are two problems with it; one theoretical, the other empirical.

7 The theoretical difficulty was argued by N Kaldor in Lloyds Bank Review, 1970 and by Wagner in the Economic Journal, 1974. It ran as follows. Monetarists argue the importance of monetary policy. They also argue that the demand for money is insensitive to interest rates. If so, unacceptably large fluctuations in interest rates are required to effect changes in the supply of money. In the limiting case of monetarism, where the demand has zero elasticity, monetary policy cannot work at all for open-market operations cannot be made! Rather than being seen as a reflection upon monetarism, as Kaldor naturally does, it is a reflection upon the equilibrium approach.

8 The empirical difficulty comes from the implication that the quantity of money is always "on" the demand curve. Further, the stock of money adjusts immediately to demand - demand and supply change together. No study which has tested for equilibrium between demand and supply, without lags, quarter by quarter, has been able to obtain a satisfactory result, irrespective of whether the aggregate chosen is M1 or £M3. A demand function along the lines of that in the "demand-side" approach can, however, be identified for M1. If the aggregate chosen is £M3, no satisfactory demand function of any form can, at this stage, be identified. Yet the equilibrium approach relies crucially upon knowledge of the existence and the slope of the function for day-to-day operations. If this is the model, it seems strange to choose as a target an aggregate for which an identifiable demand function does not exist when there exists an aggregate (M1) for which a stable function does exist, and which has an elasticity which is sensitive, but not unduly so, with respect to interest rates.

9 One answer is that neither of the above models adequately reflect what the authorities are trying to do. Neither of them take adequate account of money's role as a means of exchange. We term the approach which does, the "supply-side approach".

Supply side

10 The error in the previous account is to suppose that it is necessary to induce 'holders' of money to become 'holders' of bonds in the way that money-holding is conventionally interpreted, in terms of the demand for money. It is not necessary to induce people to 'permanently' economise on money in order to effect every open market sale, nor is it necessary to induce them to become hoarders of money every time a market purchase is made. Rather, the holding of money is likely to arise as an intermediate step in a portfolio rearrangement induced by the alteration to bond prices. Every transaction in a monetary economy involves the use of money as the means of payment. Unless sales and purchases are strictly synchronised in both timing and value, transactions necessarily involve holding purchasing power temporarily in monetary form.

11 Suppose that the Bank of England were to conduct an open market purchase of securities (bonds) by selling off some of its paintings. At a formal level, the effects which ensue can be described in terms much like those which would ensue from the 'sale' of money. In order to effect the transaction, the price of bonds will be bid up, while the bargain prices going on artworks would attract dealers in the bond market to temporarily become holders of art. But there is only a temporary equilibrium in the market. They will not wish paintings (previously money) to become a permanent component of their portfolio, and secondary effects will commence as they sell the paintings (previously money) and re-acquire securities of various types, with effects fanning out through the various credit markets.

12 This distinction between a temporary and a more permanent holding of money means that money can come into existence, or be extinguished, without an accompanying and immediate movement along the 'long run' demand curve. Transactors can be forced 'off' their demand curve. Because the supply curve can be shifted independently of demand, the demand curve can be 'lost to sight' under supply disturbances (Artis and Lewis). But so long as the demand curve is reasonably stable in the face of the shift in

supply, the resulting disequilibrium may have effects more broadly in the economy, as the 'monetary disequilibrium' models specify. What determines the interest rate change needed to alter supply? How is the disequilibrium worked off?

13 In the authorities' schema, money supply changes are decomposed into PSBR, gilts sales, etc. In the case of 'exogenous' reductions of money resulting from PSBR and the balance of payments, we might visualise initially a movement from A to B at the existing interest rate R_1 , producing an excess demand for money of AB. (Note the difference immediately with the demand side model outlined earlier.) In the case of gilt sales and bank lending, immediate increases in interest rates will be required to shift supply from S_1 to S_2 . The size of the increases is given, however, by the demand curves in the two respective markets - gilts and credit. In both cases, the demand curves are not, respectively, the mirror image or the same as that for the demand for money. For example, gilts are probably a much closer substitute for shares and debentures than is money. The money used to purchase the bonds may come from a past, concurrent and future planned sale of equities, as people take advantage of low gilt prices. If there is close substitutability between the various classes of securities, but low between these and money, the process of reducing the money supply by the requisite amount may result initially in a movement to D, where there is still an excess demand, but less than that when the money supply reduction comes about from a reduced PSBR.

14 From a position such as B or D, how is equilibrium attained? How do transactors get back to their demand curves? There are three main mechanisms:

- (a) Transactors may undertake transactions which have the result of expanding the supply of money. Sales of assets overseas (at an unchanged exchange rate) or sales of securities to the authorities to relieve the excess demand are two routes.
- (b) Sales of securities other than to the authorities will push up interest rates from B or D to C, dissipating the excess demand. This is the interest rate mechanism of Artis and Lewis.

- (c) Reductions in expenditures may be made, shifting the demand schedule to the left until equilibrium is restored. This is the mechanism emphasised in the 'small monetary models'.

Some implications

15 The advantages of this 'supply side' rationale of the authorities' actions, then, are threefold. First, unlike the 'demand side' mechanism, 'monetary disequilibrium' works in the correct direction, ie, an excess demand for money when interest rates rise. Second, the supply side approach offers a plausible explanation of the inability to identify a short-run demand curve for broader aggregates. It is unnecessary to establish stability on a quarterly or monthly basis, as in the other approaches, so long as reasonable stability exists in the longer run. Third, the major ways of inducing supply side shifts revolve around the aggregate balance sheet of the banking system, and thus justify the authorities' preference for £M3.

16 Pursuing this last point, it may be noted that monetary base control has so far not been mentioned. This is to emphasise, contrary to Pepper, that acceptance of the 'supply side' approach is not synonymous with monetary base control. But it is the case that monetary base control makes sense only in a supply side system, and it is an alternative to the authorities' operation upon PSBR etc. Its merits (or otherwise) over the authorities' present methods revolve around two points:

- (i) When the movement from S_1 to S_2 relies upon undertaking sales of securities (gilts or bills), it is more reliable to have a direct quantity objective than to guess the price in advance. Under a direct quantity objective, sales which result in a reduction M'M will be undertaken. With the present system, rates are pushed up, but without precise knowledge of the shape of the bond demand curve, the size of the interest rate change needed is not known, and thus the quantity result is uncertain.
- (ii) If the movement from S_1 to S_2 relies upon alterations to banks' earning assets, the differences in the two approaches are more marked. The authorities' approach relies upon banks' assets

being determined solely by demand. Monetary base control emphasises that banks' earning assets (advances plus investments) are governed by the supply of reserves. My own view, stated elsewhere, is that both views are relevant, but that is another story...

17 One final comment is to note that Gordon Pepper may be right and Michael Foot wrong, in arguing that the authorities can increase money supply instability and interest rate instability. Michael Foot employs a money demand-money supply framework to show that, in the face of an upsurge in demand, the authorities place an upper limit upon the rise in rates, settling for a larger money supply and lower level of interest rates than would occur in the absence of this accommodating policy; for without the augmenting of supply, interest rates would be higher. This augmenting of supply is depicted as a supply curve which is infinitely elastic at the upper bound of interest rates. My own preference would be to show a succession of shifts of the original supply curve, not a continuous curve, as the authorities deliberately choose to override 'normal' market responses (which may give the supply curve some positive slope) by purchasing parcels of securities unloaded by private transactors.

18 A more fundamental objection is with the implicit assumption that a reduced demand for bonds is an increased demand for money. It is this implicit equation which is challenged by the 'disequilibrium' view. The reduced demand for bonds, which is the proximate cause of the increase in bond rates, could be one side of many different shifts in preferences: from bonds to equities or debentures; from bonds to loans and advances; from monetary securities to real assets. In all cases there is a temporary holding of money to effect the transactions, but not necessarily an increased demand. By acquiring the securities and expanding the supply of money, the authorities think they are accommodating increased liquidity preferences, but they may be, in fact, generating an excess supply of money which is extinguished (as the small monetary model says) via rising prices. This consequence necessitates continuance of monetary targets and higher interest rates later to maintain them.

Figure



