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Dear Andrew,

MONETARY TARGETS

Before Christmas the Chancellor told the Prime Minister about the progress of work in the Treasury on the form of the monetary targets for inclusion in the MTFS in this year's Red Book. It was agreed that some changes from the previous form were required, not least because it would not make sense to have a single target range for both broad and narrow money in the next MTFS. And, as was indicated in his Mansion House Speech, the Chancellor wishes to signal the importance for interest rate policy of movements in narrow money.

Provisional decisions were taken in-house at a meeting last month which Alan Walters attended - Alan is of course very much au fait with all this work - and have been reflected in the attached paper which has now been sent to the Bank, as a basis for further discussion with them. (I believe that the Chancellor promised to let the Prime Minister see a copy of the paper.) The Chancellor will be discussing it with the Governor at a meeting on Friday: while the Bank have in the past been inclined to argue for something along the lines of option 2 b, the outcome may be along the lines of option 3 in para 27.

A copy of this letter and the paper goes to Alan Walters.

Yours ever,
J O Kerr

J O KERR

MONETARY TARGETS

This paper sets out some issues still to be resolved on the form of monetary targets for the next MTF5 - in particular what aggregates should we target. It is concerned entirely with the form of the targets. The appropriate numbers for the target ranges can be decided later.

2. The paper first records the points on which there is general agreement following the discussion of the Strategy papers last summer and identifies four main issues for decision. It then surveys what other people have said about monetary targets, and particularly about MO, after the Mansion House speech and reports what we have learned from our further research on narrow money since the papers circulated in mid-October. It also looks in more detail at the differences between MO and notes and coin, particularly in the context of operating a target for narrow money. The final section - paragraphs 26-27 - sets out what look to be the main options for the next MTF5.

WHERE WE STAND

3. There seems to be general agreement that:
- i. In assessing monetary conditions it is necessary to look at both broad and narrow money.
 - ii. Whatever numbers are targetted, it will also be necessary to take into account other monetary indicators, including the exchange rate, in assessing monetary conditions.
 - iii. We cannot continue with the present arrangement in which there is one target range embracing both broad and narrow money. Last year was exceptional. Their different characteristics indicate different target ranges for broad and narrow money.

iv. M1 is an unsatisfactory measure of narrow money because of its substantial element of wholesale, interest-bearing deposits.

v. £M3 (and PSL2) continue to be reasonable measures of broad money.

vi. All monetary aggregates are subject to technological or institutional change.

4. Some changes in the form of monetary targets are necessary. The opportunity is therefore available to re-think the presentation of policy. There is no suggestion that the present process of arriving at interest rate decisions - or of market operations to support them - should be altered. These considerations underlay the Chancellor's speech at the Mansion House in October.

5. There are four issues for decision:

a. Should we move to two target ranges, one for broad and one for narrow money. If so,

b. Which aggregates are suitable for target purposes;

c. Should each target range refer to one monetary aggregate or to more than one;

d. What should be said about non-targetted indicators of monetary conditions.

The Target for Broad Money

6. At present broad money for MTFs purposes is referred to as "£M3 (and PSL2)" - 1983-84 FSR paragraph 2.11. It is agreed that £M3 should remain a target aggregate for broad money. PSL2 does not, in practice receive much public attention, nor so far has it added much to the explanatory power of £M3. It is therefore for consideration whether it should cease to be referred to for target purposes and, instead, included among the

other measures of liquidity which are taken into account in assessing monetary conditions. The main problem in removing it - even in its present bracketed form - is that it might be taken to mean that we are taking less interest in the activities of building societies. This is not a message we should wish to convey given the present very strong growth of building society deposits.

The Target for Narrow Money

7. M1 needs to be replaced for target purposes for two reasons. First, it has a substantial and growing interest-bearing component, which means that like much of £M3 it can be held as an income earning asset. Second, it contains a large proportion of wholesale money and so cannot be said to be a very good indicator of the transactions function of money. The choice of narrow aggregate is not easy. In principle there are two candidates:

- i. M2, which has been specially designed to measure retail transactions, but which nonetheless contains a considerable interest-bearing element.
- ii. Various non-interest-bearing measures which might provide a good guide to transactions while avoiding the complication of having a complex interest-bearing element. These are NIBM1, MO or notes and coin.

8. The difficulty with M2 is that it has not been in existence long enough - certainly not for use on its own. At the Mansion House the Chancellor said of M2:

"I think and hope that it will come to play an important part in policy decisions. But its time has not yet come."

So the Chancellor went on to say:

"Meanwhile, there is some recent evidence that other measures of narrow money - particularly measures of non-interest bearing money such as the wide monetary base, M0, and its predominant component, notes and coin with the public - have not been subject to the same distortions as M1."

9. A little later in his speech the Chancellor said that:

"... It does appear that M0 could have a more important part to play as a key indicator in the growth of narrow money."

Whichever indicators we choose to emphasize, it is unlikely that it would be appropriate to maintain a single range for both broad and narrow aggregates ..."

There was no commitment to targetting M0, but a clear indication of looking in that direction. It is this aspect that has been seized on by most of those commenting on the speech.

REACTION TO MANSION HOUSE SPEECH

10. Reaction has been mixed, with the critics (mainly from the City) more vocal than the supporters.

11. Majority opinion in the City is critical, with particularly hostile pieces from Simon and Coates, Capel-Cure Myers (Roger Bootle) and Messel's (Tim Congdon). Hoare Govett (Paul Temperton, ex Bank author of the December 1982 BEQB article on cash) and Laing and Cruickshank are tersely dismissive, while Grievson-Grant, on the basis of the present Chancellor's allegedly sceptical remarks about narrow money in his 1981 Zurich speech, suggest that perhaps he "will not take M0 as seriously as one might think at first sight". The exceptions are Phillips and Drew (Bill Martin, ex CPRS), with a generally sympathetic and perceptive note, and Greenwell's who were welcoming but worried about controlling M0 "under present arrangements" (Greenwell's December Bulletin, however,

strikes a less grudging note, prompted by the recent Treasury EPR article on narrow money).

12. There has been little serious academic comment. Minford has been almost silent, approving the "sensible upgrading" of MO in a single sentence. Beenstock (in 'The Times') was enthusiastic, for the wrong reasons, stressing that MO is "unique because it is directly under the authorities' control ... controllable down to the last penny ... The Chancellor has really stuck his neck out this time." The City University (Roy Batchelor), long time MBC advocates, are actually critical, arguing that MO is essentially a means of controlling broad money, and unsuitable as a target in its own right. None of the outside forecasting groups (including the new LBS Financial Outlook) have commented.

13. Parts of the general argument of the speech have emerged almost unscathed:

- i. Most commentators are prepared to accept the case for targetting narrow money as a measure of transactions balances.
- ii. M1 has no defenders.
- iii. Beenstock aside, the message that no move to MBC is being contemplated seems to have got across (though it has not pleased supporters of monetary base at Greenwell's and the City University).
- iv. MO is widely seen as the main option, but there is some recognition of alternatives. Several commentators (eg the Economist, Greenwell's, Christopher Johnson) refer to "retail" or NIB M1, with varying degrees of

conviction. M2 comes in for favourable mention, but the view that it is too new to act as a target aggregate is not seriously questioned. Most (but not all) see notes and coin and MO as synonymous.

14. The proposition that some measure of narrow money may be particularly relevant to short-term interest rate decisions is more contentious. Notable dissenters from this view are Roger Bootle and Tim Congdon, who say interest rate decisions should be based on an overall assessment of "financial conditions", consistent with the Government's objectives for inflation. Criticism of MO itself is based on three oft-repeated points:

i. Interest rates have little or no direct effect on it, so it will be difficult to control (other than by "controlling the economy"). Some commentators challenge the sign of the effect (apparently on statistical grounds; no-one gives a convincing economic explanation of why there should be a perverse effect). The BEQB article - very occasionally supported by a chart - is the sole basis for these assertions. Only Christopher Johnson refers to the small (0.5 per cent) semi-elasticity in the current public version of the Treasury model. Greenwell's are the most explicit in drawing the conclusion that the lack of interest-sensitivity means that there is no reason to associate MO in any special way with short-term interest rates.

ii. MO has been, and will go on being, heavily affected by structural changes in the use of cash. The velocity trend is high and has risen sharply since the late 70s. So target setting will be difficult. Again, the main source is the BEQB. Some commentators add, presumably also on the basis of the Bank's work on the demand for cash, that at best MO provides a very limited snapshot of current monetary conditions, being chiefly related to personal sector behaviour.

iii. The relationship with future inflation and growth is not well established (though there may well be a link with past or current rates of inflation). This appears mainly in the most critical of the brokers, unsupported by statistical evidence other than charts. Some commentators note that the link looks closer since the mid-70s, but suggest that this is fortuitous.

15. There are two widespread misconceptions:

i. That MO would necessarily be a fourth target, additional to the existing target variables. This is taken for granted in early articles (some of which complain of a proliferation of targets). However, on 18 November, Samuel Brittan reported that "the present intention is to replace the existing three targets by two: one for so-called "little MO" ... the other will be some measure of broad liquidity".

ii. That the chief appeal of MO is as a rationale for cuts in interest rates. In the more superficial places, this is tied simply to the relatively slow growth in MO in recent years. More sophisticated commentators argue that technical change will make it easy to underestimate future trends in MO velocity, and hence set a "soft target"; or that the lack of interest sensitivity will mean that MO is not an effective brake on interest rate cuts.

The second point, very fashionable immediately after the Mansion House speech, is beginning to lose favour as some commentators focus on the probable target range for MO. Serious suggestions are:

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|--------------|--|
| 3-7 per cent | Minford |
| 4-8 per cent | Greenwell's, Phillips & Drew, Christopher Johnson |
| 5-9 per cent | Laing and Cruickshank |

(The Banker notes a 6 per cent trend increase in M0 velocity in recent years, but spoils it by concluding that the 7-11 per cent range set for the other aggregates would be uncomfortably tight). Sam Brittan says the likely range for 1984-85 is 3-7 per cent or 4-8 per cent.

Several people (eg Greenwell's, Henry Kaufman and Phillips and Drew) have argued that with current M0 growth well above last year's rate and towards the top of any plausible range, targetting M0 is not a soft option.

16. The brokers have not finished with this subject yet. Judging by informal contacts, one question that we may hear more of over the coming weeks is: "If you do not intend to move to MBC, why choose the monetary base?" The point has already begun to surface: the Economist noted that operational balances are not included in any other monetary aggregate, and Capel-Cure Myers suggest that M0 is a surprising choice if there is no intention to move to MBC. The Lex Column on 19 December commented that "by linking notes and coin with bankers' deposits and till money, M0 raises the spectre of monetary base control". The point of the CUBS article is, of course, to argue that targetting M0 makes no sense without a move to MBC. No-one yet appears to have concluded that notes and coin would be a preferable option to M0: the focus has rather been on highlighting those objections to M0 that are common to notes and coin (and readily culled from the BEQB article on cash).

FURTHER RESEARCH ON NARROW MONEY

17. Over recent months Treasury economists have undertaken extensive research on narrow money, including the demand for notes and coin and for M0. There have been several discussions with the Bank, who are still sceptical about some aspects of the work. In addition we have consulted two academics - Professor Hendry of Nuffield College and Dr Bean of the LSE - who occasionally attend our academic panel. They have made some helpful suggestions which we have now largely taken on board.

18. The Treasury's latest work tends to confirm the assessments in the note reporting the earlier work*, including the conclusion that, based on their apparent demand properties, notes and coin would seem to have a very slight edge over MO and both have a fairly clear advantage over NIB M1 (the demand for which seems to be rather poorly determined and probably distorted by the growth of interest-bearing sight deposits in recent years).

i. There appears to be small but significant interest sensitivity in the demand for both cash and MO. This issue has particularly exercised some commentators since the Mansion House speech. We have now investigated this effect on a run of monthly data that goes back to the early 1960s. This examination indicates that conclusions about interest sensitivity do to a certain extent depend on the period used for estimation. A significant, though fairly small, interest rate effect is only well established in data since the mid-1970s. (The Bank's economists agree with this finding.) The role of interest rates in earlier periods - on which we are still working - is more uncertain.

ii. The recent work confirms the importance of financial innovation in explaining the rising trend in the velocity of notes and coin and MO. The rising proportion of the population holding bank and building society accounts seems to have been particularly important. (The Bank's work suggests this too.)

iii. The later work, like the earlier, yields slightly better results for notes and coin than for MO. Our greater ability to account for fluctuations in notes and coin compared with total MO reflects the erratic nature of the bankers' balances and, to a lesser extent, till money. Separate work to explain movements in these confirms how difficult it is to model them.

* "Research into Narrow Money and its Implication for the Choice of Target Variable", October 1983.

iv. We have also looked further at the high short-term volatility of MO. About half the volatility in changes in MO appears to be due to 'noise' in bankers' balances. The proportion of the 'noise' in total cash (ie non-bank holdings of notes and coin plus banks' till money) that is due to fluctuations in till money is small. So once bankers' balances have been excluded from MO there does not appear to be a further significant reduction in volatility to be achieved by excluding till money.

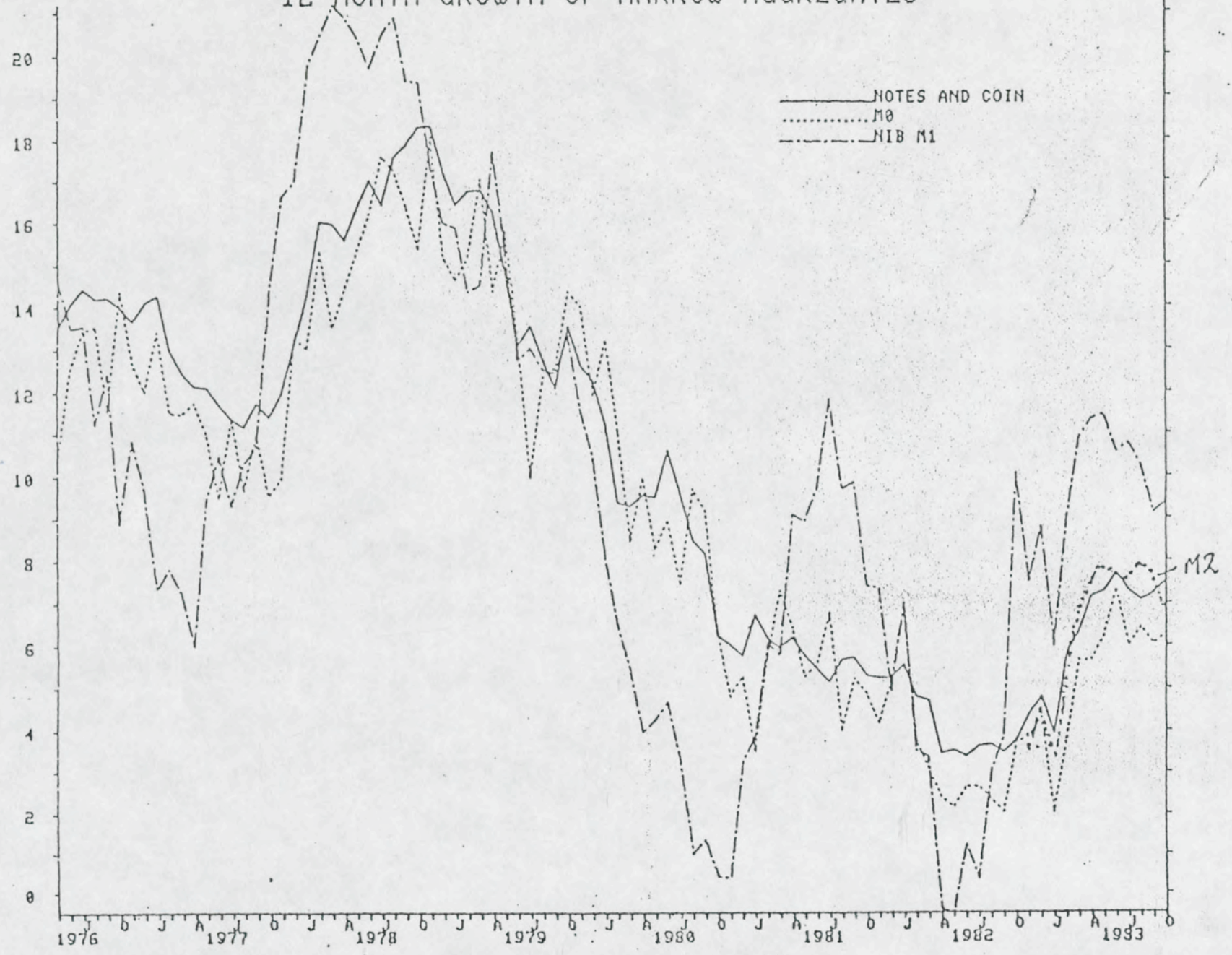
While we can take some comfort from the progress of this research, it must be recognised that it cannot point to conclusive evidence. Such research, no matter how successful it may appear to be at the time, can only have a modest role in any justification of targetting a very narrow monetary aggregate. Data revisions or new econometric techniques can all too often upset previous results.

19. There will always be room for legitimate doubts about the extent to which such work "explains" the past, and still more about how far it can be used to forecast the future. It would be unwise to let any public target range for very narrow money rest on particular assumptions about future financial innovation and its effect on the demand for cash. It seems best here to stick firmly to the practice of not justifying target ranges by econometrics. But it is important to have reputable published research available so that we are not vulnerable to the charge of adopting targets for monetary aggregates without having studied their past behaviour.

MO or Notes and Coin

20. The chart on the next page shows the movements since 1976 in the three narrow aggregates that consist entirely of non-interest-bearing money (and also, for its brief life, of M2). As will be seen NIB M1 is subject to very wide swings (probably reflecting its high interest sensitivity), and seems to have no advantage over the smoother series for MO and notes and coin.

12 MONTH GROWTH OF NARROW AGGREGATES



21. A choice between MO and notes and coin revises complex issues because MO is one of the aggregates on which a monetary base control regime could be based.

22. The Government's position on monetary base control is:

a. It has no present intention of moving to monetary base control. This was made clear again in the Mansion House speech and is the agreed position.

b. We are still in the business of taking 'steps which are desirable in their own right' and which 'would be consistent with a gradual evolution towards a monetary base system and will help us to judge how far such a system would contribute towards our medium-term objectives' (Sir G Howe, 24 November 1980).

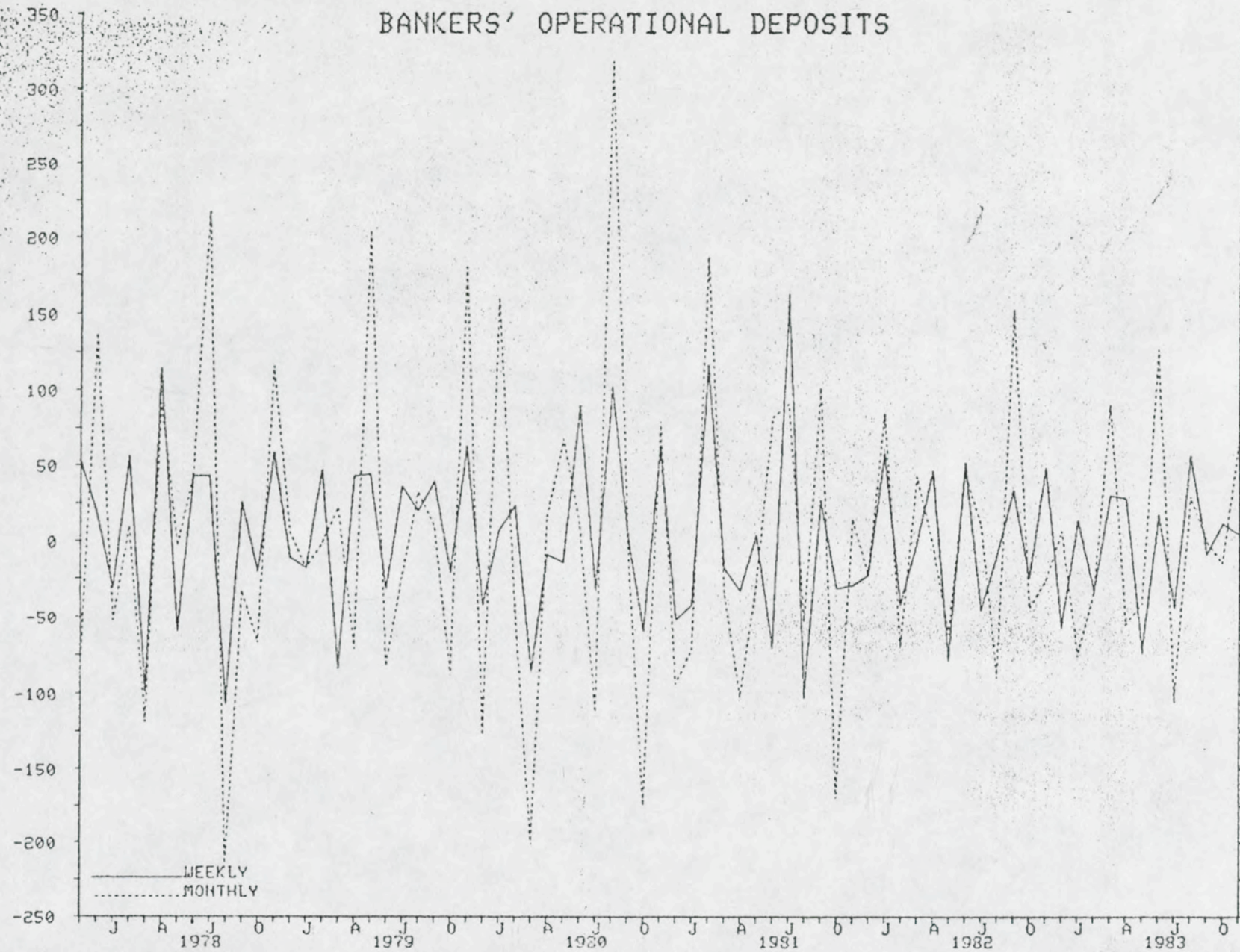
23. The research, as noted above, gives notes and coin a slight edge over MO: the statistical series is less noisy, the demand equations are better specified and have lower standard errors. As against that, MO sounds more like a serious monetary aggregate - it is an "M" - with a good pedigree in monetary theory. Targetting notes and coin sounds primitive. However, MO has some unattractive features:

i. It consists as to 90 per cent of notes and coin in circulation outside the banks and a further 8 per cent is notes and coin held in bank tills. It is difficult to argue that either till money or bankers' balances contribute much - if any - additional information about monetary conditions.

ii. It does not fit cleanly into the structure of monetary aggregates. Two of its components - till money and bankers' balances - are bank assets, whereas the other monetary aggregates are built on non-bank holdings of notes and coin and bank liabilities.

iii. This non-currency component - bankers' operational balances at the Bank of England - though only small is subject to what look to be sharply erratic movements, which

BANKERS' OPERATIONAL DEPOSITS



generate a high level of variability in the series. It would be possible, however, to smooth this by averaging the weekly or even daily figures for these balances over the banking month. Our experiments with weekly averaging suggest that it produces a much more stable series (see chart).

iv. This non-currency component would only be of economic significance if the banks are being controlled by operating on their monetary base.

v. MO consists entirely of the liabilities of the monetary authorities. This indeed is its great virtue if one is operating a system of monetary base control. But it is not easy to explain why we are choosing this aggregate to target if it is intended not to introduce MBC.

The problem of short-term volatility can probably be dealt with by calculating MO as a weekly or daily average for the month. There is indeed much to be said for that. This series would then differ from notes and coin mainly because it included till money. On statistical grounds, there is little to choose between total notes and coin and currency in circulation with the public. The two series move closely together and are virtually indistinguishable in terms of volatility and predictability; if little is gained from including till money, little is lost either. The fact that the series for total notes and coin is, in principle, better measured, suggests some presumption in favour of looking at the total. (While the monetary authorities know how much currency they have coined in total, the split between the public's holdings and till money has to be estimated from banking sector returns. Within month information about this split is only available from the smaller sample of banks that report weekly.)

24. So far as the markets are concerned, there might be a period of adjustment as they accustom themselves to narrow and broad aggregates with equal weight. But this should not prove difficult provided they do not believe policy is being relaxed.

Policy will in fact be conducted in the same way as in the p; we have simply given a sharper expression to what we are doing.

25. There is a problem in targetting M0 which arises because some will think that, whatever we say, we shall have moved to monetary base control. There might also be some pressure to move more quickly in the direction of monetary base control. These problems arise so long as M0 is given a place in the constellation of monetary indicators which we monitor. So long as we continue to take a range of monetary indicators into account - and indeed have two targets - it is difficult to see that any serious misunderstanding of our intentions could arise.

THE OPTIONS FOR 1984

26. For the reasons given at the beginning of this paper, there are strong grounds for wanting to change the form of the monetary targets. In particular we need to find a better measure of narrow money than M1 and to sharpen the presentation of our policy. We would presumably not want more than two target ranges - one for broad money, the other, and lower, one for narrow money - and we would like them to have equal status. We would also want to stress that in assessing monetary conditions we took account of all the aggregates (whether explicitly targetted or not) and other indicators as well.

27. The three options set out below are essentially about how the target ranges are labelled. It is important that each range contains the same number of aggregates - to convey equal status.

OPTION 1: Two Aggregates

- a. £M3 and M0
- b. £M3 and notes and coin (NC)

Comments:- Clearcut; even-handed between broad and narrow. But hard to justify ditching target for FSL2; and both M0 and NC have some unattractive

features for targetting. Essential to emphasise that we would be monitoring other aggregates as well as those specifically targetted.

OPTION 2: Four Aggregates

- a. £M3 + PSL2 and MO + M2
- b. £M3 + PSL2 and NC + M2

Comments:- This grouping has attractions because it includes a wide range of aggregates. But it is complicated and also has risks, given our limited knowledge of M2.

OPTION 3: A Compromise between Options 1 and 2

This would give primacy to one aggregate within each target range but would specifically mention another aggregate as well:-

broad money: £M3 (PSL2) as now
narrow money: MO (M2).