David

For your background reading. (One obvious lesson is enormously negative real interest rates @ short end).

Alec

MONETARY DEVELOPMENTS IN 1977

This note looks at the broad monetary developments in 1977, in the face of the authorities' attempt to prevent sterling appreciating.

a. The Background at the Beginning of the Year

2. 1976 was a year of recurrent crises of confidence in sterling. The effective exchange rate index which stood at 72.6 at the end of 1975 fell to 60.5 by the end of 1976. Against the dollar, the decline was from 2.22 to 1.68. Most of the pressure on sterling had come from the capital account: whilst there was a current account deficit in 1976 of £920 million this was somewhat narrower than the deficit of £1582 million in 1975 and considerably smaller than the £3318 million deficit recorded for 1974, immediately after the first oil shock.

3. The capital account pressure may have stemmed from a growing belief that the UK policy stance was looser than in most other OECD countries. The PSBR ratio was some 9¼ per cent in 1975-76 and still 6½ per cent in 1976-77. Nominal interest rates were at high levels but were lower than the inflation rate, at times very considerably so. The inflation rate, as measured by the twelve month increase in retail prices, had peaked in August 1975 at 26.9 per cent. Though in 1976 there had been a sharp deceleration - to 12.9 per cent by July - such rates were nearly double the OECD average. Moreover, inflation was tending to rise again in the second half of 1976 and had reached 15.1 per cent by December.

4. Perhaps not surprisingly given the persistent selling of sterling, interest rates tended to rise during 1976. 3 month interbank rates rose from 9½ per cent in January to a peak of 15¼ per cent at the end of October. 20 year yields increased by rather less: from 15.3 per cent in December 1975 to 16.2 per cent by the end of October. Thereafter both short and long rates declined a little.

b. The Pressures on Sterling

5. The pound reached its nadir both against the dollar and on its effective rate index at about the end of October 1976. Thereafter several developments led to some recovery:

(i) the Government's negotiations with the IMF were perceived to be proceeding well though the formal announcement of the agreed stand-by facility was not made until the first week of January 1977;

(ii) there was a perception of a tightening in monetary policy. The Letter of Intent to the IMF in December stated that it was intended to restrict domestic credit expansion (DCE) to £9.0 billion in the year to mid-April 1987 and to £7.7 billion in the following year. Consistent with the DCE limit of £9.0 billion, £M3 was expected to increase by 9-13 per cent. Preceding these monetary targets, the reintroduction of the Corset in November was also well received;

(iii) in addition, fiscal policy was perceived to be tightening. Restrictive fiscal measures were announced in December and the later public expenditure White Paper foresaw a fall in public spending of 3½ per cent in 1977-78 in real terms. In the event, the PSBR ratio for 1977-78 fell to 3½ per cent, barely a third of its level two years earlier;

(iv) restrictions on the use of sterling for financing third country trade, announced in December, also added to the net demand for sterling.

6. For these reasons, the pound staged a fairly hesitant recovery between October and the end of 1976. After that, it became subject to upward pressure, intermittently very strong, for most of the rest of 1977. It is important to realise, however, that much of this pressure owed to the weakness of the dollar as well as improved prospects for sterling. Consequently, there were marked divergences in the rate against the dollar and against other currencies.

Sterling Exchange Rates : Average of Days

		Sterling/ Dollar	Sterling/ DM	Sterling/ Yen	Effective Index (Dec 1971=100)
1976	Oct	1.64	3.98	477	59.2
	Nov	1.64	3.95	483	59.1
	Dec	1.68	4.00	494	60.5
1977	Jan	1.71	4.10	498	61.8
	Feb	1.71	4.11	487	61.7
	Mar	1.72	4.10	481	61.9
	Apr	1.72	4.08	473	61.7
	May	1.72	4.05	477	61.6
	Jun	1.72	4.05	469	61.5
	Jul	1.72	3.93	456	61.0
	Aug	1.74	4.03	464	62.0
	Sep	1.74	4.05	465	62.4
	Oct	1.77	4.03	451	62.5
	Nov	1.82	4.07	445	63.6
	Dec	1.85	3.99	447	63.8

7. Thus whilst the pound appreciated by nearly 13 per cent against the dollar between October 1976 and the end of 1977, there was virtually no net movement against the mark and a depreciation of over 6 per cent against the yen. The effective rate index rose by 7¾ per cent.

c. The Authorities' Response

8. The authorities intervened actively to contain the appreciation of sterling until the end of October. For the most part, however, there was no announced target. The March 1977 Bank of England Quarterly Bulletin claimed that official operations in the foreign exchanges were such as to moderate movements in either direction; the June and September Bulletins contented themselves with recording the increase in reserves. Only the December Bulletin, after the event, announced the ending of operations "to prevent a rise in the index", on 31 October. But it seems clear, and must have been increasingly clear at the time, what the strategy was. Broadly, 1977 seems to divide into three periods:

a) up to July, the aim was to keep the pound steady against the dollar. Since the pound was tending to decline against the other major currencies, there was actually a fall in the effective rate index over this time;

b) between August and October, there was a more general appreciation of sterling, despite the intervention;

c) after uncapping on 31 October, perversely the pound weakened a little. The effective index which reached 64.6 at the end of October fell to 63.8 in December. There was a marginal rise against the dollar (from 1.84 to 1.85) but bigger depreications against the yen and the continental currencies.

9. The intervention naturally contributed to a substantial rise in the reserves, as the following table shows; no doubt in itself this was welcome to the authorities.

Balance for Official Financing and the Increase in Reserves

£ million

	Balance for Official Financing (i)	Change in Official Liabilities (ii)	Revaluations and other Changes (iii)	Change in Reserves =(i)+(ii)+(iii)	Level of Reserves*
1977 Q1	1913	1284	- 31	3166	5592
Q2	908	250	- 23	1135	6727
Q3	2608	619	- 128	3099	9826
Q4	1932	74	-1117	889	10715

* End-period. Level at end-1976 was 2426.

10. Accompanying the intervention, the authorities sought to alleviate the pressure on sterling by reducing interest rates. Short term interest rates fell very sharply from October 1976 onwards; long rates also fell but only by about half as much as short rates.

Interest Rates

Per cent, last working day

		3 Month Inter-bank	20 Year Gilts
1976	Oct	15.3	16.0
	Nov	14.8	15.8
	Dec	14.4	15.5
1977	Jan	12.7	14.5
	Feb	11.4	13.9
	Mar	9.8	13.3
	Apr	7.4	13.1
	May	7.9	12.7
	Jun	7.9	13.3
	Jul	7.7	13.6
	Aug	6.7	13.1
	Sep	5.9	11.9
	Oct	4.9	11.0
	Nov	6.8	11.3
	Dec	6.7	11.2

11. The yield curve which had been only gently upward sloping in October 1976 thus progressively steepened over the next 12 months to the maximum gradient achieved at the end of October. It seems reasonably easy to explain why the authorities allowed short rates to behave in this way given their objectives for sterling. In the first few months, when intervention was heavy, short rates fell quickly.* From April through to July, when the upward pressure on sterling moderated, short rates stabilised. Thereafter, they were allowed to fall again as upward pressure on sterling intensified. But in November there was a step rise in short rates, maintained into December when pressure on the exchange rate had disappeared.

12. Explaining the behaviour of long rates is more complicated. Several factors seem to have been at work. First, with inflation rates between 14-18 per cent until October, real yields on long gilts were significantly negative throughout 1977. Many investors were doubtless reluctant to buy gilts in quantity in these

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* At this point, MLR was set by market-related formula so formally, official interest rate policy was merely following the market. But the authorities could have taken steps to set rates if the market pattern had displeased them. Indeed, in the first few months, the market related formula was suspended on a few occasions when the authorities believed the fall in rates was proceeding too quickly. But no systematic attempt was made to hold up interest rates.

conditions when future inflationary fears must have been re-awakened by the acceleration in monetary growth which was becoming apparent as the year proceeded. In the medium term, such fears proved well-founded. Inflation decelerated sharply in the first half of 1978 but later accelerated just as sharply in 1979. But in the short term, those who did invest in gilts did very well; 20 year gilts recorded a total return of over 55 per cent in the 15 months from October 1976 to end-1977.

13. A further factor holding up long yields was the heavy sales of gilts made by the authorities in part intended to sterilise the effcts of the intervention.

Financing the PSBR in 1977

£ billion

	PSBR	Financed by:			
		Non-bank Private Sector		Banks*	External Finance
		Notes & Coin	Other		
1977 Q1	1.0	0.1	3.2	-1.0	-1.2
Q2	2.0	0.3	1.5	0.5	-0.3
Q3	1.0	0.2	2.3	0.8	-2.2
Q4	1.9	0.4	1.7	1.5	-1.7
1977	5.9	1.0	8.6	1.8	-5.5

* Sterling only. Foreign currency borrowing included under external finance.

As the preceding table makes clear sales of debt to the non-bank private sector comfortably exceeded the PSBR in total. But because of the negative finance of the PSBR caused by the intervention and nearly as large as the PSBR itself, on the current funding rule, the PSBR was underfunded. Nearly £2 billion had to be borrowed from the banking system.

14. It seems probable that the increased slope of the yield curve was also in part attributable to the relative asset preferences of overseas residents. Until 1977, the overseas sector had scarcely bought gilts at all and whilst to a degree it "discovered" the gilts market in 1977, net purchases of public debt were relatively small.

Overseas Sector Transactions in Financial Assets in 1977

£ billion

	Q1	Q2	Q3	Q4	1977
Treasury Bills	0.4	-0.2	-	-0.3	-0.1
Public sector debt: sterling	0.2	-	0.3	0.5	0.9
foreign currency	0.9	1.1	0.4	0.2	2.7
Official Reserves and other overseas financing	-3.2	-1.2	-3.2	-2.0	-9.5
Sterling bank deposits	0.2	0.4	0.3	0.7	1.6
Sterling bank lending	0.1	-0.2	-0.2	-0.2	-0.4
Net foreign currency bank deposits	1.0	-0.6	0.9	0.4	1.7
Net company & overseas securities	-	0.3	-	-0.1	0.2
Net direct investment	0.3	-0.1	0.2	-	0.5
Other identified flows	-0.2	-0.4	-0.2	0.1	-0.8
Balancing item	1.0	1.4	0.7	0.3	3.4
Current account deficit (ie. overseas financial surplus)	0.7	0.5	-0.7	-0.4	0.1

15. The table shows that less than £1 billion of the total sales of sterling public debt were to the overseas sector, though sales were tending to increase as the year went on. As often, the biggest single overseas inflow was the balancing item - some £3½ billion. It is improbable that this represents unrecorded flows into public debt: it is more likely to represent unrecorded flows to the non-bank private sector - possibly short term ones.

d. Monetary Effects

16. In the negotiations with the IMF at the end of 1976, it was agreed that DCE should be restricted in 1977-78 to £7.7 billion. In March 1977, the then Chancellor announced that a consistent guideline for £M3 would be a growth range of 9-13 per cent. No targets were announced for narrow monetary aggregates.

17. Nevertheless, not surprisingly given their interest rate sensitivity, growth rates of narrow money did increase markedly.

Growth of Narrow Money

	Percentage change on a year earlier		
	M0	nib M1	M1
1976 Q4	11.2	8.4	10.3
1977 Q1	10.7	8.4	10.0
Q2	11.8	9.9	11.3
Q3	9.6	12.8	13.7
Q4	14.2	20.3	21.8
1978 Q1	15.6	22.5	23.0

18. Broad monetary conditions are less easily described. DCE was remarkably small throughout 1977; the outturn for 1977-78 was £3.8 billion, less than half the £7.7 billion target agreed with the IMF. The following table shows how this built up, compared, for context, to experience in the preceding two years.

Domestic Credit Expansion

£ billion

			Sterling Bank Lending to:		
	PSBR (i)	Sales of Public Debt to nbps (ii)	Private Sector (iii)	Overseas Sector (iv)	Domestic Credit Expansion [=(i)-(ii)+(iii)+(iv)]
1975-76	10.6	5.4	-0.6	0.4	5.1
1976-77	8.6	7.3	3.4	0.2	4.9
1977-78	5.5	6.6	3.8	1.1	3.8
(1977)	5.9	8.3	3.2	0.4	1.2
1977 Q1	1.0	2.9	0.1	-0.1	-1.9
Q2	2.0	1.4	1.3	0.2	2.0
Q3	1.0	2.3	0.7	0.2	-0.4
Q4	1.9	1.7	1.1	0.1	1.4
1978 Q1	0.6	1.3	0.7	0.6	0.7

19. It is apparent from the above table is that in spite of the rapid decline in interest rates, including base rates, bank lending in 1977 showed no great tendency to rise. With sales of public debt to the non-bank private sector comfortably exceeding the PSBR, DCE was inevitably very low. So neither bank lending nor DCE gave any indication of monetary looseness: quite the reverse.

20. But growth in £M3 was also accelerating and indeed the outturns for 1977-78*, at 16.4 per cent, exceeded the 9-13 per cent guideline. This can be seen by looking at the adjustments from DCE to £M3.

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* More strictly, the guideline was for the twelve banking months ending in mid-April.

DCE and £M3

£ billion

	DCE (i)	Public Sector External Finance (ii)	Overseas Sterling Deposits (iii)	Net Foreign Currency Deposits (iv)	Non-Deposit Liabilities (v)	Change in £M3+ [=(i)-(ii)-(iii)-(iv)-(v)]
1975-76	5.1	1.2	0.4	0.2	0.9	2.5 (4.1)
1976-77	4.9	1.1	0.2	0.6	0.8	2.8 (7.6)
1977-78	3.8	-4.3	1.5	-	0.5	6.2(15.4)
(1977)	1.2	-5.5	1.6	0.3	0.7	4.1
1977 Q1	-1.9	-1.2	0.2	0.3	-0.1	-1.0 (7.6)
Q2	2.0	-0.3	0.4	-0.4	0.7	1.7 (8.0)
Q3	-0.4	-2.3	0.4	0.3	0.1	1.1 (6.6)
Q4	1.4	-1.7	0.7	0.1	-0.1	2.4(10.0)

+ 12 month growth rates (end-period) in brackets.

21. Looking at this table, it is tempting to conclude that it was the heavy intervention, reflected in the £5½ billion negative public sector external finance, which caused the acceleration in £M3. It needs to be borne in mind, however, that intervention increases £M3 only if its counterpart is increased residents' holding of sterling deposits, and not foreign currency deposits or non-residents' sterling deposits. But the table shows that it was indeed largely residents who bought the sterling which the authorities offered for sale and they did hold it in bank deposits. This could reflect several factors. In the second half of 1977 a current account surplus of about £1 billion emerged. Perceiving the possibility of a capital loss on foreign currency, residents presumably held this in sterling or converted it at the earliest opportunity. Similarly, companies may well have reversed their leads and lags in payment in favour of sterling: in 1976 leads and lags would naturally have been adverse to the pound. This would be consistent with the behaviour of the balancing item.

22. One effect of such flows would doubtless be to complicate the interpretation of the bank lending and DCE figures. If companies did indeed receive sizeable quantities of sterling from overseas, it seems likely that they will have used some of it to repay bank borrowing. In that case, the apparent smallness of DCE would not

have indicated monetary tightness. In such circumstances, a tight stance would have required yet smaller DCE and perhaps even a contraction.

e. Appraisal

23. Without attempting a complete appraisal of the episode, it is possible to offer a few preliminary comments:-

(i) it is striking that after the exchange rate was uncapped in October 1977 sterling scarcely appreciated at all. This suggests that the equilibrium exchange rate throughout 1977 may never have been far above the level at which the authorities were seeking to contain it. But when it became apparent that the authorities were defending a ceiling, the market was effectively presented with a one way bet. If this was the case, then the authorities would have harvested substantial monetary difficulties for little achieved in terms of exchange rate management;

(ii) it is interesting that the narrow money aggregates, with their sensitivity to short rates, signalled the loosening of monetary conditions more decisively and rather earlier than did wider monetary indicators. This seems to reflect the larger fall in short rates than in long rates;

(iii) it is hard to know whether a different pattern of interest rates - lower longer term rates and higher short term rates - would have achieved an equivalent result for the exchange rate. At first sight it might have been achieved by a larger degree of underfunding, with the authorities borrowing more than the £1¾ billion that they did over the year from the banking system - though of course this might have been counterproductive had it added to inflationary expectations;

(iv) it is noticeable that despite the high short term gains which were to be made from the gilts market, in fact overseas residents bought relatively few gilts in 1977 - perhaps because

they were unfamiliar with the market. But a learning process developed and their purchases of gilts increased as the year proceeded. A decade later, with much greater international linkage between bond markets, one might expect earlier and larger overseas flows into gilts were a similar situation to arise.