

PO-CH/NY/0310

PART A



Part - A

**SECRET**

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PO -CH /NL/0310



PART A

Chancellor's (Lawson) Papers:

FUNDING POLICY AND  
ARITHMETIC: THE  
ALTERNATIVE TO BUYING  
BACK GILTS

DD's : 25 Year

*Didham*

25/10/95.

PO -CH /NL/0310

PART A





MINUTES OF A MEETING HELD AT 2.45 PM ON WEDNESDAY 22 JULY  
IN CHANCELLOR'S ROOM TREASURY

Those present

Chancellor		
Economic Secretary	Governor	)
Sir P Middleton	Mr George	)
Sir T Burns	Mr Flemming	) Bank of England
Sir G Littler	Mr Coleby	)
Mr Cassell	Mr Plenderleith	)
Mr Odling-Smee		
Mr Peretz		
Mr C W Kelly		
Mr Grice		
Mr M Richardson		
Mr Cropper		

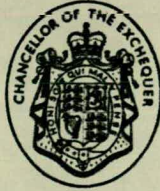
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**FUNDING POLICY REVIEW**

The Governor said that he thought it was important to look at the principles behind existing policy and any new rule. We did not have a precise knowledge of the effects of funding or of interest rate changes, but generally speaking the more funding, the more conditions were tightened. This effect worked through yields. There was no longer any quantitative guide to the respective emphases that should be placed on funding and short term interest rates in controlling monetary conditions. With a full fund rule there was a risk of loading too much emphasis on short term interest rates. This was an argument for relaxing "year endism".

2. The Chancellor said that he started with a prejudice against change. The paper discussed the fundamental issue of whether it was right to draw a distinction between banks and the non-bank private sector. He would welcome views on this.





3. Sir P Middleton said that funding objectives had grown up with M3 and the various steps on funding policy mirrored changes in the way that M3 was viewed. Questions over funding policy had arisen now because M3 no longer held target status. Mr Peretz thought what mattered was the yield curve rather than the identity of purchasers of Government debt; it was in any case increasingly difficult to know who the true holders of such debt were.

4. Mr George said that he thought the prior question was how funding policy affects the economy. The Bank's view was that it operated through long-term interest rates. Our ability to influence long-term rates independently of short-term rates was very constrained, but there was some room for manouvre. In that context, the impact of funding on the yield curve was important. Any rule could only be a first approximation and would have to be qualified. Even within the existing rule, we were not indifferent to the type and balance of funding achieved. A rule based on maturity of funding rather than on the sector purchasing public debt would also be an approximation. But given the way that the financial system had evolved, there could be increasing advantage in expressing the objective in this way. Before a move to a new maturity-based rule, more work would have to be done. For monetary control purposes, what mattered was the combined effect of private and public sector liquidity.

5. Sir T Burns said he had always been rather uncertain about how the funding rule impacted on monetary conditions. He viewed it as a process by which the Government limited its contribution to liquidity in the economy. He had a good deal of sympathy with the suggestion of basing a funding rule on the maturity of instruments the government issued rather than who buys them.





6. The Chancellor said that he thought it worth considering the balance between short-term interest rates and funding. Did we fund because we thought it allowed lower short-term interest rates for a given degree of monetary tightness? The Governor said that funding had a more immediate impact on the economy than operating on long-term rates via short-term rates. Sir P Middleton disagreed - it depended fundamentally on which had a bigger impact on the exchange rate. Mr George said that he thought interest rates and funding policy were complementary - we should be aiming at appropriate monetary conditions overall.

7. The Economic Secretary commented that the Governor's remarks seemed to be a variance with the views expressed in Mr Grice's paper. In his view a funding rule was necessary and some change in the rule was needed because of the abandonment of M3 as a target. An M4 funding rule was moving onto uncertain ground. However, a rule based on maturities was simple in itself and had the advantage of being centred on more certain ground.

8. Mr Grice said that he endorsed the Economic Secretary's views. The aim should be to ensure that the public sector did not contribute excessively to liquidity in the economy as a whole. He had much more difficulty with the notion that funding should be used to counter private sector liquidity. Experience suggested that as fast as the public sector mopped up private sector liquidity more was created.

9. The Chancellor concluded that a rule of some sort was necessary. He would be very unhappy with systematic over or under funding. He agreed that it would be sensible to allow for some carry-over of funding from one financial year to the next. This was made all the more necessary by the increased scale of intervention; intervention should be funded, but over a period of time. It would be helpful to come to some internal view about the timescale over which this should take place, otherwise it would





always be delayed. Further work would thus be needed on the precise form of end year flexibility to be adopted.

10. The question of the treatment of net debt sales to building societies should be deferred for the time being, pending investigation of the more radical option of a rule based on maturities. This should be set in hand. He would also be interested in details of practices in other countries. Some thought would have to be given to the presentation of this change, which might feature in his Mansion House Speech. The line would be that this change represented a sensible adaptation to evolution in the financial markets. Even though any change would take place in as low key a way as possible it would still be viewed as fundamental. It would be important to avoid it being seen as a weakening of policy.

### Markets

11. Reporting the market's reaction to the worse than expected trade figures, the Governor said the effective index had fallen by 0.4, but by 2 pm markets had steadied. The Bank had sold \$140 million just before noon, hopefully without being spotted. There had been a rather larger reaction in the gilts market.

12. The Chancellor commented that on share prices, there were signs that the long bull market was coming to an end. There could be a reaction in the markets generally tomorrow. It did not look as though there was great market pressure for an immediate rise in interest rates and the exchange rate was certainly not signalling that. We should continue with the policy of meeting any short-term pressure on the exchange rate with intervention; but if pressure continued we should be ready to move fast on interest rates buttressed by intervention.





**Bank Lending and Stock Market Settlement Problems**

12. The Chancellor enquired whether the Bank had reached a view on whether the settlement backlog in the Stock Exchange had contributed to the Bank lending figures. Mr George said that there was some suggestion that the settlement backlog was a larger factor in June than would normally be expected, largely because June only had a 3 week account period.

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CATHY RYDING

23 July 1987

Circulation

Those present



*pmf*

FROM: M G RICHARDSON

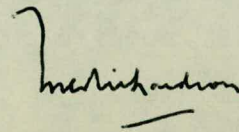
DATE: 24 July 1987

ECONOMIC SECRETARY

cc: Chancellor  
Sir P Middleton  
Sir G Littler  
Sir T Burns  
Mr Cassell  
Mr Peretz  
Mr Kelly  
Mr Grice  
Mr Rich  
Ms Bronk  
Mr Patterson) DNS  
Mr Wilson )  
Mr Plenderleith - B/E  
Prof Griffiths - No 10**FUNDING MEETING**

There are three items on the agenda for the meeting on Wednesday 29 July:

- i. Funding arithmetic.
  - ii. National savings.
  - iii. The outlook for gilt-edged funding.
2. I attach papers on each of these items, and a fourth on cost of funding.



M G RICHARDSON



SECRET

FUNDING ARITHMETIC 1987-88

(Note by MGI)

This note discusses the total funding requirement for the current financial year, based on the current funding rule.

2. A table showing the main elements of the arithmetic is at annex. The figures for the year as a whole are consistent with those in the Treasury summer forecast.

3. With National Savings producing £2 billion over the year, the arithmetic implies a gross gilt sales task of about £10 billion. This would be nearly £4 billion lower than the annual task as it appeared a month ago. The reasons for the reduction are as follows:

- a. The **PSBR** is assumed to be £1 billion - £1½ billion lower than a month ago and £3 billion lower than the Budget forecast. But at this stage of the year the margin of error on the PSBR forecast is ±£4 billion.
- b. It is now assumed that half the **intervention** up to the end of May will be unwound (by selling reserves to support sterling). Intervention therefore accounts for £2.4 billion of the funding requirement. But little unwinding has taken place so far: since the end of May reserve transactions have reduced the funding task by less than £100m. If intervention were to remain neutral from the end of July, the funding task would be £2¼ billion higher than is shown in the table.

4. Considerable uncertainty therefore surrounds the arithmetic, which might be thought more likely to increase than reduce. Three other uncertainties might also be noted:



- a. **Monetary sector purchases** of gilts are assumed to net to zero over the year as a whole. In the first quarter the monetary sector sold over £1.5 billion gilts, which would give a corresponding reduction in the funding task if not reversed.
- b. **Other public sector debt** to the npbs is assumed to reduce by £1.5 billion over the year as a whole. This position had been achieved by the end of the first quarter, so that the implicit assumption now is no net change in OPS debt holdings. In 1986-87 the OPS repaid £1.7 billion in the first quarter and a further £0.8 billion over the next three.
- c. The **buying-in** assumption excludes any element for purchases of 1989-90 maturities made to level the hump of stocks that mature in that financial year.

5. There is as yet no provision in the arithmetic for carry over of last year's underfund of £0.4 billion. This would give a corresponding increase in 1987-88 funding task.

6. On the assumption that the July target of £1500m sales is achieved, an annual gross gilt sales task of £10 billion would imply an average of something under 600m sales a month for the rest of the year. If intervention remained neutral from now on, the monthly striking rate would rise to about £850 m.

July 1987



## SECRET

## FUNDING : FINANCIAL YEAR POSITION

24/7/87

£ million u/a

	FORECAST		OUTTURN TO DATE
	Financial Year 1987/88	Implied Monthly Average	April-June 1987
PSBR excluding asset sales	6250	521	3008
Asset sales (-)	-5250	-438	-2397
PSBR	1000	83	611
Gilt redemptions/ buying in (+)	6950	579	2609
Monetary sector etc gilt purchase (+)	0	0	-1556
Intervention (+)	2400	200	4469
<b>A. FUNDING REQUIREMENT</b>	<b>10350</b>	<b>863</b>	<b>6133</b>
National Savings (-)	-2000	-167	-606
CTDs (-)	500	42	-244
Treasury bills etc (-)	0	0	-120
Other public sector debt (-)	1500	125	1543
Public sector Externals excl BGS and Intervention (-)	-400	-33	-409
<b>B. NON-GILT FUNDING (-)</b>	<b>-400</b>	<b>-33</b>	<b>164</b>
<b>C. GROSS GILT SALES REQUIRED FOR FULL FUND = A + B</b>	<b>9950</b>	<b>829</b>	<b>6297</b>
<b>D. Gross gilt sales to date</b>			<b>3965</b>
<b>E. Over(-)/under(+) funding to date = C - D</b>			<b>2332</b>



**NATIONAL SAVINGS - NOTE BY MGI**

This note reports the latest position on National Savings and comments on prospects for the three months to the end of September 1987. A table on recent funding is attached.

**Results for June 1987**

2. The total net contribution to funding from National Savings in June was around £235 million. Of this £107 million was net inflow of principal with £128 million in net accrued interest. The bulk of the net inflow continued to come from Income Bonds at £123 million although sales have been decreasing steadily over the last few months. Sales of the 33rd Issue fixed interest certificate decreased during the month from £10 million in the first week to £5 million in the last. Repayments from fixed interest certificates were some 25 per cent lower in June than in May producing overall a slightly lower negative inflow than in the previous month. The outflow from index-linked certificates continued although there was a drop in repayments as investors await crediting of the 5th supplement on 1 August. The Investment Account produced a small inflow of principal for the first time in this financial year due to a slight increase in deposits.

**Current position and prospects for July to September 1987**

3. The total net contribution to funding so far this year is £605 million. This is £105 million more than the pro rata amount needed to achieve the assumed National Savings contribution to funding of £2 billion.

4. The DNS forecast assumes that interest rates will remain unchanged throughout the forecast period. It produces a net contribution to funding of £447 million. Taken together with the net contributions so far this year this gives a total of £1052 million which is £50 million more than the necessary pro rata amount.

5. Sales of Income Bonds may be affected by the recent edging up of premium account rates at building societies together with



a direct campaign by the Nationwide to draw attention to Income Bond's less competitive position for basic rate taxpayers. DNS plan to start a television advertising campaign in mid-August. A net inflow of £300 million is expected for the forecast period.

6. The Investment Account forecast continues to be based for the time being on general trends following a backlog of work in Glasgow and produces a net contribution to funding of £171 million.

7. For fixed-interest certificates a net negative contribution to funding of £17 million is forecast. This assumes that sales will be around £5 million per week throughout and that the lower level of repayments in June will be maintained in July and August. The effects of the recent building society increases and of the two reductions in the GER are still unclear. The assumptions used in the forecast will not be fully tested until 24th Issue maturities start to build up in late September.

8. After crediting of the 5th supplement on 1 August repayments of index-linked certificates in August and September are forecast, on the basis of repayments last year, to be around £180 million and £100 million respectively. Sales are expected to continue at their current average, £3-4 million per week. These assumptions produce a net negative contribution to funding of £100 million.

**MGI Division**  
**24 June 1987**



Table 1

NATIONAL SAVINGS NET CASH FLOW AND FUNDING CONTRIBUTION (fm)

	1986-87			1987-88			1986-87	
	Jul-Sep	Oct-Dec	Jan-Mar	Apr	May	June	Apr-Jun	
Deposits Less Repayments of Principal								
F I NSCs	38	168	67	-80	-51	-34	-164	-17
I L NSCs	-140	-126	-76	-10	-15	-11	-36	-105
Investment A/c	64	12	60	-24	-3	4	-23	20
Income Bond	465	379	567	179	139	123	441	402
Deposit Bond	51	38	57	17	17	8	42	41
Other	18	-9	43	11	13	17	40	1
Total Net Inflow	496	462	718	93	100	107	300	376
Gross Accrued Interest	599	559	577	177	160	192	529	543
Payments of Accrued Interest	-232	-225	-249	-75	-85	-64	-224	-259
Net Accrued Interest	367	334	328	102	75	128	305	284
Total Net Inflow plus Net Accrued Interest = Funding Contbn.	863	796	1046	195	175	235	605	660

[FMEET1]



SECRETSeasonally adjusted  
£ mnsGILT-EDGED FUNDING IN AUGUST  
(Note by the Bank of England)

1 This note discusses gilt-edged funding policy in August.

The funding arithmetic

2 Tables 1 and 2 show (unadjusted and seasonally adjusted) the forecast of gross gilt sales required to achieve a full fund of the PSBR over the financial year as a whole, on the present policy definition which defines "funding" as public sector debt sales to the domestic non-bank private sector together with external finance of the public sector.

3 The financial year forecast on which the tables are based has been revised since the last funding meeting in the light of the Treasury's June forecast. They differ from the Treasury's figuring in holding the reserves constant from now on, whereas the Treasury's forecast projects a fall of 2100 between end-June 1987 and end-March 1988.

4 The PSBR for 1987/88 is now forecast to be 1000, 1500 less than assumed last month and 3000 less than was forecast at the time of the Budget. This downward revision broadly reflects the lower than expected PSBR outturn so far this financial year. The assumed level of asset sales, 5250, takes into account the effect of transactions between the Government and BP. Local authorities and public corporations are expected to repay some 1500 of debt to the non-bank private sector over the year, which is slightly less than has already occurred. These figures give a "modified" borrowing requirement of 2500.



5 With gilt-edged maturities amounting to nearly 7000, the projections give a total gross funding need of 14150 over the year as a whole. Of this 2000 is assumed to come from National Savings (a monthly average of 167) and 12250 from gross official sales of gilt-edged (a monthly average of some 1020).

6 Most of the modified PSBR (not seasonally adjusted) has already been recorded in the first three months of the financial year. Assuming no further change in the reserves, this implies that to achieve a full fund over the year as a whole net gilt sales outside the monetary sector should total 2400 in the last nine months of 1987/88. With maturities of 4300 and assumed gilt purchases by the banks of 1600 over the same period, this gives a gross gilt sales target of some 8300, or about 920 a month. Taking into account sales of 1410 so far in July, the striking rate from August to March is reduced to 860 a month.

7 The major current uncertainty affecting these projections is the assumption made about future movements in the reserves, which could in practice go either way.

8 Apart from the PSBR itself, there is also uncertainty about the funding effect of the "other public sector". The projection assumes a run-down of 1500 in local authority and public corporations' borrowing from the non-bank private sector during 1987/88: this is less than the total in the first three months. A continued run-down of such borrowing would add to the need for gilt sales. These would also be higher if we were to reverse the 400 underfund last year.

9 Monetary sector holdings of gilts fell by almost 1600 between end-March and end-June, virtually reversing the build-up that occurred during 1986/87. While it seems likely that the banks will be net purchasers of gilts during the remainder of the year, it is possible that the scale of purchases will be different than the forecast assumes, which would change the amount of gross gilt sales.



10 The projections as they stand point to a monthly target for gross sales of around 900. But in view of the uncertainties we need to be clear about how we would cope with any substantial variation over the rest of the year. An important consideration is that we can never be confident of stepping up the funding volume quickly if market happened to be unreceptive whereas we can - eg. by buying in stocks in the heavy maturity period - be much more confident of reducing the rate of funding in relatively short order. This is the essential reason for seeking to keep ahead of the game. Of course this can have cost implications which may be favourable if yields generally rise or unfavourable if they fall; and we obviously need to watch that in staying ahead we do not take undue risk of finding ourselves in the position where we have sold higher yielding stock and subsequently buy in on lower yields. That risk does not seem particularly severe at present. The conventional funding achieved so far - at a faster rate than the projections suggest is necessary over the rest of the year - has been at yields down to around 8 1/2% and it is at present difficult to see yields going much lower than this before next Spring. Certainly the Treasury forecast has them going higher.

11 Against this background we suggest that we should aim to keep ahead of the game in August and September by seeking to achieve gross sales of up to 1000 a month.

### Market conditions

Table 3

Yields	29 Sep 86 (peak)	8 May 87 (approx low point)	24 June 87 (last funding meeting)	22 July 87
Shorts	11 5/8	8 5/16	9	9 1/2
Mediums	11 1/4	8 11/16	9 1/4	9 5/8
Longs	10 5/8	8 3/4	9	9 3/8
IGs (2006) (real yeild)	3 7/8	3 5/8	3 15/16	3 15/16



12 Funding at even this reduced pace may not be easy. The market is unsettled at the moment, and has become more nervous about the buoyancy of domestic demand and credit, the trade prospects and inflation. Gilts have continued to drift back, with yields currently around 9 1/2%. In these conditions demand for gilts is likely to be uneven and few in the market anticipate any very strong demand. With profit-taking emerging in equities, and the market becoming less certain about the future prospects for inflation, the indexed sector has remained fairly flat, despite the reversal in conventional market. We have sold back the indexed stock we bought in earlier when prices were weaker.

### Funding instruments

- 13 Apart from near maturities we have in our portfolio:
- (i) 1130 of full-coupon conventional stock, of which 1000 is the 91 tap stock, and most of the rest is also in shorts.
  - (ii) 470 of the 92 low coupon;
  - (iii) 40 of index-linked, mainly the 2013 and 2016.

Our debt to NILO is 260, and we still hold the 200 of 8% TSY 91 reserved for the debt.

14 One aim will be to make sales of the tap stock. This could well involve cutting its price once the market has stabilised. If the market falls further immediately we may wish to encourage it to stabilise by a modest amount of buying in of 89/90 maturities, a small amount of which we already hold. With plentiful conventional stock on our book and the auction of a long stock in September, there is limited call for further conventional issues until after then in current market conditions. We hope to make further sales of the low coupon tap once the BAA refunds have been made. If demand in the index-linked sector continues to pick up our current holdings will soon be exhausted. In this event, we would wish to bring further small amounts of indexed stock to meet this demand, with the precise amount and composition depending upon market circumstances.



Table 1

Not Seasonally adjusted

(Monthly averages in brackets)

£ millions

	June 1987	April - June 1987	FY 1987/88 (Modified June forecast) (a)	July 1987 - Mar 1988 (implied)
1 PSBR	- 778	+ 613	+ 1000	+ 387
2 Net sales of local authorities' and public corporations' debt by the non-bank private sector	+ 326	+ 1546	+ 1500	- 46
3 "Modified PSBR"(b)	- 452	+ 2159	+ 2500	+ 341
Financed by				
4 National savings	- 235	- 606	- 2000 (-167)	- 1394 (-155)
5 CTDs	- 117	- 244	) ) ) + 500	) ) ) + 864
6 TB's etc	- 137	- 120	)	)
7 Reserves	- 199	+ 4469	+ 4700	+ 231
8 Other public sector externals	- 381	- 409	- 400	+ 9
Net gilt sales:				
9 nbps and overseas	- 1288	- 2912	- 5300	- 2388
10 Monetary sector (c)	+ 788	+ 1556	0	- 1556
11 Maturities	- 620	- 2609	- 6950	- 4341
12 Gross official sales (d)	- 1120	- 3965	-12250 (-1021)	- 8285 (- 921)
13 Overfunding(-)(e)	- 2809	+ 2337	0	- 2337

(a) Figures as in Treasury's June forecast, except for the reserves which are assumed to show no further change after July.

(b) Equals line 1 + line 2

(c) And public corporations and local authorities

(d) Equals line 9 + line 10 + line 11

(e) Equals line 3 + line 4 + line 5 + line 6 + line 7 + line 8 + line 9



Table 2

Seasonally adjusted

(Monthly averages in brackets)

£ millions

	June 1987	April - June 1987	FY 1987/88 (Modified June forecast) (a)	July 1987 - Mar 1988 (implied)
1 PSBR	+ 297	+ 396	+ 1000	+ 604
2 Net sales of local authorities' and public corporations' debt by the non-bank private sector	+ 208	+ 1595	+ 1500	- 95
3 "Modified PSBR"(b)	+ 505	+ 1991	+ 2500	+ 509
Financed by				
4 National savings	- 284	- 721	- 2000 (-167)	- 1279 (-142)
5 CTDS	- 100	- 373	) ) ) + 500	) ) ) + 962
6 TB's etc	- 98	- 89	)	)
7 Reserves	- 199	+ 4469	+ 4700	+ 231
8 Other public sector externals	- 373	- 380	- 400	- 20
Net gilt sales:				
9 nbps and overseas	- 1288	- 2912	- 5300	- 2388
10 Monetary sector(c)	+ 788	+ 1556	0	- 1556
11 Maturities	- 620	- 2609	- 6950	- 4341
12 Gross official sales(d)	- 1120	- 3965	-12250 (-1021)	- 8285 (- 921)
13 Overfunding(-)(e)	- 1837	+ 1985	0	- 1985

(a) Figures as in Treasury's June forecast, except for the reserves which are assumed to show no further change after July.

(b) Equals line 1 + line 2

(c) And public corporations and local authorities

(d) Equals line 9 + line 10 + line 11

(e) Equals line 3 + line 4 + line 5 + line 6 + line 7 + line 8 + line 9



Cost of Funding as at 23 July 1987(Note by MG2 Division)Main Points

- indexed gilts look cheaper than conventionals at all maturities, on all but the High Inflation scenario. In the High Inflation case, the reverse is true; over 20 years, on this scenario, the excess cost of indexed stock would be considerable. (Table 1)
- if inflation turns out in accordance with the MTF5 or even a little higher, short gilts are expected to be cheaper than medium or long issues. But if inflation accelerates, as in the High Inflation case, longer stocks would be preferable on cost grounds. (Table 1)
- gross conventional sales have been predominantly mediums and longs, resulting in a rise in the average life of dated gilts outstanding. (Table 3)
- the proportion of shorts in 1987-88 to date have been below the presumption of the Guidelines, though comparison is complicated by calls from partly-paid stock issued in 1986-87 and by transactions in the current financial year before the Guidelines were adopted. (Table 3)
- the rise in gilt yields since the last Funding Meeting has left National Savings Certificates looking less expensive relative to gilts but, except on the High Inflation outlook, still a little dear. (Table 4A).



SECRET

TABLE 1: COMPARATIVE COSTS OF AN INITIAL BORROWING OF £100 BY ISSUING A GILT

	£s, net of tax*, cash			
	Inflation Scenarios**			Weighted Projection
	MTFS Case	Low Inflation Case	High Inflation Case	
<b>(a) Five Years</b>				
5 year Conventional	137-140	137-140	139-143	137-140
5 year Index-Linked	126-128	112-114	156-159	128-130
<b>(b) Ten Years</b>				
5, then 5, year Convs	191-198	177-182	241-255	196-204
10 year Conventional	202-209	194-201	228-240	205-212
10 year Index-Linked	178-183	140-144	311-320	192-197
<b>(c) Twenty Years</b>				
5, then 15, year Convs	325-346	251-262	726-813	372-401
20 Year Conventional	372-396	322-338	631-707	402-432
20 year Index-Linked	348-358	213-218	1235-1268	455-468

\* Average marginal tax rates are not known with precision and likely ranges are used here instead so that the cost figures also emerge as ranges.

\*\* (i) The MTFS, Low and High Inflation scenarios are weighted 5:1:1 for the Weighted Projection case.

(ii) The MTFS case assumes the MTFS inflation forecast (of around 3 per cent a year) to 1991 and 2.5 per cent a year thereafter in line with the central case of the long-term assumptions paper (which is used by departments for public expenditure planning purposes).

(iii) The Low Inflation case has inflation falling to 2 per cent by 1990 and price stability achieved and sustained after 1994.

(iv) The High Inflation case has inflation accelerating to 6½ per cent by 1990 and thereafter gradually to 10 per cent by 1995. Inflation is then taken to remain at this level.



TABLE 2: BREAK-EVEN YIELDS AND BREAK-EVEN INFLATION RATES

Per cent

## A: Break-Even Yields

	MTFS	Low	High	Weighted * Projection
(a) 10 Year **	8.1	7.1	11.3	8.4
(b) 20 Year ***	7.2	5.6	12.4	7.7

\* MTFS, Low and High Inflation scenarios are weighted 5:1:1.

\*\* Below the rate shown it would be cheaper to issue a 10 year conventional than a five, followed by a five, year conventional.

\*\*\* Below the rate shown it would be cheaper to issue a 20 year conventional than a five, followed by a fifteen, year conventional.

## B: Break-Even Inflation Rates \*

## Average Inflation Rate in Each Scenario

## Break-even Inflation Rate at

	17 July 1987	MTFS	Low	High	Weighted Projection
(a) 5 years	4.1 - 4.9	3.0	2.0	6.4	3.3
(b) 10 years	3.8 - 4.5	2.7	1.0	8.0	3.2
(c) 20 years	3.6 - 4.1	2.6	0.5	9.0	3.2

\* At the break-even inflation rate the cost of an index-linked gilt is the same as that of a conventional. Below it, the IG will be cheaper than a conventional, and above it more expensive.



## SECRET

**TABLE 3: GROSS SALES OF GILTS TO DATE IN RELATION TO THE GUIDELINES****A. The Guidelines for Gross Issues of Conventionals**

<u>Yields on medium and Long Stocks (%)</u>	<u>Proportion of Gross Issues (%)</u>	
	<u>Shorts</u>	<u>Mediums and Longs</u>
above 10½	100+	consider buying in
10-10½	95	5
9½-10	80	20
9-9½	65	35
8½-9	50	50
8-8½	35	65
7½-8	20	80
7-7½	5	95
below 7	consider refinancing with longs/mediums	100+

**B. Gross Sales**

£ billion (Percentage of total in brackets)

**Conventionals**

	<u>Shorts</u>	<u>Mediums</u>	<u>Longs</u>	<u>Total</u>
1987-88*	0.9 (17)	2.0 (38)	2.3 (44)	5.2
1987 April	0.0	0.1	1.5	1.6
May	0.5	0.8	-	1.3
June	0.4	0.6	0.2	1.2
July**	0.0	0.5	0.6	1.1
Calls	-	-	-	-

**Index-linked**

1987-88*	0.0 (0)	0.1 (50)	0.1 (50)	0.2
1987 April	-	-	-0.2	-0.2
May	-	-	0.2	0.2
June	-	-	-0.1	*-0.1
July**	-	0.1	0.2	0.3
Calls	-	-	-	-

<u>Memo item:</u>	<u>1-7 Years</u>	<u>7-15 Years</u>	<u>Over 15 Years</u>	<u>Total</u>
1987-88 Conv	1.2 (23)	1.7 (33)	2.3 (44)	5.2
IG	0.0 (0)	0.1 (50)	0.1 (50)	0.2

\* Sales secured for 1987-88

\*\* To July 21.

**C. Average Life of Dated Gilts**

	<u>All</u>	<u>Conventionals only</u>
End 1986-87	10.7	9.6
21 July 1987	10.8	9.7



TABLE 4A: NATIONAL SAVINGS INSTRUMENTS : FIXED RATE PRODUCTS

## A. Costs of an Initial Borrowing of £100 over Five Years

	£s, net of tax, cash			
	MTFS Case	Low Inflation Case	High Inflation Case	Weighted Projection
Fixed Interest National Savings Certificate (FINSC)	140	140	140	140
Index-Linked National Savings Certificate (ILNSC)	141	134	164	143
Conventional 5 Year Gilt	137-140	137-140	139-143	137-140

## B. Equalising National Savings Rates

	Per cent			
Rate on FINSC to match Cost of Conventional Gilt	6.5-7.0	6.4-6.9	6.9-7.4	6.5-7.0
Current rate on FINSC	7.0	7.0	7.0	7.0
Rate on ILNSC to match Cost of Conventional Gilt *	3.5-4.0	4.4-4.9	0.5-1.0	3.2-3.7
Current rate on ILNSC *	4.0	4.0	4.0	4.0

\* In addition to inflation-proofing.



## SECRET

TABLE 4B: NATIONAL SAVINGS INSTRUMENTS : VARIABLE RATE PRODUCTS.

Compound Return	Per cent			
		Tax Rate (%)		Average Administrative Cost
	0	27	60	
Income Bond (1)	11.0	8.0	4.4	0.2
Deposit Bond	10.5	7.7	4.2	0.3
Investment Account (2)	10.0	7.3	4.0	0.4
Premium Bond	7.0	7.0	7.0	1.1
Savings Certificate on GER terms	7.0	7.0	7.0	0.2 (3)
-----				
12 Month Cost of Government Borrowing (4)	8.9	6.5	3.6	N/A
CTDs	9.4	6.9	3.8	N/A
Bank Retail Deposit Rate (5)	6.3	6.3	3.5	-
Building Society Retail Deposit Rate (5)	8.0	8.0	4.4	-

(1) Assuming interest reinvested in Investment Account.

(2) Estimated net of tax cost is 7.8 per cent.

(3) Average for all certificates.

(4) Yield on a basket of gilts with maturities clustering around one year.

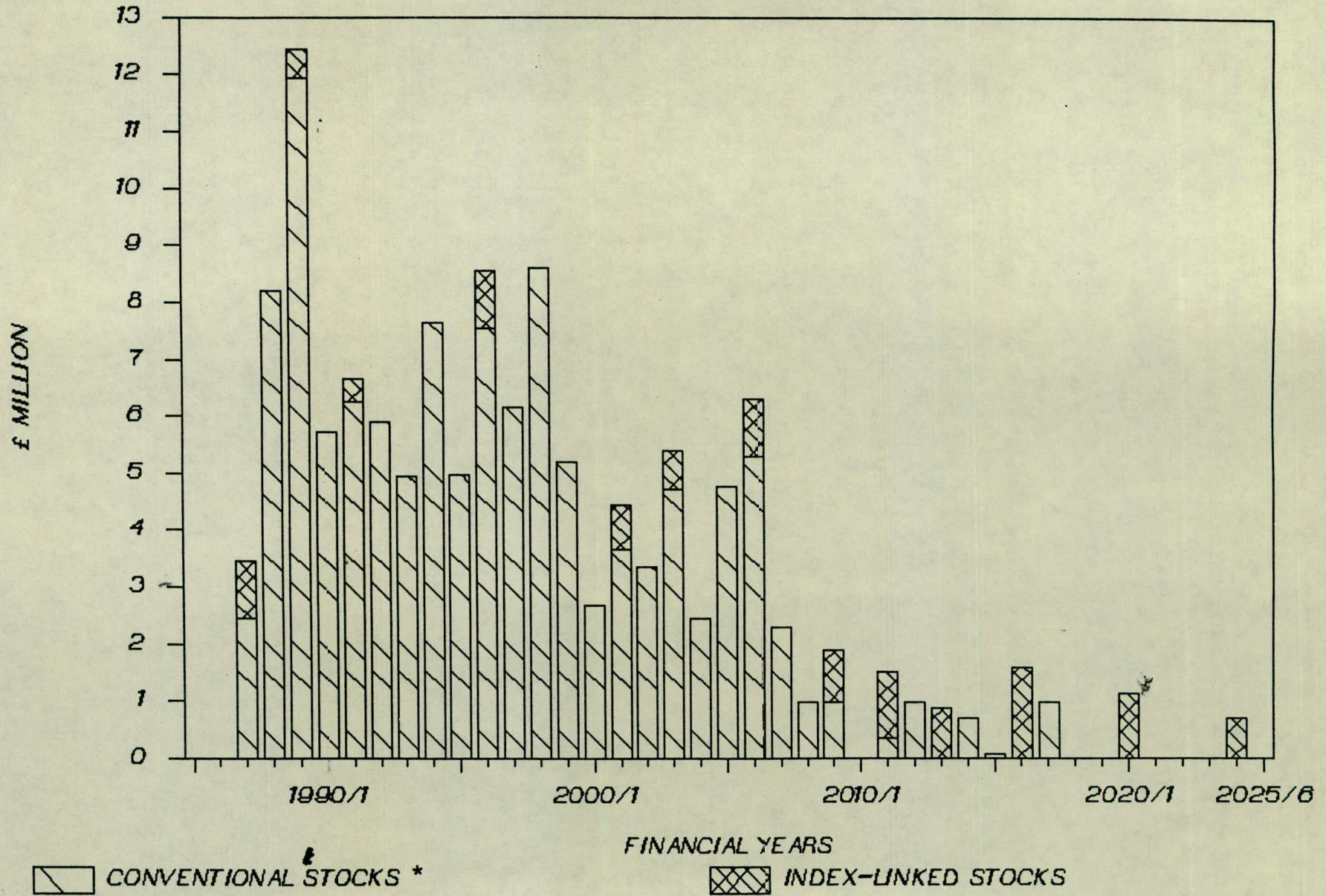
(5) Average of rates applying to the top bands of selected high interest accounts.



CHART A:

# MATURITIES OF DATED STOCKS

POSITION AT 21 JULY 1987



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\* Assuming (i) Existing convertibles unconverted, and (ii) Final redemption date if optional.







SECRET

point to a funding task of around £10 billion for the year as a whole - some £4 billion less than had seemed in prospect a month ago. A neutral intervention assumption would suggest a funding requirement of around £12½ billion. These figures implied a requirement for gross gilt sales of £600-850 million a month over the remainder of the financial year. This was somewhat lower than the average of £1300-1400 million a month achieved this year so far, which as intended had left the authorities a little ahead of the game.

3. Mr Cassell asked that in future the funding table should include a column showing the funding requirement over the remainder of the year. The table should also reflect the Chancellor's decision to fund this year the underfund of £0.4 billion in 1986-87. The Economic Secretary asked that the Treasury and Bank review jointly the future format of the funding table.

National Savings

4. Mr Patterson said that the June contribution to funding was buoyant at £235 million. DNS were currently forecasting a contribution of £190 million in July but things were much more uncertain after that. They expected heavy outflows from index-linked certificates in August and September; and when the 24th Issue maturities started to build up in the Autumn. The Economic Secretary asked what effect the planned advertising campaign was likely to have. Mr Ward felt that it might add some ten of millions of pounds to net inflows.

5. Mr Cassell commented that the mortgage rate reductions already announced were likely to be reflected in time in lower deposit rates which could have implications for the competitiveness of DNS products. The Economic Secretary said that the National Savings position should be reviewed again after the September funding meeting. In the meantime the assumption of an annual contribution of £2 billion should remain.

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Gilt-edgedi. The Market

6. Mr Plenderleith said that the gilts market had been in retreat for the last 2 or 3 weeks. The market had been set back the previous week following publication of the money supply figures - in particular the high level of bank lending - and the retail sales and trade figures. This week, however, had seen some bounce back. Yields were around 9½ per cent across the list but it was unclear whether they would settle around this level or continue to fall further. The market was likely to focus on the trade figures in a fortnight's time and the money supply figures a week later. Any action by the authorities in the meantime would obviously affect market sentiment.

ii. Gilt Sales Target

7. Mr Plenderleith reported that the outturn for gross gilt sales in July looked likely to be about £1400 million which was consistent with the target set in June. Mr Peretz had already explained that the funding arithmetic indicated a requirement for gross gilt sales of between £600-850 a month, or £900 million if the underfund from the previous year was included, for the remainder of the year. The Bank recommended keeping ahead of the game, both because of the uncertainty about future movements in the reserves and because of it being operationally more difficult to accelerate funding volume than to reduce the rate of funding if this proved necessary. The Bank therefore suggested a target of £1 billion in both August and September. Mr Kelly commented that the balance of probability was that over the year as a whole intervention was more likely to be unwound than to build up further. This suggested that the funding requirement was likely to be less than a neutral intervention assumption implied.



iii. Funding Instruments

8. Mr Plenderleith said that the Bank had £1 billion of the 1991 tap stock in its portfolio as well as £470 million of the 1992 low coupon and £30-40 million of IGs, mainly the 2013 and 2016. They would be looking for the market to consolidate and advance before bringing the 1991 tap but even then the price may have to be reduced as it was currently standing at about £2 below the tender price. If the 1991 tap was sold out it would satisfy the proposed funding requirement for August. A second auction of up to £1 billion of longs had now been announced for September. The Bank were considering a partly paid with the second call perhaps in October. In addition to this and subject to market conditions the Bank might propose a package of tranches with maturities in the 1990s or 2000s, similar to that issued in June. There was also a possibility that a differential between IGs and conventionals might appear if, as seemed possible, significant switching out of the equities market into IGs developed. If this were the case the Bank might look to bring a package of IGs.

9. Mr Cassell commented that given the current portfolio and forthcoming auction, there was only really room for at most one package of tranches during August and September even if a funding target for the two months of £2 billion was accepted.

10. The Economic Secretary noted that the authorities had sold more longs and mediums so far this year than the guidelines indicated. It was sensible therefore that the aim should be that any new issues over the next two months should be of shorts or IGs. If conditions were poor, and yields high, it would be acceptable to fall a little short of whatever target was set.

iv. Levelling the Maturity Hump

11. The Economic Secretary commented that the funding arithmetic suggested that a situation might arise later in the year where the authorities did not wish to sell gilts for a period. He



SECRET

asked how the Bank would handle this. Mr Plenderleith did not feel that this would cause insuperable problems. The Bank would not wish to withdraw entirely from the market, rather this might provide the opportunity to do some buying in of peak maturities, notably in 1989-90, given the right market conditions. Mr Peretz supported the aim of buying in some of the stocks due for redemption in 1989-90, which was one of the objectives set out in the funding guidelines.

12. Mr Plenderleith said that there were three ways that the Bank might approach this task. They could invite the market to offer stock. The Bank would not want to take this course because such action was reserved for circumstances when the authorities felt that it was important to assist the market in turning a corner. This was not the case at present and action of this sort would be taken as a dramatic signal by the market. A second option would be for the Bank to actively attempt to pick up stock in the market. There was little doubt that this would also be spotted by the market and be taken as a signal. The Bank would prefer therefore to adopt an opportunistic approach towards buying in. This would inevitably be on a limited scale initially. Mr Althaus added that it would be a delicate operation. The maximum that the bank was likely to be able to buy in in this way in the current financial year would be about £1 billion.

v. September Auction

13. Mr Plenderleith said that the Bank would wish to propose a very long stock of 20 years plus maturity for the September auction. Mr Cassell said that in view of past discussions on such maturities and the recent increase in long-term yields the Bank would need to set out the arguments fully. The Economic Secretary asked that the Bank write at latest in the week beginning 17 August setting out the reasons for this proposal.

SECRET



vi . Conclusion

14. The Economic Secretary concluded that a funding target ceiling of £2 billion should apply in August and September. There would be no funding meeting in August but the position should be reviewed by officials in early September. Apart from funding that was predetermined (including the auction) the aim should be to fund only by shorts and IGs over that period, with the understanding that the Bank would not seek to fund up to the ceiling if market conditions were wrong. Over the months ahead, the Bank should aim to buy in some of the stocks due for redemption in 1989-90 if the opportunity presented itself.

cc: Those present  
Chancellor  
Sir P Middleton  
Sir T Burns  
Sir G Littler  
Prof B Griffiths - No 10



COVERING SECRET

20

FROM: M G RICHARDSON  
 DATE: 18 September 1987

ECONOMIC SECRETARY

cc: Chancellor  
 Sir P Middleton  
 Sir G Littler  
 Sir T Burns  
 Mr Cassell  
 Mr Peretz  
 Mr Kelly  
 Mr Grice  
 Mr Rich  
 Mr Carr  
 Ms Bronk  
 Mr Patterson) DNS  
 Mr Wilson )  
 Mr Plenderleith - B/E  
 Prof Griffiths - No 10

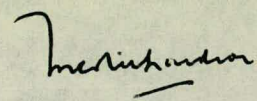
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FUNDING MEETING

There are three items on the agenda for the meeting on Wednesday 23 September:

- (i) Funding arithmetic
- (ii) National Savings
- (iii) Gilt-edged funding in October.

2. I attach papers on each of these items<sup>\*</sup>, and a fourth on cost of funding.



M G RICHARDSON

\* except (iii), which will not be available before Monday

COVERING SECRET



SECRET

FUNDING ARITHMETIC 1987-88(NOTE BY MGI)

This note discusses the total funding requirement for the current financial year, based on the current funding rule.

2. A table showing the main elements of the arithmetic is annexed. The figures for the year as a whole are mostly consistent with those prepared for the financial forecast overview.

3. With National Savings producing £2 billion over the year, the arithmetic implies a gross gilt sales task of about £10 billion. This would be about the same as the annual task as it appeared at the end of August. There have however been some offsetting changes within the total:

- a. the monetary sector is assumed to make £1 billion net disposals of gilts over the year, reducing the funding task by the same amount; this would still involve £530m net purchases over the remainder of the year. A revised assumption about other public sector externals reduces the funding requirement by a further £100m.
- b. these two influences are partly offset by the assumptions that there will be a higher run-down in other public sector debt (by £500m), and that CTDs will contribute a larger de-fund (by £250m). In addition, the 1986-87 underfund of £400m has now been added into this year's funding requirement.

4. There are two major uncertainties. The PSBR is one; the other is intervention. The arithmetic still assumes that half the intervention up to the end of May will be unwound - amounting to a funding requirement over the year of £2.4 billion. At the end of August however, very little of this unwinding had taken place. If intervention were assumed to be neutral in effect after the end of August, the gross gilt sales target would be £2 billion higher.

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5. The redemption/buying-in assumption excludes any element for purchases of 1989-90 maturities made to level the hump of stocks that mature in that financial year.

6. On the assumption that the auction stock is sold out this month, a £10 billion annual gross gilt sales task would imply a striking rate of something under £600m a month for the last six months of the year. If intervention remained flat from the end of August, the average sales per month needed would rise to just over £900m.

18 September 1987



£ million

FORECAST	OUTTURN	RESIDUAL
-----	-----	-----
Financial Year 87/88	April - Aug 1987	Sep 87 - March 88

## PSBR AND FUNDING TARGET

1 PSBR excl asset sales	6000	4793	1207
2 Asset sales (sales-)	-5000	-3362	-1638
	-----	-----	-----
3 PSBR	1000	1431	-431

## FINANCED BY:

4 OPS debt sales to nbps (sales-)	2000	1751	249
5 National Savings (sales-)	-2000	-1052	-948 * -135
6 CTDs (sales-)	750	-136	886
7 Treasury bills etc (sales-)	0	-255	255
8 Intervention (reserves inc+)	2400	4440	-2040
9 Public sector externals excl intervention and gilts (inc-)	-500	-319	-181
	-----	-----	-----
10 NET GILT SALES TO NBPS & OVERSEAS NEEDED FOR FULL FUND (sales+)	3650	5860	
11 Adjustment for 1986/87 underfund	400		
12 OVER(-)/UNDER(+) FUNDING (10+11-13)	-400	2253	-2653

## GILT SALES:

13 Net purchases by nbps and overseas (purchases+)	3650	3607	43
14 Net purchases by monetary and other public sector (purchases+)	-1000	-1532	532
15 Maturities	6950	3653	3297
	-----	-----	-----
16 GROSS OFFICIAL SALES	10000	5728	4272
17 Monthly average gross gilt sales	833	1146	610

\* average per month

Relationship between lines:

$$3 = 1 + 2$$

$$10 = 3 + 4 + 5 + 6 + 7 + 8 + 9$$

$$16 = 13 + 14 + 15$$



NATIONAL SAVINGS - NOTE BY MGI

This note reports the latest position on National Savings and comments on prospects for the three months to the end of November 1987. A table on recent funding and the implied contribution for the rest of the year is attached.

Results for August 1987

2. The total net contribution to funding from National Savings in August was around £227 million. Of this £26 million was net inflow of principal with £201 million in net accrued interest. The bulk of the net inflow continued to come from Income Bonds at £96 million although the pattern of decreasing sales is continuing. Sales of the 33rd Issue fixed interest certificate were around £4 million less than in July. Repayments of fixed interest certificates fell by about £2 million. On the basis of past experience, repayments of index-linked certificates were forecast at around £180 million in August following the crediting of the 5th supplement. In fact repayments were only £95 million. Sales continued to be sluggish (about £3m a week); overall there was an outflow of £41 million. Investment Account is continuing to produce a small inflow of principal.

Current position and prospects for September to November 1987

3. The total net contribution to funding so far this year is £1,058 million. This is £223 million more than the pro rata amount needed to achieve a National Savings contribution to funding of £2 billion.

4. The DNS forecast assumes that interest rates will remain unchanged throughout the forecast period. It produces a net contribution to funding of £336 million. Taken together with the net contribution so far this year this gives a total of £1394 million - £58 million ahead of the striking rate needed to secure £2 billion.



5. Sales of Income Bond fell slightly in August. An advertising campaign which started in mid-August has not so far yielded any real boost to sales. This contrasts sharply with the experience when a similar campaign was run in early 1987. Total sales for the period are forecast at £495 million.

6. The processing backlog at Glasgow continues to delay information on Investment Account flows. A net inflow of £10 million is assumed for each of the forecast months. With gross accrued interest of £156 million, the total net contribution over the three months is £186 million.

7. For fixed-interest certificates a net outflow of £148 million is forecast. This assumes that sales will continue at around £5 million per week throughout. A substantial increase in repayments is expected in late September and October when about £1 billion worth of 24th Issue reaches maturity, though the vast majority of this is in practice expected to remain invested on GER terms.

8. Sales of index-linked certificates are assumed to continue at around £4 million per week. Repayments are expected to fall to £60 million in September and £50 million each in October and November. A net outflow of £88 million is forecast.

**MGI Division**  
**18 September 1987**



CONFIDENTIAL

NATIONAL SAVINGS NET CASH FLOW AND FUNDING CONTRIBUTIONS (£M)

	1986-87 Full year	1987 - Jun	1987 - Jul	1988 Aug	Apr-Aug	Sep 87 to Mar 88 Implied *	Forecast next 3 months
Deposits less Repayments of Principal							
FINSC	290	-34	-47	-49	-260	-311	-210
ILNSC	-447	-11	-12	-41	-90	-119	-50
Investment A/c	156	13	9	5	36	65	30
Income Bond	1813	123	117	96	653	715	310
Deposit Bond	187	8	10	7	60	72	36
Other	52	17	11	8	60	36	-9
Total net Inflow	2051	116	88	26	459	458	107
Accrued Interest	2278	192	160	289	980	949	484
Accrued Interest Repaid	-964	-64	-70	00	-381	-465	-265
Total Net Funding Contrbn.	3365	244	178	227	1058	942	336

\* Amount required to secure a total of £2000 million

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Cost of Funding as at 17 September 1987

(Note by MG2 Division)

Main Points

- The breakeven yields have risen since the end-July Funding Meeting, reflecting the transition from an upward to downward sloping yield curve (Table 2). But yields on medium and long stocks have risen by more - up to 1 per cent - strengthening the case for shorter issues. The Guidelines call for nearly all funding to be short at present yields (Table 3).
- About 27 per cent of gross sales in 1987-88 to date have been shorts, though of issues announced within the year, the proportion is 42 per cent. The average life of issues announced within the year has been 11.0 years against an average life of 9.6 years for existing conventional dated gilts (Table 3).
- Breakeven inflation rates have risen by  $\frac{1}{2}$ -1 per cent, reflecting the sharp rise in conventional yields but a smaller increase in real yields on IGs. The breakeven rates are well above the Government's own projections of inflation, confirming the attractiveness of indexed gilts for funding (Table 2).
- Market conditions have meant no sales of IGs have been achieved this financial year to date (Table 3).
- Both fixed interest and index-linked Savings Certificates look cheap relative to gilts for the first time in some months (Table 4A).



## SECRET

TABLE 1: COMPARATIVE COSTS OF AN INITIAL BORROWING OF £100 BY ISSUING A GILT.

£s, net of tax \*, cash

Inflation Scenarios \*\*

	MTFS Case	Low Inflation Case	High Inflation Case	Weighted Projection
<b>(a) Five Years</b>				
5 year Conventional	143- 147	142- 146	146- 150	143- 147
5 year Index-Linked	132- 135	123- 125	153- 155	134- 137
<b>(b) Ten Years</b>				
5, then 5, year Convs	208- 216	196- 202	258- 274	213- 222
10 year Conventional	216- 225	208- 215	248- 262	219- 229
10 year Index-Linked	189- 193	155- 159	300- 307	200- 205
<b>(c) Twenty Years</b>				
5, then 15, year Convs	374- 400	302- 319	799- 901	424- 460
20 year Conventional	403- 432	347- 367	695- 784	437- 473
20 year Index-Linked	383- 392	245- 251	1253-1282	487- 499

\* Average marginal tax rates are not known with precision and likely ranges are used here instead so that the cost figures also emerge as ranges.

\*\* (i) The MTFS, low and high inflation scenarios are weighted 5:1:1 for the Weighted Projection case.

(ii) The MTFS case assumes the MTFS inflation forecast (of around 3 per cent a year) to 1991 and 2.5 per cent a year thereafter in line with the central case of the long-term assumptions paper (which is used by departments for public expenditure planning purposes).

(iii) The Low Inflation case has inflation falling to 2 per cent by 1990 and price stability achieved and sustained after 1994.

(iv) The High Inflation case has inflation accelerating to 6.5 per cent by 1990 and thereafter gradually to 10 per cent by 1995. Inflation is then taken to remain at this level.



TABLE 2: BREAK-EVEN YIELDS AND BREAK-EVEN INFLATION RATES

Per cent

## A: Break-Even Yields

	MTFS	Low	High	Weighted * Projection
(a) 10 Year **	7.8	6.2	13.3	8.4 (8.1) <sup>+</sup>
(b) 20 Year ***	8.1	6.6	13.7	8.7 (8.0) <sup>+</sup>

\* MTFS, low and high inflation scenarios are weighted 5:1:1

\*\* Below the rate shown it would be cheaper to issue a 10 year conventional than a five, followed by a five, year conventional.

\*\*\* Below the rate shown it would be cheaper to issue a 20 year conventional than a five, followed by a fifteen, year conventional.

+ Bracketed figures refer to last funding meeting (July).

## B: Break-Even Inflation Rates \*

Average Inflation Rate in Each Scenario

Break-even Inflation Rate at

	14 September 1987	MTFS	Low	High	Weighted Projection
a) 5 years	4.7-5.7 (4.1-4.9) <sup>+</sup>	3.0	2.0	6.4	3.0
b) 10 years	4.7-5.4 (3.8-4.5) <sup>+</sup>	2.7	1.0	8.0	3.4
c) 20 years	4.1-4.7 (3.6-4.1) <sup>+</sup>	2.6	0.5	9.0	3.7

At the break-even inflation rate the cost of an index-linked gilt is the same as that of a conventional. Below it, the IG will be cheaper than a conventional, and above it more expensive.

Bracketed figures refer to last funding meeting (July).



**SECRET**

**TABLE 3: GROSS SALES OF GILTS TO DATE IN RELATION TO THE GUIDELINES**

**A. The Guidelines for Gross Issues of Conventionals**

<u>Yields on medium and Long Stocks (%)</u>	<u>Proportion of Gross Issues (%)</u>	
	<u>Shorts</u>	<u>Mediums and Longs</u>
above 10½	100+	consider buying in
10-10½	95	5
9½-10	80	20
9-9½	65	35
8½-9	50	50
8-8½	35	65
7½-8	20	80
7-7½	5	95
below 7	consider refinancing with longs/mediums	100+

**B. Gross Sales**

£ billion (Percentage of total in brackets)

Conventionals

	<u>Shorts</u>	<u>Mediums</u>	<u>Longs</u>	<u>Total</u>
1987-88*	1.6 (27)	2.0 (34)	2.3 (39)	5.9
[New Issues**	2.8 (42)	1.8 (27)	2.0 (30)	6.6 ]
1987 Q2	0.9	1.5	1.7	4.1
July	0.0	0.5	0.6	1.1
August	0.5	0.0	0.0	0.5
Sept***	0.2	0.0	0.0	0.2
Calls			0.7	0.7

Index-linked

1987-88*	0.0 (0)	0.0 (0)	0.0 (0)	0.0 *
1987 Q2	0.0	0.0	-0.1	-0.1
July	0.0	0.0	0.2	0.2
August	0.0	0.0	-0.1	-0.1
Sept***	0.0	0.0	0.0	0.0
Calls				0.0

<u>Memo item:</u>	<u>1-7 Years</u>	<u>7-15 Years</u>	<u>Over 15 Years</u>	<u>Total</u>
1987-88 Conv	1.9 (32)	1.7 (29)	2.3 (39)	5.9
IG	0.0 (0)	0.0 (0)	0.0 (0)	0.0

**C. Average Life of Dated Gilts**

	<u>All</u>	<u>Conventionals only</u>
End 1986-87	10.7	9.6
14 September 1987	10.6	9.6
(New issues**	11.0	11.0)

\* Sales secured for 1987-88. \*\*Announced in 1987-88. \*\*\*To 14 Sept.



## SECRET

TABLE 4A: NATIONAL SAVINGS INSTRUMENTS : FIXED RATE PRODUCTS.

## A. Costs of an Initial Borrowing of £100 over Five Years

	£s, net of tax, cash			
	MTFS Case	Low Inflation Case	High Inflation Case	Weighted Projection
Fixed Interest National Savings Certificate (FINSC)	140	140	140	140
Index-Linked National Savings Certificate (ILNSC)	141	134	164	143
Conventional 5 Year Gilt	143- 147	142- 146	146- 150	143- 147

## B. Equalising National Savings Rates.

	Per cent			
Rate on FINSC to match Cost of Conventional Gilt	7.4- 8.0	7.3- 7.9	7.8- 8.5	7.5- 8.1
Current rate on FINSC	7.0	7.0	7.0	7.0
Rate on ILNSC to match Cost of Conventional Gilt *	4.4- 5.0	5.3- 5.9	1.4- 2.1	4.1- 4.7
Current rate on ILNSC *	4.0	4.0	4.0	4.0

\* In addition to inflation-proofing.

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## SECRET

TABLE 4B: NATIONAL SAVINGS INSTRUMENTS : VARIABLE RATE PRODUCTS.

Compound Return	Per cent			
		Tax Rate (%)		Average Administrative Cost
	0	27	60	
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Deposit Bond	10.5	7.7	4.2	0.3
Investment Account (2)	10.0	7.3	4.0	0.4
Premium Bond	7.0	7.0	7.0	1.1
Savings Certificate on GER terms	7.0	7.0	7.0	0.2 (3)
-----				
12 Month Cost of Government Borrowing (4)	10.4	7.6	4.1	N/A
CTDs	10.4	7.6	4.2	N/A
Bank Retail Deposit Rate (5)	7.1	7.1	3.9	-
Building Society Retail Deposit Rate (5)	8.0	8.0	4.4	-

(1) Assuming interest reinvested in Investment Account.

(2) Estimated net of tax cost is 7.8 per cent.

(3) Average for all certificates.

(4) Yield on a basket of gilts with maturities clustering around one year.

(5) Average of rates applying to the top bands of selected high interest accounts.

>



COVERING SECRET

*my*

FROM: M G RICHARDSON

DATE: 21 September 1987

ECONOMIC SECRETARY

cc: **Chancellor**  
 Sir P Middleton  
 Sir G Littler  
 Sir T Burns  
 Mr Cassell  
 Mr Peretz  
 Mr Kelly  
 Mr Grice  
 Mr Rich  
 Mr Carr  
 Ms Bronk  
 Mr Patterson) DNS  
 Mr Wilson )  
 Mr Plenderleith - B/E  
 Prof Griffiths - No 10

*✓*

FUNDING MEETING

Further to my minute of 18 September, I now attach the Bank's paper on the outlook for gilt-edged funding.

*M G Richardson*

M G RICHARDSON

*a*  
*Precedently in the gloomy stuff*

*AB*



£ million (Figures  
at cob 18 September)

GILT-EDGED FUNDING IN OCTOBER  
(Note by Bank of England)

1 This note reviews the prospect for gilt-edged funding in October.

The Funding Arithmetic

2 The latest arithmetic shows a central government funding\* need over the year as a whole of about 12000. Of this 2000 is expected to be met by National Savings, leaving 10000 to be covered by gross gilt sales. The details are set out in Table 1, which is the agreed Treasury/Bank basic arithmetic. The PSBR assumption used is a borrowing requirement of 1000, and the figuring includes a catch-up for underfunding of 400 in 1986/87.

3 In the five months ending August gross sales totalled some 5700, which is above the average striking rate required during the year as a whole. Nevertheless, in the first five months of the year the PSBR was underfunded by 1840 on a seasonally adjusted basis (2250 unadjusted). Gross official sales in August were only 360 and thus far during September have amounted to 400. Proceeds of around 425 from the auction should take the total of gross sales in August and September to around 1200, against the target of up to 2000 set in July. The shortfall reflects the difficult market conditions which have emerged since the election and in particular the impact of adverse figures on money and trade.

4 In order to achieve the year's funding target, gross gilt sales of almost 4300 are required between September and March, or about 610 per month. Taking account of expected gross sales of 825 during September (400 to date and around 425 to come from the auction), total sales required in the six months from October to March drop to 3450 and the striking rate to 575 per month.

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\* Funding is defined on the existing basis as debt sales to the domestic non-bank private sector together with external finance of the public sector.

So what?



5 However, the forecast is subject to a number of major uncertainties, and it may not be safe to assume that they are self-cancelling. In the direction of reduced funding need, there is a possibility that the PSBR could turn out lower than the forecast shows. In the other direction, there are three factors which are difficult to forecast (and could of course go either way) but on balance seem more likely to increase the funding requirement than otherwise:

(i) Intervention

After an increase in reserves from intervention of 4440 in the first five months of the year, the forecast assumes that the pattern will be sharply reversed in the rest of the year, with the reserves run down by 2040. The forecast is not borne out by the prospect so far for September (a small further rise in reserves) and it is possible that we shall see relatively little run-down in the rest of the year (and possibly even further accruals).

(ii) OPS debt

Equally, the forecast assumes that the run-off of other public sector debt in the hands of the nbps will slow-down significantly from now on, from defunding of 1751 in the first five months to defunding of only 249 in the rest of the year. But there is nothing in the market to suggest such a slackening.

(iii) Banks' gilt transactions showed sales of over 1500 in the first five months, but are forecast to swing into purchases of around 500 over the rest of the year. However, given the size of the sell-off during the market's recent weak period, the swing-back into purchases could be much greater if the market begins to recover.

6 To test the impact of these possible differences from the forecast, we have reworked the arithmetic on the following basis:

- (i) the PSBR is assumed to be zero against a borrowing requirement of 1000 in the forecast;
- (ii) the reserves are assumed to remain at their current level, rather than falling by 2040 as in the forecast;
- (iii) other public sector debt is assumed to run off by a further 1000, rather than 241 assumed in the forecast;
- (iv) there is a greater, though still incomplete, offset to the sharp fall in the banks' gilt holdings so far this year, ie purchases of around 1000 rather than 500.



These modifications taken together would raise the target for gilt sales during the remainder of the year by almost 2300. After allowing for likely proceeds from sales during September, the striking rate between October and March would rise to 950 per month.

Market Conditions

YIELDS (%)

	29 Sept 86 (peak)	8 May 87 (Approx low point)	29 July 87 (last funding meeting)	18 Sept 87
Shorts	11 5/8	8 5/16	9 1/2	10
Mediums	11 1/4	8 11/16	9 3/4	10
Longs	10 5/8	8 3/4	9 1/2	9 3/4
IGs (2006) (real yield)	3 7/8	3 5/8	3 7/8	4 1/8

7 The market lost its way after the election and fell back sharply during the summer in reaction to the poor money and trade figures and the increase in base rates in August. Yields have risen by up to 1/2% since the last funding meeting. Since the beginning of September the market has begun to feel its way towards a limited recovery at yields around 10%. The details of the long gilts auction were well received by the market and the past week's figures - especially those for bank lending and money in August - have reinforced the cautious improvement in sentiment.

8 The recovery remains, however, both febrile and fragile. The auction is seen as a significant hurdle and there is little evidence so far of any serious retail interest: the sharp rise in the market in the past two days has reflected defensive marking-up of prices rather than any real volume of business - not a very good augury for the auction. There remains a fear that pressure for higher interest rates could re-emerge later in the year, and an inclination on the part of investors to hold back funds from at any rate the long end of the market in the hope of picking up stock more cheaply in due course. The BP share sale, and other issues in the calendar, are also significant competitors for funds in the month ahead. Internationally too, the uncertainties are unhelpful. The general bearish tone in overseas bond markets has contributed to the difficult funding



conditions, and exchange rate movements in either direction tend to be viewed as unhelpful - any significant rise in sterling being viewed as liable to trigger intervention which increases the funding requirement, and a rise in the dollar being regarded as likely to direct overseas interest away from gilts.

### Funding Tactics

9 Against this background, we have managed to sell out the 1991 tap at the price established earlier this month, and to re-activate the low coupon tap. We now have in the portfolio:

- (i) Around 100 of full coupon conventional stock
- (ii) 310 of the 1992 low coupon
- (iii) 300 of index-linked, concentrated at the longer end.

Our debt to NILO is 250

10 For the month ahead, the funding arithmetic outlined above suggests a striking rate of at least 600 and possibly as much as 950. With no calls tied up for October, it would seem sensible to aim for gross sales of around 750, though with some leeway either side - if market condition remain difficult, we may fall short of that figure, and if alternatively the market continues its recovery, eg on the back of a successful auction, it may be sensible to take sales up closer to 1000. As in previous years, given the uncertainties both of the forecast and of market conditions, we think it important to keep moderately ahead of the striking rate if we can, since (as experience in August and September illustrates) it is very difficult to maintain funding in unneceptive market conditions, whereas we can slow down funding if we find we are comfortably placed later in the year, eg by buying in further stock from the hump in maturities.

11 In carrying forward the funding our main immediate focus will be on the auction and its aftermath. The fallow period will preclude our selling stock over 15 years until 22 October, but if the market is receptive we can supply shorts and mediums from our book, or the NILO portfolio, and we can look to continue sales of



the low coupon tap and to supply indexed stock out of our current book if that sector revives. If the market rallies sufficiently we might wish to bring forward a package of tranches, comprising mainly shorts and mediums, though perhaps also a small quantity of IG if there is demand.

Bank of England  
18 September 1987



Table 1

FUNDING : FINANCIAL YEAR POSITION 1987/88  
Not seasonally adjusted

£ millions

	FORECAST	OUTTURN	RESIDUAL
	Financial Year 87/88	April - Aug 1987	Sept 87 - March 88
<b>PSBR AND FUNDING TARGET</b>			
1 PSBR excl asset sales	6000	4793	1207
2 Asset sales (sales-)	-5000	-3362	-1638
3 PSBR	<u>1000</u>	<u>1431</u>	<u>-431</u>
Financed by:			
4 Other public sector debt sales to nbps (sales-)	2000	1751	249
5 National Savings (sales-)	-2000	-1052	-948 (-135) <sup>a</sup>
6 CTDS (sales-)	750	-137	887
7 Treasury bills etc (sales-)	0	-255	255
8 Intervention (reserves inc+)	2400	4440	-2040
9 External finance of public sector excluding intervention and gilts (increase+)	<u>-500</u>	<u>-319</u>	<u>-181</u>
10 Target gilt sales to nbps and overseas for full fund (sales+)	3650	5859	-2209 (-316)
11 Over(-)/Under(+) funding brought forward	<u>400</u>		
12 Over (-)/Under (+) funding 1987/88	-400	2252	-2652
<b>GILT SALES</b>			
13 Net purchases by nbps and overseas (purchases+)	4050	3607	443
14 Net purchases by monetary and other public sector (purchases+)	-1000	-1532	532
15 Maturities	6950	3653	3297
16 GROSS OFFICIAL SALES	10000	5728	4272 (610)
17 Monthly average gross gilt sales	833	1146	610

a average per month for remainder of year

Relationship between lines:

$$\begin{aligned}
 3 &= 1 + 2 \\
 10 &= 3 + 4 + 5 + 6 + 7 + 8 + 9 \\
 12 &= 10 - 13 \\
 16 &= 13 + 14 + 15
 \end{aligned}$$



PPS  
p upNOTE OF A MEETING IN ROOM 47/2 AT 3.00PM, 23 SEPTEMBER

Those present:

Economic Secretary

Mr Cassell

Mr Peretz

Mr Grice

Mr Kelly

Mr Rich

Mr Richardson

Mr Barnes

Mr Cropper

Mr Patterson

) DNS

Mr Wilson

)

Mr Plenderleith

)

Mr Allen

) Bank of England

Mr Althaus

)

Funding Arithmetic

Invited to introduce the MGI paper, Mr Peretz said that the uncertainties surrounding the funding arithmetic were immense. The table indicated that gross gilt sales after the end of August would need to average £600m a month, a striking rate that would reduce to £560m after the end of September. This was about half the monthly average of £1100m achieved during the first half of the year. The two largest uncertainties were intervention (which might not be unwound as assumed) and the PSBR (which could be negative this year); others were OPS debt and monetary sector purchases of gilts, about which various assumptions could be made. The position on the PSBR would be clearer by the next funding meeting. Meanwhile it was possible by varying assumptions to produce a gilt sales task for the rest of the year any where between 0 and £1500m a month, but £750m looked a reasonable gilt sales target for October.

2. Mr Plenderleith agreed with this analysis. In the Bank's view however, the £600m baseline was nearer the bottom of the probable range than the top. A £750m target would compensate for this, and



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allow the authorities to get a little ahead of the game. In that event, more progress could be made with levelling the hump of 1989-90 maturities.

3. The Economic Secretary asked whether the authorities should be indifferent to the prospect of an over or underfund. His own inclination was towards an overfund. Mr Cassell said that the authorities' views were symmetrical; and in any event an adjustment would be made to next year's arithmetic to compensate for any 1987-88 over or underfund. Mr Peretz thought the only reason for asymmetry would be that an overfund might be preferable this year, following two successive years of small underfunds. There was, however, already compensation for the 1986-87 underfund in the current year's funding arithmetic.

National Savings

4. Mr Patterson said that August was invariably <sup>an</sup> atypical month, because supplements on 1st and 2nd issue index linked certificates were credited then. The outturn of a £230m funding contribution was therefore not a reliable guide, and DNS forecast an average fund of around £130m a month over the next three months. He had been pleasantly surprised by the way the performance of National Savings had held up despite competitors' rates, and saw some scope for trying to shake out some of the 24th Issue.

5. Mr Cassell asked whether the BP sale would have any effect on inflows. On the basis of previous experience Mr Wilson saw no reason to expect significant outflows. Mr Patterson said that DNS advertising would be designed not to compete with BP during the sale period; the October campaign - for Invac - would be directed at the non-taxpayer. Although "Moneybox" would discuss recent NSSR developments, the main NSSR/gilts advertising would be undertaken after the BP sale. DNS had written to the Treasury and the Bank to seek guidance on this question.

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GiltsAuction

6. Mr Plenderleith said that the morning's auction had gone very smoothly from a logistic standpoint, and had been effective in securing funding. The issue had been  $1\frac{1}{2}$  times covered at an average yield of 9.57 per cent. This had proved mildly disappointing to the market, and longs had subsequently lost  $\frac{3}{4}$ .

7. The level of retail demand had been small, possibly because the auction procedure was unfamiliar to the institutions. Only two sizeable bids had come from non-GEMMs. Market makers had built up a net bear of £300m by the previous evening, which would leave them with about £200m of stock remaining. Market reaction to the auction would be clearer after a few more days; losses could make the market more wary of auctions in future. It had already been announced that the third auction would be in January.

Market

8. The Economic Secretary agreed that the gilt sales target for October should be £750m, as proposed by the Bank. Mr Plenderleith said that there were no calls due in October, and further funding would need to wait for the market to settle. It was uncertain whether market conditions would permit £750m sales to be achieved; the average outturn for August-September looked to be around £625m. Since longs would be in purdah for most of October, the Bank would seek to fund through the 1992 low coupon, IGs, and perhaps a package of tranches.

Cost of Funding

9. Mr Peretz was invited to introduce the MG2 cost of funding paper. Current yield levels pointed strongly to pursuing sales of shorts, as did 1987-88 performance to date, however it was measured. There had been no progress towards the aim of reducing the average maturity of outstanding debt. Moreover net sales of IGs were zero.



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On cost of funding grounds, therefore, there was a strong presumption that remaining gilt funding should be through IGs and short/short mediums, with a maturity designed to reduce the average maturity of outstanding debt.

10. Mr Plenderleith said that while this was not an immediate issue with the purdah period on longs, the Bank disagreed almost diametrically with these conclusions. In the Bank's view the cost of funding calculations carried an increasing air of unreality, since the forecasts on which they were based <sup>were</sup> out of date. What may have been valid in May was no longer relevant now; for example, he thought that seen in retrospect it would have been worthwhile locking into long-dated funding at 8¾ per cent yields earlier in the year.

11. Mr Peretz accepted that there were methodological issues which it would be useful to discuss at official level. One problem was simply that the MTFS was updated only once a year, while the intervening forecasts did not look beyond 1-2 years. Mr Grice said there was no mystery about why the cost of funding calculations pointed towards shorts and indexed issues. The market still took a more pessimistic view about future inflation than the Government's own projections. Even the more pessimistic June internal forecast - which had not been universally accepted in the Treasury - still projected lower inflation than the markets expected. Longer issues would only be indicated if market optimism increased, or the Government intended to pursue laxer policies than it had claimed in public. In the Economic Secretary's view, the important question was whether the authorities had enough faith in their policies and forecasts to act on them in funding matters. It was agreed that cost of funding tables would in future incorporate a "last forecast" case; and that the Treasury and the Bank would meet to discuss cost of funding methodology.

Index-linked sector

12. Mr Cassell thought that it was surprising that index-linked gilts remained out of favour with the market. Mr Plenderleith said



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that the market had been successfully widened, and around 9 per cent of gilts were now IGs. The zero sales figure for 1987-88 to date was good, considering the amount of market support the Bank had given. IGs had faced severe competition from equities, including privatisation issues. Further index linked funding could be expected to continue to come in fits and starts, as institutions felt underweight in this sector.

13. Mr Peretz noted that the current strategy tended to rely on equity profits being switched to IGs. One difficulty however was that conventional gilt prices had fallen more than IG prices; the latter were not allowed to adjust fully. The price of the 1992 low coupon for example had been cut by more <sup>than</sup> that of the equivalent IG to permit sales; but recent sales had been at a break-even inflation rate  $1\frac{1}{2}$  per cent higher than when the stock was issued.

14. Mr Plenderleith said that the index-linked sector could be developed only gradually and progressively; it would be wrong to allow yields to soar in order to pursue index linked funding. One problem was that no IG buyer had ever made money; the market thought that it was impossible to make capital gains from index linked gilts.

cc: Those present  
PPS  
Sir P Middleton  
Sir T Burns  
Sir G Littler  
Prof B Griffiths No 10.

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From : D L C Peretz  
Date : 2 October 1987

CHANCELLOR

- cc Economic Secretary
- Sir P Middleton
- Sir T Burns
- Sir G Littler
- Mr Cassell
- Mr Grice
- Mr C W Kelly
- Mr Carr
- Mr Richardson
- Mr Cropper

*Many thanks.  
I agree with the  
model proposed  
para 21.  
The one issue not  
covered here is the implicit  
assumption that intervention  
concentrated via no unpublised  
forward work is not  
sterilised/funded.*

**FUNDING POLICY**

You agreed at your meeting on 22 July that :-

- (a) we should incorporate an element of end-year flexibility into the present funding rule, providing for any under or over funding in one year to be carried forward to the next; and
- (b) while it remains right to fund exchange market intervention over a period of months, it may on occasion be necessary to provide for substantial carry over from one financial year to the next on this account.

*is an issue for a  
presentation  
on it. I see  
quite a  
substance  
to be  
made  
M.*

You asked us to work out in more detail how these elements should be incorporated in the operation of funding policy; and what if anything new we would need to say in public.

2. You also agreed that :

- (c) it is no longer sensible to distinguish, in the way we do with the present funding rule, between debt sales to banks and building societies.

You asked us to explore further the option of switching to a maturity-based funding rule.



3. This note reports the further work we have done on these issues over the summer, in consultation with the Bank of England.

End-year flexibility, and intervention

4. Annex 1 discusses the issues here. First there are the normal end-year difficulties with trying to hit a moving target. If we accidentally over or underfund one year, we should add that to the next year's task. We have already adopted this practice in setting monthly funding targets this year, adding the 1986-87 £400m underfund to the 1987-88 task.

5. Second there is the treatment of intervention, which is a special case for two reasons :-

(i) the amounts are unpredictable, and can be very large. Heavy intervention at the end of the financial year is thus very likely to lead to some funding carry over to the following year;

(ii) there will often be a policy reason for not seeking to sterilise the liquidity impact of intervention over a very short period, since that would blunt its effect on the exchange rate.

6. We have examined several possible operating rules designed to ensure that intervention is sterilised over a period but not, necessarily, in the short-term. Annex 1 concludes that the best rule, at least for public presentation, is the simple one : that where substantial intervention takes place towards the end of a financial year, we may on occasion need to carry over a sizeable under or overfund into the following year's funding task. The Economic Secretary has asked us to do some more work - which we have in hand - on the possibility of looking at the arithmetic on a 12 month rolling basis as an aid to internal discussion of the monthly funding targets.



7. The presentation of these changes requires only a small elaboration of the present rule. The aim would remain, broadly, a full fund each financial year, but :-

- (a) to the extent that the target is missed we would seek to make good the over or underfunding the following year. (We have not said this, explicitly, before);
- (b) large scale intervention carried out towards the end of a financial year could involve a larger degree of carry over, in part because there are often policy reasons for wishing not to sterilise the effect of intervention in the very short-term.

#### A maturity-based funding rule

8. It was argued at your meeting on 22 July that in principle a maturity-based funding rule would have a number of advantages over a sectoral based rule. We were asked to investigate further whether, and if so how, a maturity-based rule could be made to work in practice.

9. Following this further work we continue to see the relative attractions, in principle, of a maturity-based rule as compared with any kind of sectoral based rule. Fundamentally, it would be more in keeping with the underlying objective of funding policy : to limit the public sector's contribution to the growth of liquidity. The economic effects of following this funding objective must be transmitted in one way or another through the yield curve. The main argument is the absence of any reason to suppose that sales of long dated debt to banks have a markedly different effect on the yield curve than sales of long dated debt to other sectors. And if banks do change their propensity to transform illiquid assets into liquid liabilities, there seems no particular reason for the Government to be more concerned if this takes the form of acquisition of Government debt than if it takes the form of acquisition of other fixed interest sterling assets. On the other hand issues of liquid public sector debt, such as Treasury bills and CTDs, to the non-bank sector clearly do add to



liquidity and do tend to raise short-term interest rates in relation to long-term rates, even though they are not caught by the current sectoral funding rule.

10. Secondly, it seems likely that a maturity-based rule would also be more robust to financial innovation and institutional change. As different kinds of financial institution become more alike, it becomes less easy to draw any sectoral dividing line; even the division between financial companies and industrial ones is becoming less clear than it was. Moreover as the swap market develops, the effective ownership of a particular financial asset, in terms of responsibility for interest flows and exposure to price risk, is becoming divorced from nominal ownership. The Bank does not believe any significant part of the banking sector's holdings of gilts to be related to swap transactions, at present : but this could become a problem with any sectoral based rule in future, as markets develop.

11. No other major country makes the distinction we do between debt sales to the monetary sector and to other purchasers (see Annex 2). Finally, a maturity-based rule would avoid the problem of drawing particular attention to one measure of broad money - whether it be M3, M4 or M5 - a difficulty which is inherent in any sectoral-based rule. A maturity-based rule fits nicely with our view that there is no one measure of liquidity that gives an adequate picture.

12. No single rule, however, is likely to encapsulate every feature we are interested in. We have always recognised with the sectoral based approach that we should avoid issuing liquid forms of debt, even if they are sold outside the monetary sector. To some degree the current rule guards against this; we have been reluctant to issue liquid debt because we expect it to be bought, disproportionately, by banks. Equally, with a maturity-based approach, we would no doubt be concerned if we found ourselves financing the borrowing requirement entirely from banks, even if they were buying longer term debt. Maturity/liquidity is not a simple concept, as is clear from the discussion of national savings in paragraph 14(c) below.



13. We have, in any case, identified a number of practical and other difficulties involved in making an early move to a maturity-based rule. These are partly operational and partly presentational. I do not think any of them rule out making a move in this direction in due course. But our conclusion is that it would be quite difficult to make an early move; and that there is a case for a slower approach.

14. There are annexes to this note covering particular aspects, in detail, but in summary the main problems are as follows :-

(a) **Original or residual maturity.** This is discussed in Annex 3, with the associated question of what the cut off in terms of years should be in Annex 4. Logically we should be concerned with residual maturity. A gilt with one or two years left to go to maturity is just as liquid as a newly issued gilt of the same maturity. There are, however, a number of practical difficulties with using residual maturities : (i) one minor point is that we do not know the residual maturity of outstanding local authority debt, and would need to collect new figures; (ii) we would also need to establish conventions for deciding what residual maturity to assign to convertibles, or stock with optional redemption dates; (iii) more importantly, there is a major problem of transition from the present rule, particularly given the hump of gilt maturities in 1989-90. On one scenario, we could end up not funding this hump at all. There would then be a risk that the shift in policy would be seen by market operators as a clever attempt to avoid funding the hump. We could take steps to avoid this by devising some kind of suitable transitional arrangement - but this might appear complicated, and mark a departure from a simple rule.

(b) **Missing statistics** would also be a problem with an original maturity-based rule. At present we have no data about the maturity of new local authority borrowing



from the private sector, other than a split between borrowing of less than 1 year's maturity and borrowing of over 1 year. So if we were going to go for, say, a 2 year original maturity rule we would need to start collecting new figures. We have established that this would require a period of negotiation between DOE statisticians and the local authorities, since it involves adding a new question to a voluntary questionnaire. If we started with a new rule before these figures were available, we would have to draw the line at one year's maturity for local authority debt.

- (c) **National savings.** Annex 5 discusses the issues here. There are two possible views. Logical consistency would point to looking at nominal maturity. On that basis only new sales of savings certificates and net inflows into the yearly plan would count as funding. (There are of course reasons other than their contribution to funding for wishing to maintain other National Savings products : but on this rule, if the amounts increased there would be a corresponding increase in the bill mountain). The alternative view is that National Savings as a whole should continue to count as funding. This would be rougher and readier, but we might defend it on the basis that the actual liquidity, as measured by turnover, of all national savings products - with the possible exception of the ordinary account - is less than the liquidity of, say, a 2 year gilt. Moreover, there is some advantage in terms of the mix of Government funding in continuing to have some significant amount of debt on floating rate terms. National savings seem to represent the best way to secure this in a form that in practice is not too liquid. A floating rate gilt, with a longer nominal maturity would be an alternative : but in that case, despite its nominal maturity it would be an extremely liquid product.



Options

15. One reasonably clear conclusion from this is that it would be difficult to announce this autumn a change in policy of this kind to come into effect before next financial year. The changes in funding policy you announced in the 1985 Mansion House Speech applied with immediate effect. Another conclusion is that we could not proceed solely by way of an announcement in the Mansion House Speech. At a minimum this would need to be accompanied by a technical note, explaining the details - perhaps to be published for the record in due course in the BEQB.

16. The other approach would be to proceed more slowly, and without committing ourselves at this stage. This might involve :-

- (i) putting down some kind of marker in the Mansion House Speech about the need to pay attention to the maturity of government debt, of a kind that could be referred back to later on, without exciting too much immediate interest;
- (ii) put some of the ideas into circulation, probably by way of an article on funding policy in the BEQB - but of course there are other options here;
- (iii) begin to collect data on both original and outstanding maturity of debt issued to the private sector by local authorities;
- (iv) consider further the treatment of national savings products, discussing with DNS the implications of any change.

17. This need not necessarily preclude making any other more immediate change to the funding rule that we considered sensible, and which might represent a possible stopping place if we subsequently decided against moving to a maturity-based rule. There are several options here :-



- (a) One possibility is to do nothing for the present. We are under no great outside pressure to revise our existing funding rule. If our position is that ideally we would ultimately move to a maturity-based rule but that we can only get there slowly, then we could confine ourselves for the time being to the elaboration of policy on end-year carry over and intervention; and to putting down a marker for the future about the maturity of debt.
- (b) We have however all agreed for some time that, particularly after the enactment of the Building Societies Act, it is an anomaly for gilt sales to banks and building societies to be treated in a different manner. It would be odd to allow this anomaly to persist. To remove it by including gilt sales to banks as funding, without imposing a maturity rule as an alternative, would in effect mean abandoning funding policy altogether. But the anomaly could be resolved by excluding gilt sales to building societies from funding. This would be essentially a move to an M4-based funding rule, though we would not present it as such. By removing both banks and building societies from the compass of funding this might seem to be a step in the wrong direction compared to a maturity-based rule. It would not necessarily, however, pre-judge future developments. It could be presented as a natural and simple evolution, following the Building Societies Act and the increasing similarity between banks and building societies. At the same time as announcing it you could comment on the importance we have always attached to the maturity and liquidity of debt we issue, whichever the sector buys it - to provide a point to refer back to if and when we take the further step.
- (c) The Bank has suggested an M5-based rule, as an alternative and arguably more of a halfway house to a maturity-based funding rule. This would exclude gilt sales to building societies, and also sales of those



kinds of Government debt that score as components of M5 whichever sector buys them : Treasury bills, CTDs, National Savings ordinary account, Invac, and premium bonds. The argument for this approach is that it makes a small move in the maturity-based direction, adopting an existing maturity-based definition, without being too radical a departure from past practice. The disadvantages are that insofar as it is a move in the right direction it is a move to an original maturity-based rule, rather than the more logical residual maturity basis; and that it draws a line through National Savings at a point which is not necessarily the right one.

18. Annex 6 shows the difference that these various rules would have made in the past to required gilt sales, and what their implications would be for funding in the current year and in future (on the basis of the Treasury summer forecast). The figures (both for the past and future) involve a number of assumptions. For each year they assume that gilt sales are such as to produce an exact full fund on the respective definitions, and show how many more or less gilts would need (would have needed) to be sold as compared with the sales required by the present rule. A residual maturity rule would clearly make a considerable difference. On the basis of the forecast, however, and given the uncertainties it is not clear - looking forward - whether a switch to any of the other possible rules would set us a tougher or easier gilt sales task than the current rule. It is also worth noting that excluding net gilt sales to building societies is not expected to make a great difference to required gilt sales this year. This is because the run down in building society gilt portfolios looks as if it has come to an end.

19. Obviously there are several possible ways forward, and you will want to consider the options. The majority view in the Treasury, and Bank, is that :

- while in principle we continue to see the relative attractions of a maturity-based approach, we should move in that direction slowly rather



than in one bound : ie paragraphs 16-17, rather than paragraph 15;

- we should not, however, pass up the opportunity to bring the treatment of banks and building societies into line, regardless of the future development of policy.

20. This points to options 17(b) or (c); and of these we think that (b) is the best. It should be possible to present it in a way that avoids appearing to raise the status of M4. And the Bank believe that given the likelihood that building societies' holdings of gilts are now on a fairly even keel (following two years of quite sharp rundown) the change will not be seen by the market as a loosening of policy, and will be seen for what it is : a sensible technical adjustment given the changing status of building societies.

#### Summary

21. To summarise :-

- (i) We should in the Mansion House Speech elaborate on existing funding policy, slightly, to allow for end-year carry over of any under or over funding, particularly in the special case of exchange market intervention.
- (ii) We remain convinced of the relative attractions, in principle, of a maturity-based funding rule compared to any sectoral funding rule. But there are too many complications to proceed solely by way of an announcement in the Mansion House Speech.
- (iii) You will want to consider the options in paragraphs 15-17. But on balance our advice is that it would be best to proceed reasonably slowly, starting with a reference in the Mansion House Speech that would avoid raising immediate questions but could provide a point to refer back to in future, followed up by something of an educational campaign; and, without prejudice to future developments, to make the more



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immediate move of bringing the treatment of building societies and banks into line by excluding debt sales to the former from the funding figures (as suggested in paragraph 17(b)).

DLCW

D L C PERETZ

cc Mr George )  
Mr Coleby ) Bank of England  
Mr Plenderleith )



## ANNEXES

- Annex 1 - End-year flexibility and intervention
- Annex 2 - Funding policy in five overseas countries
- Annex 3 - Original or residual maturity
- Annex 4 - The liquidity cut-off under a non-sectoral funding rule
- Annex 5 - National savings products under a non-sectoral funding rule
- Annex 6 - Funding arithmetic under different rules



### FUNDING RULE : END-YEAR FLEXIBILITY AND INTERVENTION

This note discusses how a system of end-year carryover of funding from one financial year to the next might be operated, and presented.

2. There are broadly two sorts of circumstance that might make such carryover desirable : the run-of-the-mill difficulties in hitting a moving and uncertain target; and large scale intervention. This note considers these in turn.

3. The run-of-the-mill difficulties arise because the full fund objective is an exacting one that is impossible to hit precisely; important elements of the funding arithmetic are difficult to forecast and remain unknown until well after the end of the financial year. Hitherto the variations from the forecast (on, for example, the LABR and PCBR, monetary sector purchase of gilts and sales of other public sector debt) have partly offset each other, with the result that 1985-86 and 1986-87 both saw small underfunds of about £400m. In less favourable circumstances the margin could easily reach £1 billion over or underfund.

4. Without some form of carryover this inevitable variation from the annual full fund rule could lead to a departure from the aim of securing a full fund over a run of years. An end-year flexibility arrangement would be designed to prevent this. One year's under/overfund would be added to the following year's funding arithmetic.

5. Operationally the simplest way to achieve this would be to wait until the outturn for the previous year is reasonably reliably known - in practice once the March full money figures are available - and then incorporate it in the arithmetic discussed at the monthly funding meetings.



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6. We would obviously want to make it clear to the market that this would be the practice in future. There is probably no need to go into operational details, though. We could just announce that in future any over or underfund during the year would be taken into account in the following year's funding task.

7. Turning to exchange market intervention, it could be argued that this is in principle no different from any other factor affecting the funding arithmetic: that changes in the reserves are merely one of the elements in the funding arithmetic that is particularly difficult to forecast. This was very much the experience in 1985-86. But now that we have moved to engaging in larger scale intervention, and giving a higher priority to short-term exchange rate stability, there are two important respects in which intervention is different. The first is a difference of degree; the second of kind :-

- (a) the scale of intervention is larger and more variable than other elements of the funding arithmetic (over £4½ billion in April-May this year);
- (b) it will often be wrong, on policy grounds, to seek to sterilise the impact of intervention in the very short-term: since that would offset its desired effect on the exchange rate. However if the intervention occurs late in the financial year the current funding rule in effect requires it to be sterilised more or less immediately.

8. The key point is that particularly when there is large scale intervention towards the end of the year we might deliberately decide, on policy grounds, not to offset its effect within the funding arithmetic by gilt sales within the year. We would in that case, though, still want to take it into account - and sterilise its effect on liquidity - over a period of months, and certainly within the following financial year.

9. We have considered a number of ways of dealing with operationally :-



- (a) a rolling fund. This would involve taking, say, a six or twelve month forward look each month, and seeking to offset the effect of intervention over that period. The best way to do this might be to carry forward each month any unfunded intervention from the previous month, and to adopt a funding target that assumed this intervention would be funded evenly over, say, the following 12 months. It would, however, be difficult to treat only intervention in this way : we would need to apply it to the overall funding arithmetic. In some circumstances it could produce quite large departures from the financial year rule, though it should tend to produce a full fund over a period. There would be no simple retrospective check either for us or the markets - as there is with the financial year rule - on the extent to which the objective has been achieved. The procedure would also be complicated to explain and present.
- (b) a two part fund : intervention in the first half or three-quarters of the financial year to be neutralised by the end of March; intervention in the second half or last quarter to be neutralised in the following financial year. In other words the intervention "funding year" would run from say January to December. This option too would carry the disadvantage of two different timescales for the full fund : one for intervention, and the other for all other aspects.
- (c) a normal full fund, but accepting that there may need to be a special degree of end-year flexibility to cope with intervention. This would acknowledge that intervention has similarities with as well as differences from the other elements in the funding arithmetic. We might on occasion fail to achieve a full fund over a year : but when we did we would have a clear reason for doing so.



10. The last approach seems the simplest and most attractive course, at least for public presentation. We would aim to sterilise intervention within each financial year, but recognise explicitly that significant amounts of intervention towards the end of any financial year might cause an under or overfund that would have to be carried over into the following year's funding arithmetic. The public presentation would be fairly simple, and could be linked with the more general idea of a carryover feature. We would say that the amounts carried over in respect of intervention, particularly when carried out at the end of a financial year, could be particularly substantial, in part because there might be policy reasons for not wishing to sterilise the effect of intervention in the very short-term.

11. We are considering further whether it would be helpful, for operational purposes, to produce the arithmetic on a 12 or six month rolling basis, as an aid to funding meeting decisions on monthly gilt sales targets.



## ANNEX 2

## FUNDING POLICY IN FIVE OVERSEAS COUNTRIES

This note describes the main features of funding policy in the US, Japan, Germany, France and Italy, in turn. The emphasis is mainly on the funding of the central government's borrowing (which is usually the largest component of the overall public sector borrowing requirement.)

2. One purpose of the note is to show how funding policies in these countries compare with that pursued in the UK. UK policy is directed at fully funding the PSBR each financial year by debt sales (of any maturity) to the non bank private, and overseas, sectors. The broad aim underlying this is that the activities of the public sector should not serve to increase private sector liquidity.

3. The **main points** are as follows:

- (i) the aim in each of these countries is to **broadly** fund the borrowing requirement over each financial year with particular types of debt. There is, unlike in the UK, little concern as to whether this aim is achieved exactly by the year end;
- (ii) sales of debt to any part of the private sector - including the banking and overseas sectors - score as funding; (they appear not to accept the idea that the effect on liquidity depends on the sector which takes up the debt);
- (iii) and so do purchases by other parts of the public sector in some countries, eg in Japan where the "public banks" (notably the Trust Fund Bureau which invests money deposited in Japanese Post Offices) are large-scale purchasers of government bonds. Central bank financing of government borrowing needs is normally, however, tightly controlled;



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- (iv) the policy in Japan and France is to fund via new debt sales of above a minimum number of years' original maturity (1, 5, respectively); in the other countries there is no such rule, but policy is aimed at increasing the residual maturity of the outstanding debt;
- (v) the average residual maturity of the outstanding debt varies from 3½ years in Italy to 5½ in the US. (This compares with around 10 years for UK gilts);
- (vi) there are restrictions in most of these economies on the amount of short-term (normally under 1 year) funding conducted (eg ceilings in Japan, Germany and Italy) on the grounds that such funding injects liquidity into the economy;
- (vii) only in Italy is the government a large-scale issuer of medium/long-term, variable rate bonds.



**UNITED STATES****Background**

Overall public sector borrowing is dominated by that of the Federal government. Thus in FY 1986 the federal deficit (on a unified basis) was \$221 billion, while, the state and local governments ran a combined surplus of around \$60 billion. This section is primarily concerned with the funding of the Federal deficit.

**Responsibility**

2. The US Treasury has responsibility for deciding and executing funding policy. However, the day to day management of the markets is conducted by the New York Fed in consultation with the Treasury.

**Aim of funding policy**

3. Policy is aimed at broadly funding the deficit with debt sales to the US private, and overseas, sectors on a financial year basis. The end-year deadline is not a matter of concern so long as there is not a pattern of significant over, or under funding. The main aim of funding policy is to fund the Federal deficit as cheaply as possible. Policy is also directed at increasing the average maturity of the debt (insofar as that is possible given various legal restrictions [see paragraph 4]) and at maintaining a liquid and stable market for debt (partly through a predictable pattern of issuance). There is no policy regarding the sectoral take up of the debt.

**Constraints**

4. The most serious constraint is the debt limit ceiling, which governs the maximum amount that the Treasury can borrow. There are also legal restrictions on the amount of long-term\* debt which has a coupon of above 4¼ per cent which can be issued. (Currently, \$24 billion of such debt can be issued without regard to this 'rate-lid'.)

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\* Defined here as over 10 years' maturity.



5. The Treasury has also placed some constraints upon itself. For example, it is their policy not to issue instruments that would compete directly and favourably with savings deposits at banks and savings & loan associations. The Treasury also tries to keep the mix of maturities at the regular auctions as predictable as possible so as to encourage liquidity and market certainty. In addition current Treasury policy is rather conservative regarding new products. (A good example is their reluctance to issue indexed debt or yen bonds). The private sector is, however, allowed considerable freedom to develop new products (eg strips).

#### Mechanics

6. A programme of Federal government debt sales is announced in advance by the Treasury. The programme is decided with regard to the forecast profile of the Federal deficit. The aim however is not to match the deficit in each period with the same amount of debt sales. Instead the flow of debt sales is 'smoothed' through the year. As a result of this and the fact that there is always a discrepancy between the forecast, and the actual, deficit, the flow of debt sales does not match exactly the borrowing requirement. When debt sales are insufficient Treasury bills (of up to twelve months' maturity) and cash management bills (which are very short-term) are issued.

7. The Federal Reserve is permitted to take up limited amounts of Treasury debt at auctions. In practice, however, it finances a significant share of the overall Federal deficit in individual years (see Table 1) the bulk of such funding reflecting the open market operations of the New York Federal Reserve. The combined operations of the Federal Reserve and the Treasury have in recent years resulted in a modest degree of under-funding of the Federal deficit.

8. Table 1 shows that part of the deficit is funded by the public sector itself via eg. the drawing down of Federal cash balances and monetary assets in the 'other financing means' column. The Federal government also borrows (by the issue of non-marketable debt) large amounts from state and local governments - such borrowing is included in the 'other domestic' column of the table.



TABLE 1

## United States: Financing of the Federal Deficit

(In billions of dollars)

Fiscal years	Total Deficit (-) <u>1/</u>	Means of Financing				Other Financing Means <u>3/</u>
		Borrowing from the Public <u>2/</u>				
		Total	Change in Debt Held by			
			Federal Reserve	Other Domestic	Foreign	
1977	-53.6	53.5	8.3	24.3	20.9	0.2
1978	-59.2	59.1	10.5	23.2	25.4	0.1
1979	-40.2	33.6	0.1	29.2	4.3	6.5
1980	-73.8	70.5	5.3	64.1	1.1	3.3
1981	-78.9	79.3	3.6	66.6	9.1	-0.4
1982	-127.9	134.9	10.1	113.9	10.9	-7.1
1983	-207.8	212.4	21.0	171.8	19.5	-4.6
1984	-185.3	170.8	-0.4	155.8	15.4	14.5
1985	-212.2	197.3	14.7	148.3	34.3	14.9
1986	-220.7	235.7	21.0	168.1	46.6	-15.0
1987 <u>4/</u>	-173.2					
1988 <u>4/</u>	-107.8					

Sources: U.S. Treasury Department; and FY 1988 budget documents presented in February 1987.

1/ Unified budget basis; both on- and off-budget transactions are included. Since FY 1985, off-budget entities are the Old-Age and Survivors Insurance Trust Fund and the Disability Insurance Trust Fund.

2/ Includes agencies' borrowing.

3/ Includes use of cash balances and monetary assets; changes in checks outstanding, military payment certificates, accrued interest on Treasury debt, certain collections in transit, and deposit fund balances; and seigniorage on coins.

4/ Estimates presented in the FY 1988 budget.



**Instruments**

9. A range of maturities of marketable debt is issued. Treasury bills (of 3, 6 and 12 months maturity) are sold at regular auctions. Treasury notes are of 1-10 years' original maturity while Treasury bonds are of 10-30 years'. The Treasury does not issue variable rate debt.

10. Non-marketable debt is also issued. This takes the form of savings bonds aimed at small investors, as well as special issues to Government agencies, trust funds, as well as foreign, state and local governments. Debt sold to Government agencies is not counted as part of Federal Government funding.

**Maturity**

11. The average maturity of marketable interest-bearing public debt held by private investors was 5½ years in March 1987. The average maturity has been increasing for the last 11 years as a result of the policy described above to issue more long-term stock (see Chart A).

 **Holders**

12. Table 2 shows the estimated sectoral allocation of total public debt (of which Treasury debt is the largest part).

**Other**

13. State and local governments manage their own financial affairs largely independently of the Treasury. They fund their borrowing requirements by issuing "municipal securities". These consist of bonds issued to finance specific projects and short-term notes sold in anticipation of the receipt of other funds, such as taxes or proceeds from a bond issue. While many states are constitutionally required to run a balanced budget, some of these nevertheless borrow for specific projects.



# CHART A: AVERAGE LENGTH OF THE MARKETABLE DEBT Privately Held

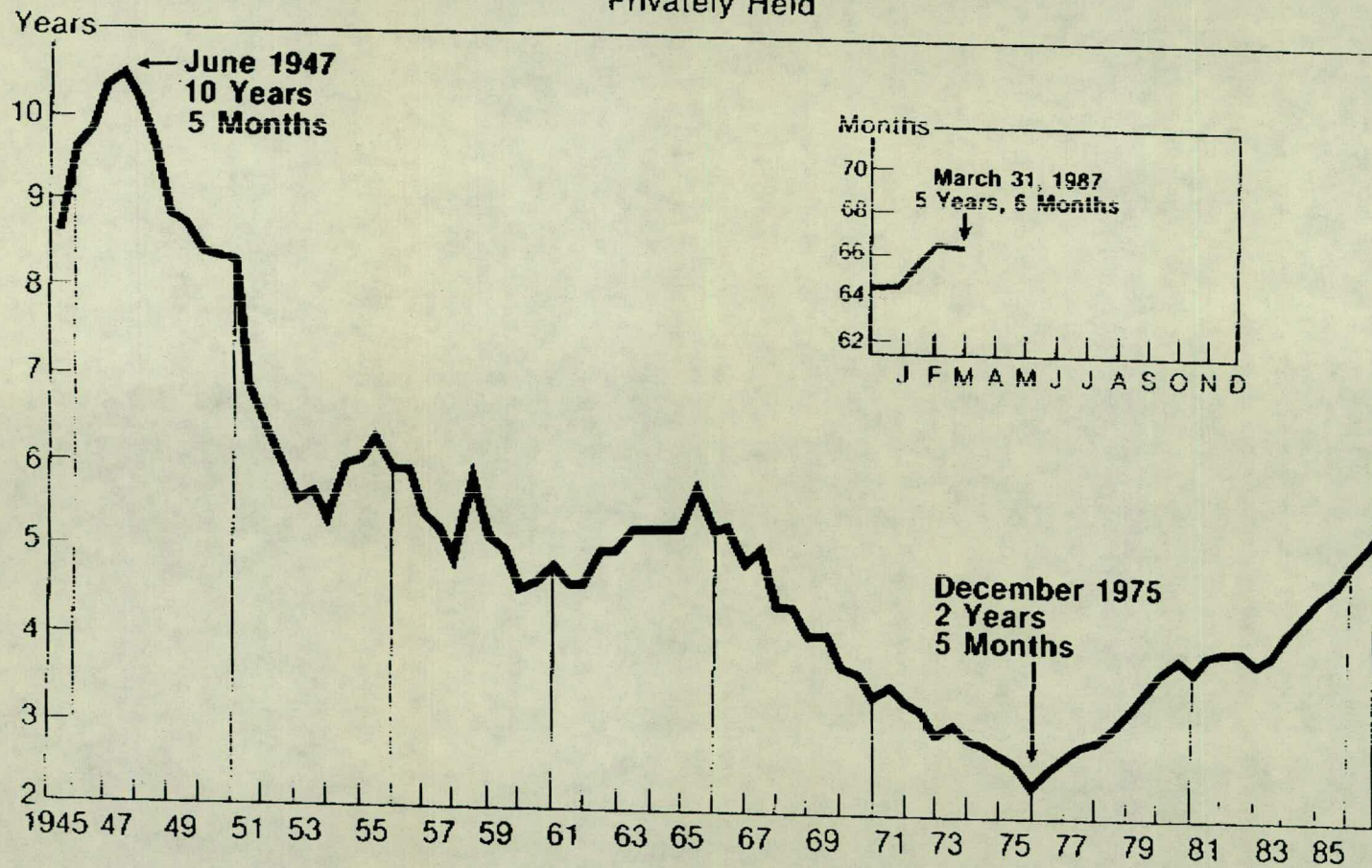




TABLE 2

Estimated Percentage Ownership of  
Public Debt Securities 1970 through 1985

End of fiscal year	Total <sup>a</sup>	U.S. government accounts	Federal Reserve	Foreign and international	Private financial institutions <sup>b</sup>	Corpor- ations	Individ- uals	State and local govern- ments	Other <sup>c</sup>
1970	100.0	25.7	15.6	4.0	16.8	3.0	22.2	6.6	6.2
1971	100.0	25.8	16.4	8.2	17.7	2.5	19.6	5.4	4.3
1972	100.0	26.1	16.7	11.5	16.7	2.2	17.2	6.3	3.3
1973	100.0	27.0	16.4	13.0	15.0	2.1	16.6	6.3	3.7
1974	100.0	29.1	17.0	12.0	13.0	2.3	17.0	6.0	3.7
1975	100.0	27.3	15.9	12.4	14.9	2.6	16.3	6.0	4.7
1976	100.0	24.1	15.2	11.3	17.5	4.0	15.5	6.3	6.1
1977	100.0	22.4	15.0	13.7	17.2	3.3	14.9	7.6	6.1
1978	100.0	21.8	14.9	15.7	15.0	2.8	14.2	8.8	6.9
1979	100.0	22.7	14.0	15.1	13.8	2.7	14.0	8.1	9.7
1980	100.0	21.8	13.3	13.9	14.8	2.9	13.6	8.5	11.3
1981	100.0	20.9	12.5	13.1	15.2	1.8	11.0	10.0	15.6
1982	100.0	18.9	11.8	12.3	16.7	1.9	10.1	10.7	17.5
1983	100.0	17.4	11.3	11.6	18.1	2.6	9.4	10.9	18.8
1984	100.0	16.7	9.9	11.2	16.2	3.0	9.4	N/A	N/A
1985	100.0	17.3	9.3	11.5	12.0	3.1	8.3	N/A	N/A

<sup>a</sup>Totals may not add to 100.0 due to rounding.

<sup>b</sup>Includes commercial banks, mutual savings banks, and insurance companies through 1980. From 1981 on, excludes mutual savings banks, but includes money market funds.

<sup>c</sup>Includes S&Is, nonprofit institutions, credit unions, corporate pension trust funds, dealers and brokers, certain U.S. government deposit accounts, and U.S. government sponsored agencies. From 1981 on, also includes mutual savings banks.

N/A = Not available.

Source: Treasury Bulletin, various issues. Data for Federal Reserve and U.S. government accounts are actual holdings; data for other groups are Treasury estimates.

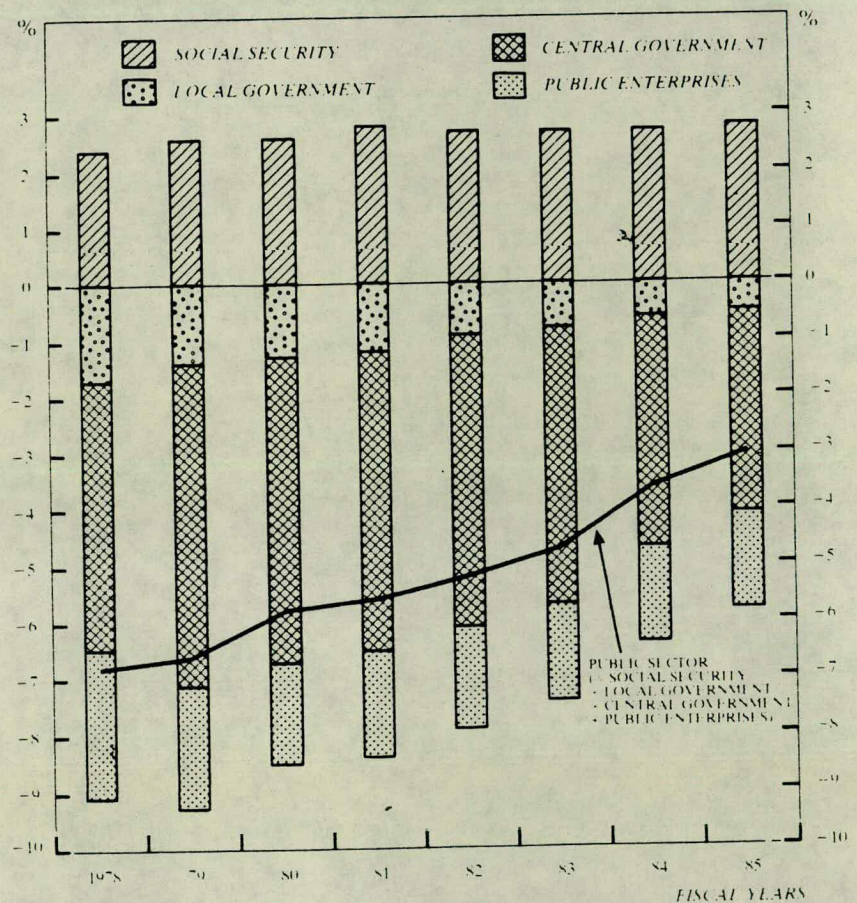


## JAPAN

## Background

Chart B shows a sharp fall - from nearly 7 per cent to 3 per cent - in the ratio of public sector borrowing to GNP from FY 1978 to 1985 in Japan. It also highlights the large contribution of central government to total public sector borrowing. This section is primarily concerned with the financing of central government borrowing.

**CHART B** Components of public sector borrowing in Japan  
Percentages of GNP



## Responsibility

Sources: Economic Planning Agency, Annual Report on National Accounts; OECD Secretariat estimates.

2. Policy is determined by the Ministry of Finance following discussions with the Bank of Japan. It is the Bank, however, which is more active in the conduct of policy (eg. it organises the bond auctions held each month).



### Aim of funding policy

3. The broad aim of policy is to fully fund the central government deficit over each fiscal year by sales of long-term - defined as over 1 year's original maturity - fixed rate debt. (Funding by way of short-term debt is seen as injecting liquidity into the economy.) However, it is of no great import whether or not the goal is achieved exactly by each fiscal year-end - in the event of any over-, or under-, funding in the fiscal year, the difference is carried forward. A range of long-term maturity bonds are issued so that private sector (eg. commercial bank) recourse to the bond market is affected as little as possible. Minimisation of the cost of the new debt is of key importance and this is effected by eg. hard negotiations each month with the syndicates.

### Constraints

4. A series of legal constraints apply to the type of instruments used for funding. Thus annual ceilings, set by the Diet when authorising the Budget for the year, limit the amount of short-term funding (including Treasury bills, financing bills, food bills\* and foreign exchange intervention bills<sup>+</sup>) that can be carried out. There is however provisions for these limits to be eased in years when bond sales have already been huge.

5. The law, in addition, places constraints on the ownership of central government debt, especially by the Bank of Japan. The issuance of bonds directly underwritten by the Bank of Japan is prohibited. It cannot purchase government bonds within a year of issue, except insofar as it holds a maturing bond and buys a refinancing issue.

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\* These are bills issued to finance government subsidies to Japanese farmers. Their maximum maturity is one year.

+ These are issued to the Bank of Japan in exchange for yen to be used in intervention - they pay less than the market rate of interest.



6. Bonds issued to finance current rather than capital expenditure are not permitted by law. However, each year a special law is passed to allow them. It is government policy to stop the issuance of such bonds by FY 1990.

7. Whether a long-term bond was originally issued to finance current or capital expenditure it is the practice to refinance only part of it by bond finance upon maturity, eg. five-sixths in the case of a 10 year bond. The idea is that in this way the original expenditure will have been fully paid for over a finite time horizon, the 60 year period in the case of a 10 year bond being equivalent to the putative life of a typical government investment.

#### **Mechanics**

8. At the start of the calendar year a joint Treasury/central bank meeting is held to discuss the amount of bonds to be issued in the fiscal year beginning in April, taking into account borrowing needs and market conditions. Bonds are normally issued each month. The amount issued reflects the expected monthly borrowing requirement (which can be forecast with a high degree of accuracy) and a range of other factors including the authorities' assessment of monetary conditions (including the level of short and long term interest rates) and their desire to smooth the flow of bond sales over the financial year. Their volume rarely matches the central government's financing needs exactly and short-term borrowing is used to finance any shortfalls that arise (or purchases if there is a surfeit of bond sales).

#### **Instruments**

9. Treasury bills are used mainly for seasonal funding. A new kind of Treasury bill was introduced in February 1986. It is sold by auction to the market and does not have to be redeemed in the financial year in which it is issued. A ceiling is however set on the increase in its stock over a fiscal year which serves to constrain the amount of the deficit financed in this way. By contrast, those Treasury bills extant before February 1986 - which are now called 'financing bills' - are initially issued to the Bank of Japan (at a rate of interest below the market rate) and must



be redeemed in the financial year of issue as must the food and foreign exchange intervention bills (unless special legislation is passed). Both Treasury and financing bills are usually of six months' original maturity.

10. Seven kinds of bonds (for 2, 3, 4, 5, 10, 15 and 20 years) are issued, of which the most important is the 10 year bond. [In FY 1986-87 long-term bond issues accounted for 89 per cent of new central government bonds of which 10 year bonds accounted for around 95 per cent.]

11. 2, 3, 4 and 5 year bonds are known as medium-term bonds. They are sold by auction, at irregular intervals determined by funding needs. 10 year bonds by contrast are issued directly to a syndicate around the twentieth of each month following negotiations between the syndicate and the Ministry of Finance (though it is intended that 20 year, and some 10 year bonds be issued by auction for the first time this fiscal year.)

15 year bonds, unlike the others, are non-marketable; they have been sold mainly to insurance companies and Trust Banks.

12. The retail sale of government bonds at post offices is scheduled to begin in FY 1987-88. The success of this new departure is likely to be impaired by the planned elimination of the tax exemption on the interest on such bonds which will reduce their attractiveness to small investors.

### **Maturity**

13. The average maturity of central government bonds outstanding - defined as bonds of original maturity 1 year or more - is, at August 1987, just under 5 years.

### **Holders of central government debt**

14. All sectors may hold central government debt. However no comprehensive data on the sectoral holdings of such debt are available, partly because around 10 per cent of it is held in bearer form. The government itself held almost two-fifths of it at end-calendar 1986, partly reflecting large holdings by the Trust Fund Bureau (which invests money raised largely via small investors'



deposits in, and insurance taken out with, the nation's post offices). The Bank of Japan held 2 per cent, mainly in the form of short-term securities. Japanese financial institutions (including banks) are thought to hold 45 per cent, private corporates 9 per cent and individuals 10 per cent. Overseas holdings are subsumed into the last two categories.

**Other :**

15. Funding is approved on an annual basis for the local authorities and government agencies, as well as for the central government. The central government controls the amount and composition of their borrowing, which takes the form of borrowings from the Trust Fund Bureau and the issue of long-term bonds (initially to syndicates).



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**WEST GERMANY****Background**

The Federal (ie central) government borrowing requirement has declined sharply as a proportion of GNP in recent years, standing at 1.2 per cent of GNP in 1986 as against 3½ per cent in 1981. The borrowing requirement of the rest of the public sector (including the Länder governments, and state enterprises) also amounted to around 1 per cent of GNP in 1986. This section deals mainly with the funding of the Federal borrowing requirement.

**Responsibility**

2. Funding is sharply divorced from monetary policy; it is the responsibility of the Ministry of Finance. The Bundesbank acts as its agent in selling the debt. It also leads the consortium which provides any residual financing to meet Federal borrowing requirements, acting effectively as a go-between for the banks and the government.

**Aim of funding policy**

3. One aim underlying funding policy is that it should have no monetary impact. It follows from this that recourse to instruments even remotely close to money (such as variable rate instruments and Treasury bills) is avoided.

**Constraints**

4. There are restrictions on the amount of short-term funding - the amount of which is insignificant - that can be provided by the Bundesbank and on the amount of direct Federal borrowing from the money markets.

**Mechanics**

5. The funding aim is to borrow enough each month to cover the government's cash needs. At the outset of the month, the Federal Office of Cash Management projects the Federal deficit for the month



ahead (with, it appears, a high degree of accuracy). To the extent that there are errors, and net borrowing differs from the cash need, there are two buffer facilities: (i) the government can borrow up to DM6 billion short term from the Bundesbank; (ii) more importantly, they can borrow up to 15 per cent of annual budget expenditure directly in the money markets. These facilities have allowed just a little departure recently from rigid monthly funding. The government has tended to borrow slightly more heavily in the first part of the year than necessary, partly to be prudently ahead of the game and partly to accommodate the borrowing pattern of the Lander who tend to need money later in the year.

### Instruments

6. There are three main types of financing instruments:

- (i) Federal savings bonds normally of 6 or 7 year maturity. These are very similar to National Savings Certificates - eg the interest rate paid on them rises the longer they are held to encourage their retention.
- (ii) Schuldscheindarlehen: mainly of 5 to 7 year maturities. Issued irregularly as needed with limited marketability and mainly placed with the commercial banks.
- (iii) Treasury bonds of various maturities:
  - Kassenobligationen (2-5 years);
  - Bundesobligationen (5 years); and
  - Bundesanleihen (maturities up to 30 years)

7. In recent years, about two-thirds of the total borrowing needs have been met by direct sales of instruments - mainly Schuldscheine and Bundesobligationen. But a third or more has had to be financed by recourse to the Federal financing syndicate. This is a consortium of banks, led or coordinated by the Bundesbank, which negotiates with the government about the type of debt and the terms it is prepared to accept in acting as residual financier. Members of the consortium may either hold the debt in their own portfolios or sell them to others after a fallow period. In return, they receive a fee.



**Maturity**

8. The average life of the Federal debt is between 4 and 5 years. This means that turnover is very high. Whilst the Federal deficit in 1987 is expected to be DM26 billion, gross borrowing is put at DM88 billion. Adding in other general government entities, gross general government borrowing could be as much as DM140 billion, a multiple of the equivalent UK figure.

 **Holders**

9. The bulk of the Federal debt is held by the commercial banks, mainly in the form of Schuldscheine. At end-1985 they held nearly two-thirds of total public sector debt (half of which is Federal debt) with the non-banks and overseas sectors holding one-fifth a-piece. The banks' share has however fallen in recent years. The recent rise seen in the overseas share - the latest figures put its share of new issues in 1986 at 90 per cent - reflects the growing securitisation\* of the new debt, the attractiveness of DM assets, and the abolition of the coupon tax for foreign residents in October 1984. More than half of Federal bonds and medium-term notes outstanding are held by the overseas sector - non-residents are not however allowed to acquire tap issues. The Ministry of Finance is concerned that there is little domestic non-bank appetite for government debt. In addition, there is a concern that the syndicate may not represent the cheapest way of raising finance.

**Other**

10. The Lander governments and local authorities issue bonds and Schuldscheine independently of the central government, relying most heavily on Schuldscheine, and the Lander governments also issue notes (Kassenobligationen).

\* As bond sales have increased relative to Schuldscheine.



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**FRANCE****Background**

The central government budget deficit dominates the overall public sector budget deficit. Thus in 1986 the central government deficit was equivalent to an estimated 2½ per cent of GDP, as compared with a 3½ per cent figure for the public sector as a whole. It has risen sharply since 1980.

2. The government's aim is to reduce the central government budget deficit as a share of GDP to 1 per cent between 1986 and 1988. This would be consistent with the stabilisation of the share of central government debt interest in GDP. The government's ultimate goal is to eliminate the central government budget deficit.

**Responsibility**

3. Primary responsibility for organising the central government's borrowing programme rests with the Finance Ministry (which takes all key decisions in relation to debt management) but the task of managing the issues of Treasury bills and government debt is entrusted to the Bank of France.

**Aims of funding policy**

4. The funding rule entails broadly funding the public sector financial deficit on an annual basis. In applying this rule the government seeks:\*

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\* The aims of funding policy were explained in part in the 29 June 1987 address of the Minister of State to the National Credit Council.



- (i) to obtain the bulk of its funding on the markets by issuing bonds\* (and thus to keep money creation by the Treasury within strict limits);
- (ii) to increase liquidity in the government bond market and thus achieve cost savings, both by moving away from reliance on a large heterogeneous assortment of debt instruments to a smaller more homogeneous set, and by encouraging overseas investors to purchase government debt (domestic demand for it having declined somewhat in reflection of the thriving equity market);
- (iii) to increase the average maturity of its debt (which it can achieve by issuing Treasury bills with a maturity of more than one year and by issuing bonds).

### Constraints

5. The Bank of France may grant direct advances to the government only within predetermined limits.

### Mechanics

6. The annual funding goal is based on the forecast for the deficit. If the latter is revised during the year, the funding objective is revised accordingly. There is no significant end-year problem since both expenditure and tax revenues are highly predictable (although tax revenues are becoming less so).

7. An auction calendar for Treasury bills (which are then issued weekly) is announced every three months.

8. In 1987 the scale of bonds to be sold in the forthcoming year was announced (for the first time) together with the calendar of auctions. Funding is achieved through a series of monthly auctions, in each of which a range of maturities is sold. Thirteen primary dealers take part in these auctions and act as market makers. (Previously there were one or two large discrete bond issues each year, which were usually placed with a syndicate of the largest French banks.)

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\* Subject - by an unwritten rule - to its share of the new issues on the bond market not exceeding one third.



### Instruments

9. Treasury bills are the major short-term instrument. They fall into two main categories:

- (i) non-interest bearing, discount bills of up to 1 year's maturity; and
- (ii) negotiable, interest bearing (with a fixed coupon) bills of longer (ie 2 and 5 year) maturities. The share of all Treasury bills of this category has risen in recent years.

10. 7, 10, 15 and 25 year fixed rate bonds are issued, together with variable rate 12 year bonds. [These are issued as new tranches of existing bonds]. Long-term bonds, nonetheless, dominate the funding of the deficit. Table 3 shows that such issues financed 83 per cent of the Treasury's total deficit in 1986. Monetary financing in this table is dominated by non-negotiable Treasury bills and the residual category by foreign borrowing.

### Maturity

11. The aim is to keep all new borrowing of bonds at maturities of five years or more.

### Holders

12. Any sector may purchase government debt (eg Treasury bills, bonds) and around 15-20 per cent is held overseas. The attractiveness of such debt to the banks partly reflects its maturity. Bonds which have an original and/or a residual maturity of seven years or less may be held in banks' reserve asset portfolios and are hence known as 'bankable' bonds. They are more marketable than other - unbankable bonds.

### Other

13. Local authorities can run deficits, the size of which is strictly limited by law.



TABLE 3: France: Financing of the Treasury's Cash Deficit, 1981-86

(In billions of francs; as percent of total deficit in parentheses)

	1981	1982	1983	1984	1985	1986 <sup>4/</sup>
Cash deficit <sup>1/</sup>	61.3 (100.0)	82.9 (100.0)	147.1 (100.0)	143.3 (100.0)	157.6 (100.0)	136.6 (100.0)
Financing						
Long-term bond issues, net	18.6 (30.3)	28.2 (34.1)	44.3 (30.1)	77.4 (54.0)	88.0 (55.8)	113.9 (83.4)
Monetary financing <sup>2/</sup>	56.1 (91.6)	69.2 (83.5)	81.5 (55.4)	58.1 (40.6)	69.9 (44.3)	4.5 (3.3)
Other, nonmonetary	-13.4 (-21.9)	-14.6 (-17.6)	21.3 <sup>3/</sup> (14.5)	7.8 (5.4)	-0.3 (-0.2)	18.2 (13.3)

Source: Banque de France, Compte Rendu, March 1987.

<sup>1/</sup> Including operations of the Fonds de stabilisation des changes (FSC).

<sup>2/</sup> "Claims on the Treasury" counterpart to M3.

<sup>3/</sup> Includes F 13.4 billion compulsory loan.

<sup>4/</sup> Provisional.



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**ITALY****Background**

Total public sector debt rose from 37 per cent of GDP in 1980 to over 100 per cent in 1986. The share of this debt held by the Bank of Italy has fallen since 1981 when the requirement that the Bank act as buyer at last resort of government paper was dropped. There has been a decline too in the commercial banks' share partly in reflection of a tightening up in control of peripheral state entities' freedom to borrow. The overall state - defined to be slightly wider than the central government\* - deficit has accounted for over 90 per cent of the total public sector deficit in recent years (see Chart C). The state deficit is projected to drop from over 9, to 5¼, per cent of GDP over 1987-91 - this section is concerned with its funding.

**Responsibility**

2. The Treasury determines funding policy. The role of the Bank of Italy, which acts as its agent, has become more independent since 1981 when the 'divorce' (see paragraph 1) of the Bank and Treasury occurred.

**Aims of funding policy**

3. The aims of funding policy are to increase the average maturity of new borrowing, to minimise its cost, and to reduce the proportion held by the Bank of Italy.

**Constraints**

4. The Bank of Italy is no longer obliged to act as buyer of last resort of government debt. The Treasury has, however, an overdraft facility at the Bank of Italy, the ceiling on which is equivalent to 14 per cent of the budget expenditure total. The

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\* It includes autonomous agencies (railways, postal and telecommunications services, etc) and the Deposits and Loans Fund (which lends almost entirely to local authorities).



CHART C

ITALY  
PUBLIC SECTOR FINANCIAL BALANCES, 1976-85  
(As a percent of GDP)

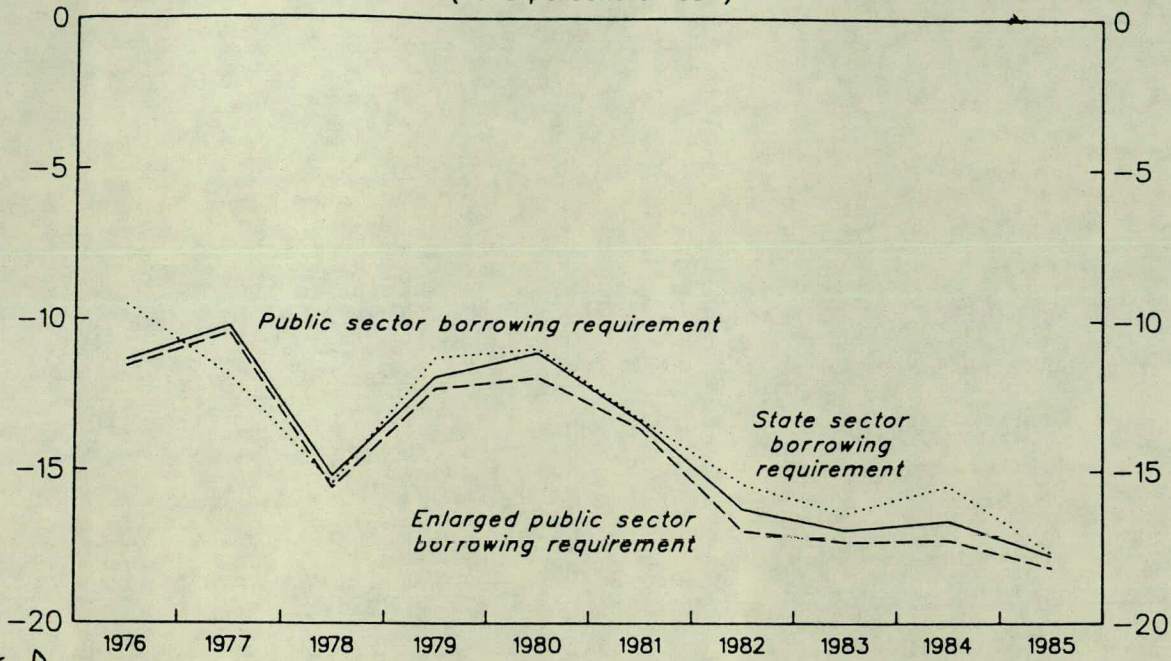
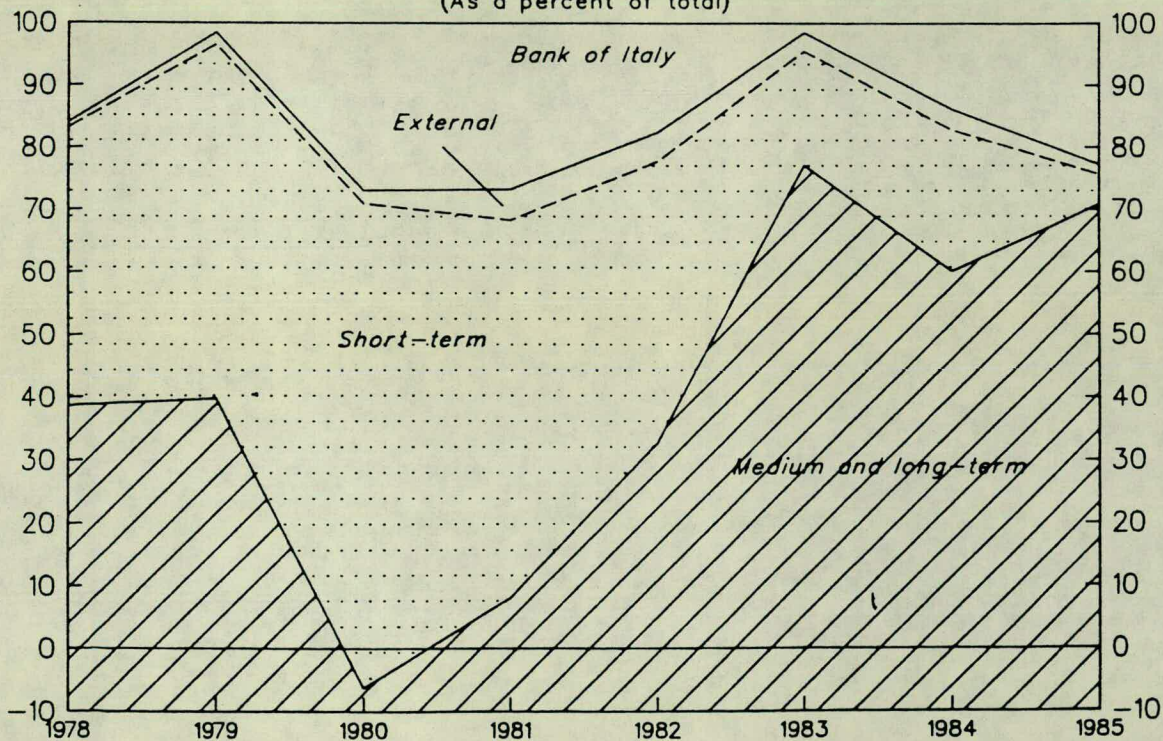


CHART D

FINANCING OF THE STATE SECTOR BORROWING REQUIREMENT  
(As a percent of total)



Source: Data provided by the Italian authorities.



Budget law sets a ceiling on the net issues of Treasury bills each year, while the finance law establishes the maximum maturities of the various government securities.

#### **Mechanics**

5. Part of the deficit - 23 per cent in 1985 - is funded by the Bank of Italy mainly via direct transfers to the Treasury, rather than by the central bank purchase of Treasury bills. Over two-thirds is funded by the sale of government securities. The residual is met by external borrowing and Postal deposits (see Chart D).

#### **Instruments**

6. Treasury bills (BOT) of 3, 6 and 12 months maturity are issued at the end of each month by auction. Certificati di Credito del Tesoro (CCT) are longer term **indexed** bonds, generally of 6-10 years' maturity. They are the single most important funding instrument, and are, like Treasury bills, tax-free. In recent years small quantities of certificates denominated in ECU, and CCTs indexed to the GDP deflator, have also been issued.

#### **Maturity**

7. The average maturity of the public debt declined in the second half of the 1970s as Treasury bill sales burgeoned. However, its average maturity has lengthened in recent years - eg. from 18 months in October 1983 to 3½ years in October 1986 -reflecting in part large sales of CCT (see Chart D).

#### **Holders**

8. Treasury bills and bonds can be held by all sectors.

#### **Other**

9. Local authorities, social security institutions and state holding companies may issue bonds only if authorised by the government. Limits on local authorities' and social security institutions' borrowing are fixed in the Finance Law each year.



**ORIGINAL OR RESIDUAL MATURITY : TREATMENT OF THE OUTSTANDING STOCK OF DEBT WITH A MATURITY-BASED FUNDING RULE**

This Annex considers the alternative ways of dealing with changes in the outstanding stock of Government debt, with a maturity-based funding rule. For illustrative purposes, it assumes that the liquidity cut-off point would be two years, but the principles would apply whatever the time limit chosen.

2. The logic of a maturity-based funding rule is that it is the maturity of the debt that matters, not (as now) its purchaser; that public sector borrowing is financed in a non-inflationary way only if the instruments sold are not close substitutes for money; and that sales of debt with less than two years to maturity are deemed too close to money to score as funding.

**The maturity-based logic**

3. In principle, our attitude to outstanding debt ought also to follow this logic. If new gilts had to be of more than two years to contribute to funding, then existing stocks ought no longer to count as they fell back under the two year threshold. The maturity rule would imply that debt ceased to counter as funding when it reached the two year cut-off ("two year maturities") - rather than, as now, when it is repaid.

4. The same principle should also in logic apply to other public sector debt (eg Local Authority Bonds), and to National Savings certificates two years before they mature.

5. It would be relatively straightforward to apply this principle to gilts. The relevant sums would be roughly the same as the redemption burden two years out; for example the 1988-89 funding task would take account of 1990-91 maturities (which will



pass the two year point during 1988-89), rather than - as under the current rule - of 198889 maturities.

6. Complications would arise in the treatment of convertibles and of stocks with optional redemption dates; we would need to decide what convention to adopt in deeming their maturity.

7. There is another particular complication which arises simply because the maturity profile of gilts maturities in the immediate future is so lumpy :

	<u>1987-88</u>	<u>1988-89</u>	<u>1989-90</u>	<u>1990-91</u>	<u>1991-92</u>
£bn (rounded)	7	8	12	6	7

The transition from a redemption-based calculation to a two-year cut-off could mean that the hump of maturities in 1988-89 and 1989-90 would never be refinanced : under the present rule this would be premature, but if a liquidity rule were to be introduced it would be too late. Instead of levelling the hump, we should have finessed it. If we allowed that to happen :-

a. Monetary conditions would be looser : the change would involve an uncovenanted - albeit one-off - increase in liquidity, akin to a substantial underfund under the current funding rule. On the other hand, the present sectoral funding rule is not free of this problem. Over the next few years, the proportion of gilts with less than two years to maturity - and which thus have affinity with money itself - will be abnormally high. The present rule will do nothing to prevent this adding to de facto liquidity.

b. There would also be the problem of presentation : the change would be seen as a weakening of policy; some commentators might even suggest that the switch to a liquidity-based funding policy was driven by the



authorities' desire to avoid the burden of refinancing 1989-90 maturities.

8. Clearly, we would need to adopt some kind of transitional arrangement to avoid this outcome. We could explicitly mention the problem, in presenting the new rule, and say, for example, that we would be selling £x billion more gilts in the transitional period than the rule mechanically interpreted would imply to deal with it. But this would inevitably make the presentation more complicated.

9. A final practical disadvantage relates to the treatment of other public sector debt, where at present we have information about its residual maturity only at the end of each financial year. We would need to persuade the local authorities to report more frequently.

10. Presentation and market understanding would, however, probably be the main problem. Even without the extra complication suggested in paragraph 8, a residual maturity rule would not be easy for the market to understand.

#### Original maturity rule

11. The alternative course of an original maturity rule would be similar to the current arrangement whereby existing stocks essentially cease to score as funding only when they mature. The argument in favour of this would have to be that the maturity-based funding rule applied only to debt being sold; that although the new rule required a cut off point there was no had and fast dividing line between liquid and non-liquid assets; and that it would be an unnecessary complication to introduce calculations for debt with less than two years to maturity (in part because of data collection problems).

12. While this might detract from the theoretical coherence of the new funding regime, it could perhaps be defended on the basis of its relative simplicity; and on the grounds that any rule is likely to involve some anomalies. The approach is the one we



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chose for deciding which assets should be included in M5 (the old PSL2), which includes bank deposits of greater than two year original maturity but excludes all gilts, even when there are only a few months to maturity.



## ANNEX 4

## THE LIQUIDITY CUT-OFF POINT UNDER A NON-SECTORAL FUNDING RULE

The aim of a non-sectoral maturity-based funding rule is to ensure that public sector activities do not increase private sector liquidity. This Annex considers the question of what liquidity cut-off should be chosen. The answer clearly depends on whether an original or residual maturity rule is chosen (see Annex 3).

**Price Volatility**

2. In considering the optimal liquidity cut-off it is useful to look first at gilts, the largest single component of government debt. The liquidity of a gilt is limited by the fact that its capital value prior to redemption, is uncertain. This uncertainty serves to dissuade holders from employing gilts for transactions purposes, encouraging them instead to use instruments of greater capital certainty. The level of capital uncertainty attached to a particular gilt can be measured in part by its "gross volatility", which shows the extent to which the price of a gilt changes upon a given change in yields.

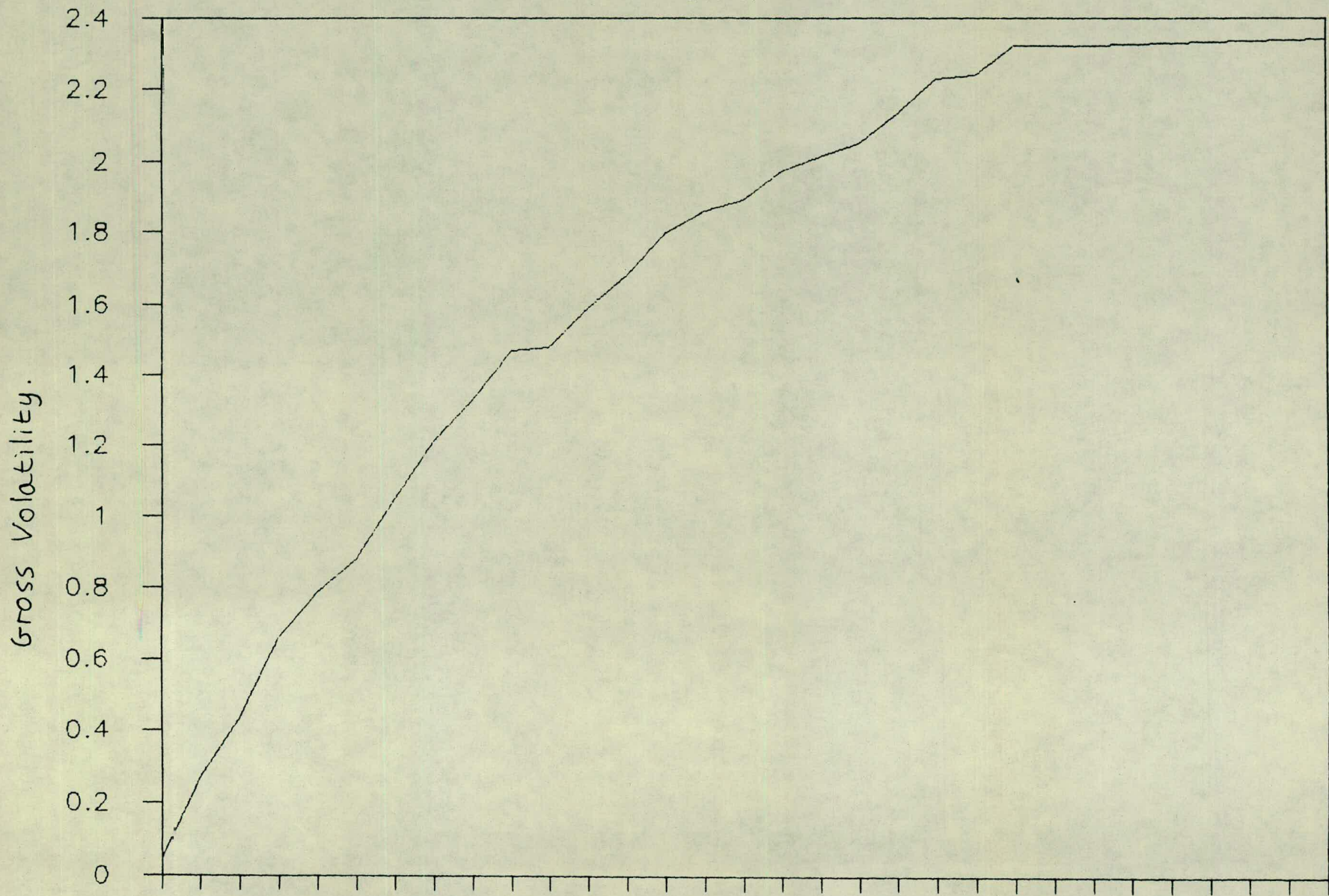
3. The gross volatility of a gilt depends on three factors; its term to maturity, its coupon rate and the level of yields. Broadly speaking the longer the residual maturity of a gilt with a particular coupon, the greater its gross volatility. When comparing the gross volatility of different gilts at a given point in time it is necessary to choose gilts with similar coupons. A selection of (dated conventional) gilts - one for each year where possible - with coupons of around 10 percent, was used for Chart A which plots each gilt's gross volatility against its redemption date. The chart shows a steady rise in gross volatility from only 0.25 for Treasury 12 1987 to 2.34 for Exchequer 12 2013/17. There is no clear step-change (eg a maturity at which stocks suddenly become more volatile) in this continuum and it therefore throws no light on where the maturity cut off should be.

4. It is possible to look at the **actual** - rather than the potential - volatility of the prices of different maturities of gilts.



# GROSS VOLATILITY<sup>(a)</sup> OF DATED CONVENTIONALS<sup>(b)</sup> (as at 26 August.)

CHART A



19 87'88'89'90'91'92'93'94'95'96'97'98'99'2000'01 02 03 04'05'06'07'08'09' 10'11'12'13'14'15'16'17

a) The percentage change in price if yield increases by 0.25

b) A selection of gilts with coupons around 10 per cent is used.

Maturity Date.



TABLE 1: VOLATILITY (STANDARD DEVIATION) OF PRICES OF STERLING INSTRUMENTS

Maturity	1	6	1	2	3	4	5	10	20
	month	months	year	years	years	years	years	years	years
[CDs (Jan 1983 - Oct 1986)]	0.03	0.16	0.29]						
Gilts (Jan 1984 - July 1986)				0.48	0.63	0.76	0.89	1.15	1.36

Source : Bank

Table 1 shows 2 year gilts to be markedly more volatile than 0-1 year CDs. The volatility of gilts rises sharply over the 2 to 5 years period and more slowly thereafter. Thus the volatility of 5 year gilts is roughly double that of 2 year gilts, but is itself two thirds that of 20 year gilts. This would suggest a cut-off of 5 years or less, probably closer to 2. Unfortunately it does not identify a specific break-off point.

#### Capital requirements for gilts

5. Supervisors of institutions holding gilts have had to wrestle with the problem of devising safeguards to protect these institutions from the effect of gilts prices falling. Most of them have laid down capital requirements which reflect the risk attached to gilt holdings of particular maturities. It is helpful to consider whether supervisors have a common view or not of the maturity at which gilts become significantly more risky to hold.

6. Table 2 attempts to set out the capital requirements for gilts laid down by different institutions on a common footing. It was drawn up in early 1987 since when requirements in the wholesale markets have changed (declining somewhat).



TABLE 2: CAPITAL REQUIREMENTS FOR GILTS

(i) Risk weights						
	Banks (a)	Convergence Proposals for Banks	GEMMS	Wholesale Markets	Building Societies	SIB (b)
0-7 days	2	1	0	0	0	2
7 days-1 month	2	1	0	1	0	2
1-3 months	2	1	2	2	0	2
3-12 months	2	1	2	3	1-2	2
0-1½ years	2	2½	5	6	3½	5
1½-5 years	5	2½	6	6	3½-7½	5
5-10 years	5	2½	6½	6	8-11 (c)	10
10 years+	5	2½	8½	9	½(N+13)	10

## (ii) Ratio of risk weighted assets to capital base

100	N/A	100	100	100	100
-----	-----	-----	-----	-----	-----

(a) Assuming a large bank with a 10 percent risk asset ratio;

(b) SIB proposals for firms registering under the Financial Services Act;

(c) N is the number of years to maturity.

7. It shows that once gilts pass the 1 year residual maturity band, they are viewed as significantly more risky by all (bar one) of the above institutions' supervisors. The other breaks shown, eg that between 5 and 10 year gilts in the SIB proposal, are not by contrast common to other supervisors.

**National Savings**

8. A maturity cut-off of 1 year (or of less than this) would mean that certain instruments which are potentially very liquid, eg income bonds, would count as funding. In order to disqualify such products the cut-off should be higher than 1 year. National savings is discussed further in Annex 5.

**Maturity as a criterion in defining the monetary aggregates**

9. Maturity is used as a criterion in defining M2 (private sector transactions balances) and M4/M5 (overall non-bank private sector liquidity). There was never any strong argument to include gilts in M2 since it was always thought that they would be used rarely for



transactions purposes. However, the possible inclusion of gilts in M5 was considered seriously when M5 (then "PSL2") was first invented. Instruments qualifying for inclusion were supposed to be of one year (or less) residual maturity. Gilts were disqualified on two counts. First, their inclusion would lead to "humps" in the new aggregate wherever large quantities of existing gilts crossed the cut-off point. It was argued that such increases would not be representative of changes in the underlying level of private sector liquidity and it was therefore better to exclude all gilts from the aggregate. Second, there were data problems. But for these problems gilts of residual maturity one year or less would have qualified for "PSL2". In practice because of data problems, an original maturity criterion was applied under which gilts clearly failed to qualify for inclusion since gilts of such a short original maturity are not issued.

### Other Countries

10. The main overseas economies can be divided into two groups; (i) those that seek to ensure that new borrowing is of a minimum number of years' maturity eg Japan (1 year) and France (5 years) and (ii) those with no explicit cut-off, but which do seek to lengthen the average maturity of new debt and thus increase the residual maturity of the total debt outstanding (eg the US).

### Summary

11. This section can be summarised briefly:-

past volatility implies a	2-5 year cut-off
supervisory requirements	1
the definition of M5	1 or 2
and other countries' policies	1 or more

12. The choice is clearly influenced by the choice between original and residual maturity. With the latter it would be logical to go for a shorter date liquidity cut off. These considerations point to no clear conclusions: by 2 years would perhaps be at the short end of the possible range with an original maturity criterion: and nearer the middle of the possible range with a residual maturity criteria.



## ANNEX 5

## NATIONAL SAVINGS PRODUCTS UNDER A NON-SECTORAL FUNDING RULE

The structure of this note is as follows

<u>Section</u>	<u>Subject</u>	<u>Paragraphs</u>
A	Introduction	2
B	Summary	3-6
C	Measures of potential liquidity	7-17
D	Measures of actual liquidity	18-28

A: Introduction

2. The choice of a liquidity - , as opposed a to a sectoral - , based funding rule, would reflect a preference for forms of funding that are less, rather than more, liquid. One way of ensuring that new borrowing is sufficiently illiquid is to score only borrowing with an original maturity of a minimum number of years - two or four are currently proposed - as funding. If maturity is defined as the minimum period in which the investor is able to reclaim his **principal**, the adoption of either a two or a four year minimum maturity ceiling would prevent all National Savings products from counting as funding because all National Savings instruments can be redeemed early subject to an interest penalty. It would also disqualify various other instruments which currently provide funding, including Treasury bills and CTDs. It is commonly thought, however, that certain National Savings products are significantly more illiquid than instruments such as Treasury bills. This note looks at alternative criteria for assessing the liquidity of National Savings products and how the various instruments fare under each of them.



B: Summary

3. (a) one can distinguish between criteria for (i) the **potential** and (ii) the **actual** liquidity of National Savings instruments.

Potential

4. (b) The adoption of a 2 or 4 year original maturity rule would - if maturity is defined as the minimum period in which principal can be repaid - debar all NS instruments from scoring as funding;

(c) if however maturity is defined as the minimum time in which principal can be repaid **without interest penalties**, such rules would leave unmatured fixed interest and index-linked certificates and Yearly Plan as funding;

(d) and a 1 (rather than 2 or 4) year maturity cut off would mean that income and deposit bonds scored too.

Actual

5. (e) Alternatively criteria based on the actual liquidity exhibited in the past can be used. **These** imply some confidence that past behaviour is a guide to future liquidity.

(f) Probably the best of them is **turnover**. Since all National Savings instruments have a lower turnover than bank and building society deposits - which are included in broad money - and CTDs and Treasury Bills there is a case for all of them to score as funding.

Implications

6. (g) A 2 or 4 year original maturity (defined as the minimum repayment period without interest penalties) rule would be the best potential liquidity criterion. Only unmatured certificates and Yearly Plan would score as funding on this basis.



(ii) However, there is a strong case for an actual liquidity measure, eg turnover. A turnover yardstick would mean that all National Savings instruments would score as funding, though there would be a case, taking account of other measures, for excluding ordinary account balances.

**TABLE 1: MEASURES OF LIQUIDITY OF NATIONAL SAVINGS PRODUCTS**

(x means instruments would score as funding, - that it would not)

<u>Measures of:</u>	<u>Potential Liquidity</u>		<u>Actual Liquidity</u>		
	<u>Terms</u>	<u>2, 4 Year original Maturity</u>	<u>Turnover</u>	<u>Average Balance</u>	<u>Rates of Return*</u>
Fixed interest certificates:					
1 (i) under 5 years	x	x	x	)x	
2 (ii) on GER	-	-	x	)	
Index-linked certificates:					
3 (i) under 5 years	x	x	x	)x	
(ii) over 5 years	-	-	x	)	
4 Yearly Plan	x	x	x	-	
5 Deposit bonds	-	-	x	x	
6 Income bonds	-	-	x	x	
7 Premium bonds	-	-	x	-	
8 Invac	-	-	x	-	
9 Ordinary account	-	-	x	-	-

\* This measure can only be used for Ordinary Account (see paragraph 28)



C: Measures of potential liquidity

7. The terms on each National Savings instrument - which determine its potential liquidity - are summarised in Table 2.

8. The first row shows the period which an instrument must be held in order for its holder to maximise his return. There is a clear distinction between those products which must be held for five years (unmatured certificates and Yearly Plan) and those which can be realised in up to a year.

9. The following row details the notice of withdrawal required for each instrument, and any penalties for early withdrawal. Ordinary Account has the easiest terms, followed by Premium bonds. INVAC (which has a long [one month] period of notice of withdrawal but no interest penalty) and GER (which has only eight days' notice but on which up to three months' interest can be forfeited by untimely withdrawals) are the next most liquid instruments. They are followed by income and deposit bonds (which are characterised by the longest periods of notice of all the products [three months] and severe first year penalties, though no penalties thereafter). Unmatured certificates and Yearly Plan by contrast have relatively short periods of notice, but there are severe interest penalties for any withdrawals. The longer a holding is maintained on such products the higher the average compound return with the peak reached on maturity at five years (the whole rate structure is known as the 'rake'). The 'rake' would seem to make such products innately less liquid than income and deposit bonds for which there are no one to five year withdrawal penalties.

10. The minimum investment required for most of these instrument is relatively small (at £1 to £25). However that required for income bonds is substantial (£2000) increasing the likelihood that they are bought for savings rather than transactions purposes and are therefore relatively illiquid.

11. While it is difficult to devise an objective measure summarising the overall terms on these products, it is clear that certain of



them - unmatured certificates and Yearly Plan in particular - have more restrictive terms than others and are, in this respect, less liquid.

### M5 Rule

12. One alternative way of taking into account the interest penalty associated with the early repayment of certain products - the top row of Table 2 - is to take the criterion used by the Bank of England in deciding which instruments should enter into M5, and to categorise those National Savings products that fail to qualify, as 'funding'.

13. This is that instruments which are realisable within a year without significant loss of interest or principal are included in M5, and those that are not, are excluded. Only unmatured certificates, Yearly Plan, income bonds and deposit bonds would be classified as funding using this criterion. Such a rule may not however provide a handle on the actual liquidity of an individual instrument. Eg it could be that its holders are relatively insensitive to interest penalties and extremely sensitive to other factors (such as changes in relative rates of return) so that the product is rarely in practice held for a year. At the same time there may be significant differences between the 'innate' liquidity characteristics of those instruments that do score as funding. Thus there is no interest 'rake' for income and deposit bonds, whereas there is for certificates which are between one and five years old, and Yearly Plan. Funds invested in the latter products for between one and five years cannot therefore be withdrawn without an interest penalty, making holders less willing to do so, and such funds thereby more illiquid than otherwise.

14. Variants of the M5 rule can easily be devised. One could for example classify instruments which are not realisable within two or four (rather than one) years, without significant loss of



interest or principal as funding. This would leave only certificates and Yearly Plan holdings of up to three years', and one year's, original maturity, respectively, counting as funding.

15. Either variant can be modified to take account of the residual maturity of these funding instruments falling below the two or four year cut off. However the consequences would be complicated and somewhat awkward in practice.

16. For example under the four year rule investments in certificates up to one year old would score as funding; however on reaching their first birthday they would dip below the four year residual maturity ceiling and hence be disqualified. They would thus have then to be refinanced by higher funding. The authorities would thus be (i) issuing five year certificates, (ii) scoring them as funding for the first year of their life and then (iii) raising the funds for their eventual repayment four years before they 'mature'. Given the fact that a large part - three fifths or more for some certificates - of certificate monies stay within DNS beyond their five year 'maturity' such a rule would result in a refinancing 'mountain' emerging. The authorities would be borrowing to refinance certificates which they did not yet have to redeem and both long-term (defined here as over four years' original maturity) liabilities and short term assets (in the form of the receipts of the borrowing which have not yet paid to certificate holders) would be higher than they otherwise would. The implications for the yield curve could be similar to those of overfunding - downward pressure at the short end, coupled with upward pressure further along the maturity spectrum.

17. Similar - though not as extreme - effects would result from the adoption of a one or two year residual maturity rule. They would appear to argue against the application of a residual maturity rule to National Savings products.



D: The actual liquidity of national savings instruments

18. It has already been mentioned that the potential liquidity of an instrument may quite different to its observed liquidity. It is useful to consider ways of measuring liquidity (which will reflect in part the extent to which an instrument is used for transactions rather than savings purposes) for this will throw light on the likely liquidity of new funding. Three measures are considered here for each instrument:

- (a) turnover;
- (b) average balance per account;
- (d) rates of return.

Turnover (see Table 3)

19. From the funding standpoint the average amount of time a debt instrument is held by the private sector is clearly important. The average life of a Treasury bill is less than three months and that of a CTD around nine months. Unfortunately no such data exist for National Savings products. However it is possible to present turnover figures, which show gross withdrawals divided by the average stock in a given year. These (see Table 3) provide a measure of the degree of churning of each instrument which will reflect in part its use for transactions purposes; and a rough measure of average life - eg a 400 per cent figure would mean an average life of three months.

20. Numerous factors other than the extent to which an instrument is used for transactions purposes affect the turnover figures:

- (i) an increase in turnover may reflect a surge in purchases of a fixed life product (eg a fixed rate certificate) in the past;



(ii) turnover figures may rise in reflection, of a heightened sensitivity (on the part of investors) to relative interest rates which has no implications for its use for transactions purposes;

(iii) high turnover may reflect in part a decline in the mean stock as withdrawals outpace inflows, eg for index-linked certificates (for which low sales and high repayments have reflected the government's success against inflation).

21. Several points also need to be borne in mind when using the turnover figures to rank individual National Savings instruments. Firstly death claims represent an extraordinarily high percentage - a fifth each year between 1984 and 1986 - of repayments on Ordinary account. Secondly the figures for fixed and index-linked certificates lump together unmatured and matured certificates. Turnover figures are much higher (see below) even without interest repayments taken into account - for matured certificates.

REPAYMENTS OF CERTIFICATES (PRINCIPAL ONLY)\* AS A PERCENTAGE OF AVERAGE STOCK

	<u>1982-3</u>	<u>1983-4</u>	<u>1984-5</u>	<u>1985-6</u>	<u>1986-7</u>
Fixed interest:					
before maturity	4	5	7	6	8
on extension terms	32	13	19	16	18
Index-linked					
less than five years	n/a	n/a	12	10	8
five years and older	n/a	n/a	32	40	41

\*Addition of interest would only increase these figures by about one tenth.

The difference reflects more the fact that investors view certificates as five year investments (though this factor is becoming less important) than the existence of the 'rake' which now appears to play a small role in investors' decisions.



22. Table 3 is nonetheless of interest. It shows National Savings instruments to be considerably **less** liquid than building society deposits, bank deposits, Treasury bills and CTDs.

23. Turnover on Ordinary Account is higher than that for the other instruments with matured index-linked certificates having the second highest turnover rate. They are followed by INVAC, income bonds and matured fixed interest certificates (for which the turnover is highly volatile).

24. By contrast, that on Yearly Plan, unmatured certificates, deposit bonds and premium bonds is - at 5 to 15 per cent - relatively low.

#### The average balance per account (Table 4)

25. The size of the average balance provides some clue as to whether a particular instrument is used for transactions or for savings purposes. If the average balance is large - relative to building society and bank high interest accounts (both of which are used in large degree for savings as well as/rather than transaction purposes) the presumption is that it too, is used for savings balances and is therefore relatively illiquid.

26. Unfortunately the average balance per account is not always a good measure for this purpose. Firstly individuals may hold more than one account in a given instrument, and this number may vary considerably between different instruments. Unfortunately, no data is available showing how important this factor actually is. Secondly, instruments with large balances (eg bank HICAs) may be used a great deal for transactions, while those with low average balances may not. In the case of Ordinary Account it would appear - given that an estimated 69 per cent of Ordinary Account



accounts have no transactions at all - that many holdings have simply been forgotten about.

27. Income bond balances are considerably higher than building societies (partly in reflection of the large minimum balance on such holdings) though less than banks' high interest accounts. Balances on deposit bonds and certificates are also higher than the building societies' average balance. All these instruments would score as funding under a rule stipulating that only instruments with an average balance in 1986/87 that exceeded the average balance on building society accounts constitute funding.

### Rates of return

28. In theory, the rates of return on different products should, cet par, vary inversely with their perceived liquidity. For example, one would expect the significant interest penalty on early withdrawal of a fixed interest certificate and other practical obstacles in the way of easy access to such funds (such as lack of ATMs in post offices) relative to funds invested in building societies to result in the investor seeking a higher return on such certificates than on high building society deposits. Unfortunately, it is far from easy to detect such messages in the actual returns paid (see Table 5). Ordinary Account depositors do receive less than other National Savings investors reflecting in part their high liquidity. However, it is difficult to compare the National Savings products because their tax treatment differs considerably. Some returns are paid net, and others gross, of tax. Without knowing the tax status of the typical investor in each instrument it is impossible to come to any firm conclusions on the relative liquidity of each of them. Even then it would be difficult given that rates of return reflect in part government policy (eg at present a preference for catering for the taxfree investor).



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TABLE 2: TERMS ON DIFFERENT TYPES OF NATIONAL SAVINGS PRODUCT

	Fixed interest Certificate	Index-linked Certificate	GER	Income Bond	Deposit Bond	INVAC	Ordinary Account	Premium Bond	Yearly Plan
1. Period to get maximum return	5 years	5 years	3 months	1 Year	1 Year	1 month	1 Calendar month	Variable	5 years
2. Notice of withdrawal	8 days. No interest or index-linking, if repaid in first year.	8 working days	8 working days	3 months. Half interest on any amount repaid in first year.	1 month's written notice. No penalties.	Up to £100 on demand. A few days' written notice for more.	8 working days	2 weeks. No interest if repaid in first year.	
3. Minimum investment	£25	£25	(3)	£2000	£100	£5	£1	£10	£20 per month
4. Maximum investment	£1000 <sup>(1)</sup>	£5000	(4)	£100,000	£100,000	£100,000	£10,000	£10,000	£200 per month

(1) Additional holdings up to £5000 if reinvesting existing matured Certificates.

(2) Fixed interest certificates which have completed their fixed extensions terms - five years for the current issue - can be held at the General Extension Rate (GER); index-linked certificates - only the first and second have matured - receive index-linking plus a supplement.

(3) The lowest nominal value certificate issued - thus below £1 for the principal.

(4) Equivalent to maximum holdings of all certificates that have gone on to GER terms.



## CONFIDENTIAL

TABLE 3 : TURNOVER<sup>(1)</sup> ON DIFFERENT TYPES OF ACCOUNT

	NATIONAL SAVINGS					Per cent unless otherwise stated		
	Fixed Interest Certificate <sup>(2)</sup>	Index-Linked Certificates <sup>(2)</sup>	Income Bond <sup>(3)</sup>	Deposit Bond	INVAC	Ordinary Account	Premium Bond	Yearly Plan
1982/83	9	22	8	-	22	40	13	-
1983/84	7	18	14	-	25	41	13	-
1984/85	10	16	21	10	28	44	14	1
1985/86	9	19	22	14	25	45	14	5
1986/87	12	24	20	12	22	44	14	4
Stock outstanding at end 1986/87 (£ billions)	13.7	3.7	5.5	0.6	6.4	1.7	1.9	0.3
	Building Societies		Banks <sup>(e)</sup>		CTDs <sup>e</sup>		Treasury Bills	
1982/83	44							
1983/84	46							
1984/85	51		200-400 <sup>e</sup>		100-125 <sup>e</sup>		400 <sup>+e</sup>	
1985/86	54							
1986/87	62							

(1) Outflow (principal plus interest paid out) as a percentage of mean stock over a year

(2) Including stock on extension terms.

(3) Interest on income bonds and premium bonds (here in the form of prizes) is by contrast to that on other instruments, paid out irrespective of the holder's wishes.



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TABLE 4: AVERAGE BALANCES ON DIFFERENT TYPES OF ACCOUNT

	NATIONAL SAVINGS						£\$
	All Certificates <sup>(1)</sup>	Income Bond	Deposit Bond	INVAC	Ordinary Account	Premium Bond	Yearly Plan
At end:							
1982-83	2052	10607	n/a	1631	107	61	n/a
1983-84	2132	9535	3410	1758	109	67	n/a
1984-85	2429	9316	3333	1717	108	72	231
1985-86	2627	8987	3092	1700	111	75	844
1986-87	2715	9646	2900	1755	108	79	1471
		Building Societies' Shares and Deposits				Banks' High Interest Accounts	
At end:							
1982			1610				n/a
1983			1708				n/a
1984			1840				n/a
1985			2030				7957
1986			2192				11909

(1) Including those (fixed rate certificates) on General Extension Terms and those (index-linked certificates) which have passed their five year maturity

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## ANNEX 5

## FUNDING POLICY REVIEW : ARITHMETIC

The attached table shows the extra gilts sales that would be required under alternative funding rules to the M3 rule in order (i) to produce the same amount of over-, or under-, funding over the 1984-85 to 1986-87 period as occurred with the M3 rule, and (ii) to produce a full fund from 1987-88 to 1989-90. All National Savings products are included as funding.



## EXTRA GILT SALES COMPARED TO M3 RULE

(Positive sign means more gilt sales required)

£ million

	<u>"M4" RULE</u>	<u>"M5" RULE</u>	<u>ORIGINAL MATURITY RULE*</u>		<u>RESIDUAL MATURITY RULE*</u>	
			> 2 Years	> 4 Years	> 2 Years	> 4 Years
1984-85	240	1660	1240	2620	12130	8400
1985-86	- 760	- 650	790	1080	3670	7440
1986-87	-4460	-3650	-2630	-3110	-1040	-4530
1987-88	- 450	-1310	-1250	-1250	8050	500
1988-89	- 350	- 130	150	150	600	7900
1989-90	- 150	220	150	150	5080	300

\* These figures assume that future gilt sales are in line with current guidelines: ie. largely 4-5 year shorts for conventional stock (since yields are assumed to remain at current levels). They also involve various other assumptions, eg. about the maturity of local authority debt.



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BIF 12/100

AOX



FROM: P D P BARNES  
DATE: 5 October 1987

PS/CHANCELLOR

cc Sir P Middleton  
Sir T Burns  
Sir G Littler  
Mr Cassell  
Mr Grice  
Mr C W Kelly  
Mr Carr  
Mr Richardson  
Mr Cropper

Ch  
We are fixing a meeting  
next week to discuss markets  
& intervention. Convenient to  
take this subject too  
(v similar work)

ATA

ym:

FUNDING POLICY

The Economic Secretary has seen Mr Peretz's submission of 2 October.

2. The Economic Secretary thinks that the a maturity basis would be more rational and sustainable than the current sectoral basis. His thinks that a shift to an M4 basis:

- is not urgent;
- could not prevent people from concluding that this upgraded M4;
- could be open to ridicule as yet another monetary aggregate which the Government were seeking to promote;
- would make people assume that M4 has been chosen because it was growing more slowly than M3;
- would make a subsequent move to a maturity basis look like a reversal

So the Economic Secretary thinks that nothing should be done to change the treatment of the sale of gilts to Building Societies yet.



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3. The Economic Secretary thinks that this is precisely the sort of issue which would benefit from public discussion, and would cause no serious problems of confidentiality.

RB

P D P BARNES

Private Secretary



CONFIDENTIAL



BIF  
9/10

FROM: CATHY RYDING  
DATE: 5 October 1987

MR PERETZ

cc: EST  
Sir P Middleton  
Sir T Burns  
Sir G Littler  
Mr Cassell  
Mr Grice  
Mr C W Kelly  
Mr Carr  
Mr Richardson  
Mr Cropper

**FUNDING POLICY**

The Chancellor was most grateful for your minute of 2 October.

2. The Chancellor agrees with the modest operational proposals contained in paragraph 21. The one issue not covered in the paper is the implicit assumption that intervention concealed via the unpublished forward book is not sterilised/funded. While this is not a presentational problem, there is an issue of substance on which the Chancellor would be grateful for a short note.

A handwritten signature in cursive script, appearing to be "CR".

CATHY RYDING



From : D L C Peretz  
Date : 13 October 1987

CHANCELLOR

cc Economic Secretary  
Sir P Middleton  
Sir T Burns  
Sir G Littler o/r  
Mr Cassell  
Mr Grice  
Mr C W Kelly  
Ms Goodman  
Mr Richardson o/r  
Mr Cropper

**FUNDING POLICY AND THE FORWARD BOOK**

You asked for a short note on this, which is attached. It is largely the work of Mr Grice, with contributions from Mr Kelly and Ms Goodman. The Annex is intended to serve also as a reply to your earlier request for a note about the current state of the forward book.

2. In the first 9 months of calendar 1987 we have added around \$7bn to the EEA's forward position with the market. This has been offset by EEA forward sales of currency to MOD which - after taking account also of the October transaction - amount to roughly \$4.3bn, leaving a \$2.7bn net addition to the forward book (the MOD forward position should be relatively stable from now on). The rise in the net position is quite large and the rise in the position with the market very large compared to year to year shifts in the forward book over the period 1980-86.

3. As a general proposition we think forward intervention with the market (ie excluding changes in the EEA's position with MOD, which are intra-public sector bookkeeping transactions) has much the same impact on the exchange rate, and on monetary conditions, as spot intervention. The argument is less clear cut (see paragraph 9 of the note) in the case of those forward purchases allocated to meet MOD's future currency needs, where the forward deals are crystalising future HMG currency requirements that arguably the market might already have taken into account.

*(i) max fwd  
(ii) no net additions to forward book  
v. x, when?*



4. The conclusion is that in principle we should certainly be aiming to fund the \$2.7bn net increase in the forward book, and probably the \$7bn increase in the market position, in the same way that we aim to fund spot intervention : ie not in the short run, but over a longer period to the extent that we experience a lasting increase in the spot or forward reserves.

5. In practice this is not possible, presentationally, since we do not publish the forward figures (and the forward book would lose much of its point if we did). Arguably that may not matter too much, so long as the changes in the forward position are not too large. There are plenty of other rough edges to the components of the funding arithmetic. (See paragraph 10 of the note).

6. This year we would have wanted to see an increase in the EEA's forward position with the market to reflect the, one off, \$4.3bn increase in MOD's forward position. From now on MOD's position should be on a more even keel.

7. This all points me to the following conclusions :-

- a) the fact that we cannot under the present rule fund forward intervention may not matter too much so long as the net amounts, over a period, are not too large. It is not the only imperfection in the funding arithmetic.
- b) there is a special one off reason this year for increased forward intervention in the market - the transition to putting the MOD operations onto a forward rather than spot basis.
- c) the funding policy implications should, however, lead us to try to avoid making very substantial increases (or reductions) in the forward book over time : ie we should try to ensure that the month by month



S E C R E T

adjustments - which we make for market management reasons - unwind over time, and do not cumulate to a large net figure in one direction.

*DLCP*

D L C PERETZ



## FUNDING POLICY AND CHANGES IN THE FORWARD BOOK

This note discusses whether intervention concealed via the unpublished forward book should be sterilised/funded. It is in two parts :

- (a) a comparison of the impact of spot and forward intervention;
- (b) the practical implications for funding policy.

Spot and Forward Intervention

2. The earlier paper\* which reviewed the funding rule in relation to spot intervention argued that such intervention worked by changing the supply of sterling in relation to the demand for it. Thus, for example, if, temporarily, speculative demand for sterling threatened to push the exchange rate above the levels consistent with the Government's inflation objectives, then the authorities could choose to meet the extra demand by selling sterling to the market in return for foreign currency. An alternative would be to lower interest rates and in that way accommodate the increased demand for sterling.

3. The conventional wisdom is that forward intervention has largely the same effect as spot intervention. For any given level of demand for forward sterling, forward sales by the authorities will tend to depress the forward rate. Unless the authorities act at the same time to offset the forward intervention by changing short term interest rates (and assuming world interest rates similarly remain unchanged), the forward discount/premium will remain at the same level. Arbitrage will then ensure that the spot rate falls by the same amount as the forward rate. This story is entirely consistent with the efficient operation of the exchange market; the spot rate responds not only to current

---

\* Mr Peretz' submission to the Chancellor : "Funding Policy Review", 3 July 1987



supply and demand but also to what is known about future supply and demand conditions.

4. It is possible to derive the same conclusion from an institutional account of developments. When the authorities sell sterling forward, the counterparty purchasers will typically be banks. Banks generally are not prepared to run large uncovered currency exposures and will typically sell sterling spot to match their forward purchases. (Alternatively, if the banks did have an open foreign currency position before the authorities' operations, they would have no incentive to change it afterwards, since the pattern of interest rates would not have changed. Again, they would be expected to sell sterling spot to match their forward purchases).

5. This conclusion - that official spot and forward sales of sterling have much the same effect - applies equally to official purchases.

#### Practical Implications for Funding Policy

6. The preceding discussion suggests that, in principle, forward intervention should be funded no more or no less than spot intervention. Thus it would be right to fund both kinds of intervention over a period of months but not necessarily immediately. There is, however, a clear operational difficulty in including the change in the forward book within the funding arithmetic since the information is not published. Even if the authorities funded taking account of unpublished forward intervention, it would be impossible for the private sector to verify that full funding had been achieved since the funding arithmetic would not be available to it. Alternatively, if the private sector was prepared to take on trust that full funding had been attained, more or less precisely, then it could infer the amount of forward intervention that had taken place.

7. This dilemma would not carry much importance if the changes in the forward book were typically small in relation to the overall funding task, and reversed themselves over time. Indeed,



the ability to vary the forward book without having to change the funding requirement could help to provide a modest degree of end-year flexibility. On the figures in the attached annex this might, arguably, have been true of financial years before 1986-87. But the change at the end of 1986-87 and, so far, in 1987-88 is of a larger order.

8. There is, however, a wider issue which affects the interpretation of the 1987 figures. The previous analysis suggests that it is changes in the forward position with the market of the public sector as a whole which ought to be relevant to monetary conditions overall. That means that it is important to take into consideration not only the forward position of the EEA but also of other public sector bodies. In particular, in recent months, up to end-September, MOD had purchased some \$3 billion of forward foreign currencies from the EEA to help match their known future foreign currency liabilities in 1988-89. Without these purchases, the increase in the EEA forward book in (calendar) 1987 to end-September would have been \$7 billion, not the \$4 billion shown in Table 1. If you include the further forward transactions with MOD of \$1.3bn completed this month (see Annex) then the increase in the MOD forward position (which has now reached a "steady state") during 1987 will be \$4.3 billion; and the increase in the net forward book will be around \$2.7 billion, compared with \$7 billion of net forward intervention with the market.

9. There are two ways to look at these MOD purchases of forward currencies. First, if the foreign exchange markets were fully efficient and if they had full knowledge of the nature of the MOD operations, then it is arguable that placing these transactions on the market would have no effect on current monetary conditions. The market would realise that MOD's current forward sales of sterling for foreign currency were merely replacing spot sales of sterling for foreign currency which would otherwise have to be made in future, as MOD's foreign currency liabilities fell due. In this sense, MOD's forward sales of sterling would be quite unlike spot EEA intervention because there would be no effect on the exchange rate or on current monetary conditions. But, in



fact, it is highly unlikely that the market will have appreciated that part of the EEA's overall purchases of forward foreign currencies were to meet MOD's future obligations. (This will, however, be announced in due course). Nor is likely that the market had previously discounted fully for MOD's future currency requirements. U X

10. We are thus left not knowing how much if any of the forward intervention that has been or will be allocated to meet MOD's future needs should be considered as having affected monetary conditions - and hence in principle requiring a funding offset to neutralise its impact on liquidity. Because the MOD figure this year will be so large this is a huge uncertainty.

11. There is, finally, one other general point to be made. The funding rule is only a fairly rough and ready one. Forward intervention is by no means the only factor we do not take into account. Precisely what we count as funding is to some degree arbitrary. And the PSBR itself is necessarily an imperfect guide to the public sector's demands for private credit. For example the giving of public sector guarantees (eg ECGD) on bank loans may affect monetary conditions and the growth of liquidity but will not affect the funding arithmetic. The line in the funding arithmetic has to be drawn somewhere : and where it is drawn, on intervention, at present is reasonably simple to explain, and will not lead us badly astray - so long as we do not, over time, go in for very large net movements in the forward book.

### Conclusions

12. The main points that emerge from the above analysis are :-

- (a) in principle, the funding treatment of forward intervention should be the same as that of spot intervention, to the extent that they are expected to have very similar if not identical effects on monetary conditions. In principle we should aim to fund both over a period of time, but not necessarily in the short-term;



- (b) in practice, it is hard to see how funding policy could take account of movements in the forward position unless the latter information were itself published;
- (c) up to 1986, over time, the change in the forward book has been small in relation to total funding but not always from year-to-year. In 1987, the change in the forward position has been much greater - about \$7 billion - taking into account the rest of the public sector as well as the EEA itself. But by the end of the year the increase in the EEA's own forward book will be much less, perhaps only \$2.7bn on present figuring, because of the forward sales to MOD. While at first sight it is the larger change in the position of the public sector as a whole that is more relevant for funding policy, there is a counter argument (see paragraph 9);
- (d) the funding rule is in any case only a fairly rough and ready guide. Forward intervention is not the only possible complication left out of account in the funding arithmetic.



FORWARD BOOK: STATISTICS

The attached tables show past changes in the EEA's forward book, and the current position. Table 1 shows the size of the forward book at the beginning of each calendar year, from 1980. Table 2 sets out the same information on a financial year basis. Table 3 sets out the monthly changes since mid 1983 (the earliest date for which we have monthly figures). The figures are complicated by valuation differences arising out of the EMCF swap. So to simplify these have been stripped out.

2. Between 1980 and 1986 the size of the net forward book fluctuated (as measured at the end of calendar years) between around \$900m and \$2,300m, the largest change being a drop in 1982 as the Bank intervened to break sterling's fall. During 1987 there has been an increase in forward transactions with the market ~~to~~ \$7 billion following the heavy intervention in the early summer; this has been offset by forward contracts of \$3,090 million with MOD for their foreign currency requirements in 1988-89.

3. The position of the forward book as at the end of September is shown in Table 4. This is on the standard basis including the EMCF swap valuation difference and takes account of the \$3 billion supplied to MOD in June. It disaggregates the figures by currency and maturity.

4. Looking at the public sector forward position as a whole the <sup>EEA</sup> position at the end of September was:

	<u>\$ million equivalent</u>
Forward contracts with the market	+8,080
Forward contracts with government departments	-3,134
BIS Valuation Adjustment	- 3
EMCF Valuation Adjustment	- 542
	<u>+4,401</u>



SECRET

5. These figures are all as at 30 September. Since then there has been a further forward deal with MOD for \$1,284m. These bring MOD's forward position to what might be considered a steady state - after which MOD's spot currency requirements will be met by maturing forward contracts which will in turn be replaced with further forward contracts for the following year. ~~(1988-89)~~. ~~At that point,~~ <sup>So</sup> assuming no further forward intervention with the market, the EEA's forward book (net) <sup>has now</sup> ~~will have~~ fallen back to \$2.7bn.

SECRET



TABLE 1

FORWARD BOOK: 1980-87 SEPTEMBER 1987  
(EXCLUDING EMCF SWAP VALUATION DIFFERENCE)

\$ M

	<u>Level of the</u> <u>Forward Book at the</u> <u>Beginning of the year (ie 1st January)</u>	<u>Change during the</u> <u>Year</u>
1980	1131	+1140
1981	2271	- 419
1982	1852	- 940
1983	912	+ 213
1984	1125	- 37
1985	1088	+ 63
1986	1151	- 284
1987	867	+4076 to 30 September
<hr style="border-top: 1px dashed black;"/>		
1987 at 30 September	4943	



TABLE 2\$ m

FORWARD BOOK: 1<sup>st</sup> APRIL 1984 to 30<sup>th</sup> SEPTEMBER 1987 (ie ON A FINANCIAL YEAR BASIS)  
(EXCLUDING EMCF SWAP VALUATION DIFFERENCE)

	<u>Level of Forward Book</u> <u>at the beginning of April each</u> <u>year</u>	<u>Change during the year</u> <u>(ie 1 April to 31<sup>st</sup> March)</u>
1984 - 85	1143	- 126
1985 - 86	1017	+ 564
1986 - 87	1581	+1753
1987 - 88	3334	+1609 to 30 <sup>th</sup> September
-----		
1987 at 30 September	4943	



TABLE 3\$ m

FORWARD BOOK: JUNE 1983-SEPTEMBER 1987  
(EXCLUDING EMCF SWAP VALUATION DIFFERENCE)

	<u>1983</u>	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>
January		1150	1061	1098	936
February		1150	982	1318	1029
March		1143*	1017*	1581*	3334*
April		1143	1051	1875	4887
May		1125	1256	1813	7502
June	1041	1098	1254	1865	4382
July	1041	914	1253	1773	4693
August	1094	934	1249	1628	4293
September	1178	975	1324	1312	4943
October	1145	1057	1324	655 <sup>+</sup>	
November	1166	1081	1323	767 <sup>+</sup>	
December	1125	1088	1151	867	

\*after revaluation

<sup>+</sup>net of Bundesbank swap repayment liability of \$300 million in October 1986 and \$150 million in November 1986



TABLE 4EEA ASSETS 30 SEPTEMBER 1987

<u>Forwards by Currency*</u>	<u>\$ Mns</u>	<u>Forwards by Maturity*</u>	<u>\$ Mns</u>
US\$	2304*		
CAN\$	49		
DM	2780	Up to 1 month (October 1987)*	492
YEN	396	Up to 2 months (November 1987)	508
SDR	230	Up to 3 months (December 1987)	575
ECU	-830	Up to 6 months (March 1988)	1565
Others	14	Up to 9 months (June 1988)	1247
		Up to 12 months (Sept 1988)	255
Valuation of EMCF	-542	Up to 24 months (Sept 1989)	-241
	<u>4401</u>		<u>4401</u>

\*Includes EMCF Swap Valuation Difference of -542



COVERING SECRET

FROM: M G RICHARDSON  
 DATE: 23 October 1987

ECONOMIC SECRETARY

cc: **Chancellor**  
 Sir P Middleton  
 Sir G Littler  
 Sir T Burns  
 Mr Cassell  
 Mr Peretz  
 Mr Kelly  
 Mr Grice  
 Mr Rich  
 Mr Carr  
 Ms Bronk  
 Mr Cropper

Mr Patterson) DNS  
 Mr Wilson )  
 Mr Plenderleith - B/E  
 Prof Griffiths - No 10

FUNDING MEETING

There are four items on the agenda for the meeting on Wednesday 28 October:

- (i) Funding arithmetic
- (ii) National Savings
- (iii) Gilt-edged funding in November
- (iv) Outlook for the money markets.

2. I attach papers on each of these items, and a fifth on cost of funding.

*M G Richardson*  
 M G RICHARDSON

COVERING SECRET



FUNDING ARITHMETIC 1987-88(Note by MGI)

This note discusses the total funding requirement for the current financial year, based on the current funding rule.

2. A table showing the main elements of the arithmetic is annexed. For the most part the figures are consistent with the autumn forecast; the PSBR shown is £1 billion, as will be published in the Industry Act forecast.

3. It is assumed that none of the intervention to date will unwind: that is, that the spot reserves will increase by some £7½ billion over the year as a whole (this derives from the actual outturn to the end of September, plus a £3 billion increase in October).

4. The PSBR and intervention assumptions are the major uncertainties. Others include gilt purchases by the monetary sector and the extent to which other public sector debt is run off.

5. On the assumption - itself uncertain - that National Savings contribute £2 billion over the year, the arithmetic implies a gross gilt sales task of over £15 billion. If gross sales remain around £1.5 billion for October, this would leave about £7½ billion sales to be achieved over the last five months of the year - an average of £1450 million a month.

6. If the PSBR were to realise a surplus of £1 billion, the residual task would fall to £5½ billion, or £1050 million a month.

7. The redemption/buying in assumption excludes any element for purchases of 1989-90 maturities made to level the hump of stocks maturing that year. It is perhaps for consideration that no effort should now be made to level the hump this year, unless a significant amount of intervention unwinds.

8. If funding were to exclude building society transactions, the underfund to the end of September would decrease by some £500 million; that is, the residual task would fall by this amount, if building society behaviour were to be funding-neutral for the rest of the year.

October 23 1987



	£ million		
	FORECAST	ESTIMATED OUTTURN	RESIDUAL
	Financial Year 87/88	April Sep 1987	Oct 87 - March 88
<b>PSBR AND FUNDING TARGET</b>			
1 PSBR excl asset sales	6000	5505	495
2 Asset sales (sales-)	-5000	-3985	-1015
	-----	-----	-----
3 PSBR	1000	1520	-520
<b>FINANCED BY:</b>			
4 OPS debt sales to nbps (sales-)	2000	1563	437
5 National Savings (sales-)	-2000	-1172	-828 * -138
6 CTDs (sales-)	750	-235	985
7 Treasury bills etc (sales-)	0	-135	135
8 Intervention (reserves inc+)	7738	4738	3000
9 Public sector externals excl intervention and gilts (inc-)	-500	-438	-62
	-----	-----	-----
10 NET GILT SALES TO NBPS & OVERSEAS NEEDED FOR FULL FUND (sales+)	8988	5841	
11 Adjustment for 1986/87 underfund	400		
12 OVER(-)/UNDER(+) FUNDING	-400	1916	-2316
<b>GILT SALES:</b>			
13 Net purchases by nbps and overseas (purchases+)	9388	3925	5463
14 Net purchases by monetary and other public sector (purchases+)	-1000	-1130	130
15 Maturities	6950	3801	3149
	-----	-----	-----
16 GROSS OFFICIAL SALES	15338	6596	8742
17 Monthly average gross gilt sales	1278	1099	1457

\* average per month

Relationship between lines:

3 = 1 + 2

10 = 3+4+5+6+7+8+9

12 = 3+4+5+6+7+8+9+11-13

16 = 13 + 14 + 15



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NATIONAL SAVINGS - NOTE BY MGI

This note reports the latest position on National Savings and comments on prospects for the three months to the end of November 1987. A table on recent funding and the implied contribution for the rest of the year is attached.

Results for September 1987

2. The total net contribution to funding from National Savings in September was around £107 million. Of this £26 million was net inflow of principal with £81 million in net accrued interest. Income Bonds continue to provide the largest contribution - £99 million. The television and press advertising campaign which ran from mid-August to mid-September has maintained sales at the immediate pre-campaign level (about £150m a month). Sales of the 33rd Issue fixed interest certificate were £17m - £2 million less than August. Repayments of fixed interest certificates increased in late September and October as 24th Issue matured. At this stage, no assessment can be made of the effect of the reduction in the GER to 6.5% on 1 October. Repayments of index-linked certificates were £36 million - £21 million less than August. Repayments following the summer supplement this year have been about half that experienced in 1986. Sales continued at around £3 million a week. For the first time since December 1986 there was a small net outflow of principal from the Investment Account due to a slight fall in deposits and an increase in repayments.

Current position and prospects for October to December 1987

3. The total net contribution to funding for the first half of 1987-88 is £1,173 million. This is £173 million more than the pro rata amount (£1000m) needed to achieve a National Savings contribution to funding of £2 billion.

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4. The DNS forecast assumes that interest rates will remain unchanged throughout the forecast period. It indicates a net contribution to funding of £242 million. Taken together with the net contribution so far this year this gives a total of £1,415 million -£88 million ahead of the striking rate needed to secure £2 billion. We are ahead of the game at present, and seem likely to remain so for the next 2 or 3 months, because of the relatively high level of funding earlier in the year. Contributions from October onwards are forecast to fall away sharply. The result is to indicate a full year contribution of £1750 million rather than £2000 million. The principal reason is lower sales of Income Bonds.

MGI Division  
October 1987

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NATIONAL SAVINGS NET CASH FLOW AND FUNDING CONTRIBUTIONS (£M)

	1986-87	1987 - 1988				Oct 87	Forecast
	Full year	Jul	Aug	Sep	Apr-Sep	to Mar 88 Implied *	next 3 months
Deposits less Repayments of Principal							
FINSC	290	-47	-49	-63	-323	-410	-225
ILNSC	-447	-12	-41	-21	-110	-90	-45
Investment A/c	156	21	5	-8	40	0	0
Income Bond	1813	117	96	99	752	490	240
Deposit Bond	187	10	7	5	65	35	17
Other	52	13	8	14	75	75	28
Total net Inflow	2051	102	26	26	499	100	15
Accrued Interest	2278	160	283	164	1138	974	488
Accrued Interest Repaid	-964	-70	-87	-83	-464	-497	-261
Total Net Funding Contrbn.	3365	192	222	107	1173	577	242

\* Total now forecast for 1987-88 is £1750 million (see para. 4 of text)  
To secure a total of £2000 million, a further £827 million would be  
required in the remaining period of the year.



**COST OF FUNDING : 20 OCTOBER 1987**

(Note by MG2)

**a) Presentational Changes**

At the last funding meeting, the Bank of England asked for a further discussion of the cost of funding methodology. Following these discussions, several presentational changes are being made to this and to future months' notes:

(i) the costs of various financing strategies in table 1 are being shown in constant price terms to facilitate proper calculation of the weighted projection costings;

(ii) as the Economic Secretary requested, costings are being shown on the basis of the latest internal forecast - the "Autumn case" - as well as the other scenarios previously considered;

(iii) to allow easier comparison of the Guidelines with outturns in the year to date, table 3A now contains a memorandum item showing the Guidelines' indicated proportions of short and other conventionals given average yields in the year to date.

**b) Main Points**

This month's numbers should be treated with some caution. At the time of writing yields are fluctuating very considerably. Subject to this caveat:

- since the last calculations (14 September), the yield curve has developed a more pronounced hump at 10 years though the average level of yields is not greatly changed. 5 year rates are now roughly in line with 20 year rates, having been above last month. The effect has been to reduce the breakeven yields at both 10 and 20 years by about  $\frac{1}{4}$  per cent
- in itself this would tend to increase the attractiveness of shorter finance, though the Autumn Forecast suggests a higher breakeven yield about  $\frac{1}{2}$ - $\frac{3}{4}$  per cent below current yields



- real yields on indexed gilts have risen by nearly  $\frac{1}{2}$  per cent since 14 September, reducing the breakeven inflation rate. Even so, indexed gilts look cheaper than conventional stocks at all maturities, though the advantage is less at 20 years than for shorter periods
  
- the Guidelines presume that, given the path of yields in 1987-88 to date, about 70 per cent of gilts sales should have been in the form of shorts. About 42 per cent of new issues announced in this period have been shorts
  
- the average life of new issues announced has been 11.0 years. But because of the falling life of the existing debt outstanding, as time passes, the average life of conventional dated gilts as a whole has fallen from 9.6 to 9.5 years.



TABLE 1: COMPARATIVE COSTS OF AN INITIAL BORROWING OF £100 BY ISSUING A GILT

1987 prices, net of tax \*

Inflation Scenarios \*\*

	MTFS Case	Low Inflation Case	High Inflation Case	Weighted Projection	Autumn Case
<b>(a) Five years</b>					
5 year Conventional	123-127	130-134	107-110	122-126	120-124
5 year Index-Linked	113-116	114-115	113-116	113-116	113-115
<b>(b) Ten Years</b>					
5, then 5, year Convs	144-151	160-168	107-115	141-148	148-156
10 year Conventional	169-177	195-203	113-119	165-172	168-176
10 year Index-Linked	147-151	147-151	146-149	147-151	146-151
<b>(c) Twenty Years</b>					
5, then 15, year Convs	206-222	253-269	128-145	202-218	231-250
20 year Conventional	255-275	342-363	120-135	248-268	261-282
20 year Index-Linked	242-249	242-249	241-248	242-249	242-249

\*,\*\* Footnotes overleaf



\* Average marginal tax rates are not known with precision and likely ranges are used here instead so that the cost figures also emerge as ranges.

\*\* i. The MTFs, low and high inflation scenarios are weighted 5:1:1 for the Weighted Projection case.

ii. The MTFs case assumes the MTFs inflation forecast (of around 3 per cent a year) to 1991 and 2.5 per cent a year thereafter in line with the central case of the long-term assumptions paper (which is used by departments for public expenditure planning purposes).

iii. The Low Inflation case has inflation falling to 2 per cent by 1990 and price stability achieved and sustained after 1994.

iv. The High Inflation case has inflation accelerating to 6.5 per cent by 1990 and thereafter rising gradually to 10 per cent by 1995. Inflation is then taken to remain at this level.

v. The Autumn case assumes the Autumn internal forecast to 1992 (which has inflation peaking at 5.3 per cent in 1988 H2 and falling to 2.9 per cent in 1992 Q1) and 2.5 per cent a year inflation thereafter (see ii).



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TABLE 2: BREAK-EVEN YIELDS AND BREAK-EVEN INFLATION RATES

Per cent

## A: Break-Even Yields

	MTFS	Low	High	Weighted Projection	Autumn
(a) 10 Years **	7.5	5.9	13.0	8.1(8.4)*	9.3
(b) 20 Years ***	7.8	6.2	13.3	8.4(8.7)*	9.6

\* MTFS, low and high inflation scenarios are weighted 5:1:1.

\*\* Below the rate shown it would be cheaper to issue a 10 year conventional than a five, followed by a five, year conventional.

\*\*\* Below the rate shown it would be cheaper to issue a 20 year conventional than a five, followed by a fifteen, year conventional.

+ Bracketed figures refer to last funding meeting (September).

## B: Break-Even Inflation Rates \*

	Break-even Inflation Rate		Average Inflation Rate in Each Scenario				
	at 20 October 1987		MTFS	Low	High	Weighted Projection	Autumn
a. 5 years	4.3-5.4	(4.7-5.7) +	3.0	2.0	6.4	3.3	3.7
b. 10 years	4.3-5.1	(4.7-5.4) +	2.7	1.0	8.0	3.2	3.1
c. 20 years	3.7-4.3	(4.1-4.7) +	2.6	0.5	9.0	3.2	2.8

\* At the break-even inflation rate the cost of an index-linked gilt is the same as that of a conventional. Below it, the IG will be cheaper than a conventional, and above it more expensive.

+ Bracketed figures refer to last funding meeting (September).



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**TABLE 3: GROSS SALES OF GILTS TO DATE IN RELATION TO THE GUIDELINES**

**A. The Guidelines for Gross Issues of Conventionals**

<u>Yields on medium and Long Stocks (%)</u>	<u>Proportion of Gross Issues (%)</u>	
	<u>Shorts</u>	<u>Mediums and Longs</u>
above 10½	100+	consider buying in
10-10½	95	5
9½-10	80	20
9-9½	65	35
8½-9	50	50
8-8½	35	65
7½-8	20	80
7-7½	5	95
below 7	consider refinancing with longs/mediums	100+
Proportions implied by average yields in F.Y. to 20 Oct.	71	29

**B. Gross Sales**

£ billion (Percentage of total in brackets)

Conventionals

	<u>Shorts</u>	<u>Mediums</u>	<u>Longs</u>	<u>Total</u>
1987-88*	2.1 (29)	2.0 (28)	3.0 (42)	7.0
[New Issues**	2.8 (42)	1.8 (27)	2.0 (30)	6.6 ]
1987 Q2	0.9	1.5	1.7	4.1
Q3	1.1	0.4	1.0	2.6
Oct ***	0.0	0.0	0.0	0.0
Calls	0.0	0.0	0.3	0.3

Index-linked

1987-88*	0.1 (29)	0.0 (6)	-0.1 (65)	-0.2
1987 Q2	0.0	0.0	-0.1	-0.1
Q3	0.0	0.0	0.1	0.0
Oct ***	0.0	0.0	-0.1	-0.1
Calls	0.0	0.0	0.0	0.0

<u>Memo item:</u>	<u>1-7 Years</u>	<u>7-15 Years</u>	<u>Over 15 Years</u>	<u>Total</u>
1987-88 Conv	2.4 (33)	1.7 (24)	3.0 (42)	7.0
IG	-0.1 (28)	0.0 (7)	-0.1 (65)	-0.2

**C. Average Life of Dated Gilts**

	<u>All</u>	<u>Conventionals only</u>
End 1986-87	10.7	9.6
20 October 1987	10.6	9.5
(New issues**	11.0	11.0)

\* Sales secured for 1987-88. \*\*Announced in 1987-88. \*\*\*To 20 Oct.



## SECRET

TABLE 4A: NATIONAL SAVINGS INSTRUMENTS : FIXED RATE PRODUCTS

## A. Costs of an Initial Borrowing of £100 over Five Years

1987 prices, net of tax

	MTFS Case	Low Inflation Case	High Inflation Case	Weighted Projection	Autumn Case
Fixed Interest National Savings Certificate (FINSC)	121	127	103	119	117
Index-Linked National Savings Certificate (ILNSC)	122	121	120	122	121
Conventional 5 Year Gilt	123-127	130-133	106-109	122-125	120-124

## B. Equalising National Savings Rates.

Per cent

Rate on FINSC to match Cost of Conventional Gilt	7.4-8	7.4-8.0	7.7-8.3	7.4-8.0	7.6-8.2
Current rate on FINSC	7.0	7.0	7.0	7.0	7.0
Rate on ILNSC to match Cost of Conventional Gilt *	4.4-5	5.4-6.0	1.3-1.9	4.1-4.7	3.9-4.5
Current rate on ILNSC *	4.0	4.0	4.0	4.0	4.0

\* In addition to inflation-proofing.



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£ million (Figures  
at COB 20 October)**GILT-EDGED FUNDING IN NOVEMBER**  
(Note by Bank of England)

1 This note reviews the prospects for gilt-edged funding in November.

The Funding Arithmetic

2 The latest funding arithmetic has changed very substantially from that presented last month, with the target for gilt sales in the year as a whole having been increased from 10000 to almost 15500, entirely due to a changed assumption on the reserves (Table 1). Formerly the forecast had a rise of 2400 in the reserves over the year as a whole, implying a fall of over 2040 between September and March. This projection was falsified by intervention earlier this month and, on the basis of a rise of 3000 during October and no change thereafter, the current figuring shows an increase in the reserves of 7740 over the full year. Adding to this a borrowing requirement of 1000, a reversal of last year's 400 underfund, redemptions of about 7000 and a 2000 run-down in other public sector debt gives a total central government funding requirement of some 18100. This is largely met by 2000 of national savings receipts and 15300 of gross gilt sales.

3 In the first half of the current financial year, gross gilt sales totalled 6600, falling below the average striking rate now required by 180 per month. During the same period, the PSBR was underfunded by 1920 (670 on a seasonally adjusted basis). Gross official gilt sales in September were 870, and the auction secured calls of 320 for November. Thus far in October gross gilt sales amount to some 1500, (all of which have been into very strong demand since the collapse of equity markets) against a target of around 750 set last month.



4 The target for the year as a whole implies gross gilt sales of 8740 between October and March, giving a striking rate of almost 1500 per month. Sales so far in October are around this level, leaving some 7250 of sales to be made between November and March, a striking rate of 1450 per month.

5 As the revision to last month's forecast testifies, there are major uncertainties in the figuring, perhaps the largest of which is foreign exchange market intervention. The increase in the reserves so far in 1987/88 accounts for half the required total of gilt sales in the year as a whole. While in theory intervention during the remainder of the year could go either way, in practice there seems more likelihood of an increase in the reserves than a fall, reflecting the relative strength of UK economic performance and the proximity of the exchange rate to its ceiling. While end-year flexibility in funding might mean that some of this could remain unsterilised in 1987/88 (at least if it came late in the year) the addition to the funding requirement could be substantial. More gilt sales would also be required were other public sector debt held by the nbps to continue to be run off at the rate seen in the first half year, though it should be noted that the OPS actually sold a small quantity of debt to the nbps in September. A further uncertainty surrounds the behaviour of the banks' gilt holdings: the banks made very large disposals in the early part of the year, but returned to being net purchasers in September, taking up over 400 during the month. Were this turn-around to continue, the forecast of bank disposals of 1000 during 1987/88 as a whole could turn out to be too large, again requiring heavier gilt sales. However, the risks are not all in one direction, and against the factors pointing towards a heavier gilt sales target must be set those which may serve to reduce it. Principal among these is the PSBR. The forecast of a borrowing requirement of 1000 could turn out to be too pessimistic - the recent strength of the public finances suggests that a surplus may be more in prospect than a deficit. A smaller run-off this year of CTDs than the 750 forecast - the nbps has purchased 240 so far this year - would also hold down the required total for gilt sales.



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Quantification of these risks is difficult, particularly with regard to intervention. It is perhaps worth outlining a variant to the forecast designed to show what the funding requirement would be under more favourable circumstances. If the current forecast is modified to reflect a public sector surplus of 1000 rather than a deficit of 1000 then the total of gilt sales required between November and March would be reduced to some 5250, giving a striking rate of 1050, close to the rate achieved in the first six months. Thus the gilt sales target remains heavy even on quite favourable assumptions.

Market conditions

## Yields %

	<u>29 Sept 86</u> (peak)	<u>8 May 87</u> (trough)	<u>23 Sept 87</u> (last funding meeting)	<u>23 Oct 1987</u>
Shorts	11 5/8	8 5/16	10 1/16	9 3/4
Mediums	11 1/4	8 11/16	10	9 11/16
Longs	10 5/8	8 3/4	9 21/32	9 3/8
IGs (2006) (real yield at 5% inflation)	3 7/8	3 5/8	4 11/16	4 1/2

6 After an uncomfortable time in the three months following the election, the market had rallied on a run of well-received economic statistics in the week or so prior to the last funding meeting; this recovery proved to be transitory. The small margin of coverage at the long gilt auction, held on the same day as the funding meeting, disappointed the market. This had begun to turn down just before the auction, and the poor August trade figures the following day took it down further. For the rest of September and the first half of October the market remained becalmed at yields around 10 1/4% at the long end. Weaknesses in international bond markets and the upward trend in interest rates abroad, as well as worries about the pace of the domestic economy, meant that the market was uneasy. The collapse of world equity markets at first took yields up above 10 1/2%, but more recently the switch out of equities and into gilts has resulted in a sharp fall in yields so that longs yields are now 1/2% below their level at the time of the last funding meeting. Despite the flight to



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bonds worldwide at the height of the worries about the equity market it is not clear that expectations of lower interest rates and yields will persist. Greater volatility in financial markets could mean that funding will be difficult at times during the rest of the year.

Funding tactics

7 Against this background, until very recently we had managed to sell no debt after the auction, but since Tuesday have sold 1500. In addition to near maturities, we have in our portfolio:

- (i) 80 of full coupon conventional stock;
- (ii) 150 of index linked, none longer than 2011.

Our debt to NILO is 1110.

8 For the month ahead the funding arithmetic suggests a target of around 1500; taking into account calls already secured leaves some 1200 of sales to be made. We have the added complication in current circumstances that we would not wish to exacerbate difficulties in the equity market by supplying additional gilts and drawing off funds employed there. Thus, our usual tactic of selling into a rising market cannot be used, and the advance in gilt prices which may result could turn out to be unsustainable, making our funding task more difficult later; the short-term objective of stabilising equities justifies this risk. Against this background, which may imply a change in both the level and structure of yields, the decision on our next funding step is best delayed until the situation clarifies, though at some stage we will wish to replenish our book which is virtually exhausted.



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Table 1

FUNDING : FINANCIAL YEAR POSITION 1987/88  
Not seasonally adjusted

£ millions

	FORECAST	OUTTURN	RESIDUAL
	Financial Year 87/88	April - Sept 1987	Oct 87 - March 88
<b>PSBR AND FUNDING TARGET</b>			
1 PSBR excl asset sales	6000	5505	495
2 Asset sales (sales-)	-5000	-3985	-1015
3 PSBR	<u>1000</u>	<u>1520</u>	<u>-520</u>
Financed by:			
4 Other public sector debt sales to nbps (sales-)	2000	1563	437
5 National Savings (sales-)	-2000	-1173	-828 (-138)a
6 CTDS (sales-)	750	-235	985
7 Treasury bills etc (sales-)	0	-135	135
8 Intervention (reserves inc+)	7738	4738	3000
9 External finance of public sector excluding intervention and gilts (increase+)	<u>-500</u>	<u>-438</u>	<u>- 62</u>
10 Target gilt sales to nbps and overseas for full fund (sales+)	8988	5841	3147 (525)
11 Over(-)/Under(+) funding brought forward	400		
12 Over (-)/Under (+) funding 1987/88	-400	1916	-2316
<b>GILT SALES</b>			
13 Net purchases by nbps and overseas (purchases+)	9388	3925	5463
14 Net purchases by monetary and other public sector (purchases+)	-1000	-1130	130
15 Maturities	6950	3801	3149
16 GROSS OFFICIAL SALES	<u>15338</u>	<u>6596</u>	<u>8742 (1457)</u>
17 Monthly average gross gilt sales	1278	1099	1457

a average per month for remainder of year

Relationship between lines:

$$\begin{aligned}
 3 &= 1 + 2 \\
 10 &= 3 + 4 + 5 + 6 + 7 + 8 + 9 \\
 12 &= 10 - 13 \\
 16 &= 13 + 14 + 15
 \end{aligned}$$



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## THE OUTLOOK FOR MONEY MARKET ASSISTANCE

£ millions

Note by the Bank of England

Money market assistance as at 22 October stood at 5,200. The prospect for the next ten weeks, based on projections of Exchequer revenues and disbursements provided by the Treasury Accountant's office and on the assumptions set out below (and subject to wide margins of error), is:

23 October	6,400
30 October	5,200
6 November	5,700
13 November	6,100
20 November	6,900
27 November	7,700
4 December	7,800
11 December	7,300
18 December	8,000
24 December	8,400
31 December	8,000

The assumptions underlying this forecast are

- (i) That there is no further foreign exchange intervention.
- (ii) That we sell 500 of 63 day Treasury bills (in addition to the regular 100 of 91-day bills) at the tenders on 23 and 30 October and on 6 and 13 November), and that we buy none of them back in our money market operations during the period.
- (iii) That the Government receives payment for BP shares sold in the UK on 3 November; and that foreign currency payments for



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shares sold in North America and Japan will be added to the reserves.

(iv) That the payment to BP in respect of its sale of new shares will be made on 30 October.

(v) That we achieve gross gilt sales of 150 a week from the beginning of November until the end of the year, in addition to the sales we have already secured. This would mean gross sales of about 920 in November and 750 in December.

The latest estimate available to us for January (consistent with the Treasury's summer forecast) is that the central government might have a cash surplus of some 5,000, and that total money market influences other than Treasury bills might be contractionary by 4,300. Allowance for net maturities of Treasury bills might however reduce this latter figure by up to 2,000, so that on this basis the end-January total of money market assistance might be some £10 bn (of course the figure might go higher during the course of January).

We will need to decide week by week the amount of 9-week bills to offer at the weekly tender, and for how long the additional tenders of 9-week bills should continue. Later on we will need to consider whether and, if so, how far we need to resort to repurchase agreements directly with the banks during the revenue season.

23 October 1987





FROM: P D P BARNES  
DATE: 23 October 1987

MR PERETZ

cc PS/Chancellor  
Mr Cassell  
Mr Kelly o/r  
Mr Grice  
Mr Richardson

CTDs

You spoke to the Economic Secretary this morning.

2. You said that the cut in market rates had left CTDs rates above the market and that there was some danger of a rapid inflow into CTDs. At the time you spoke (12.45), there had been two substantial purchases of CTDs, one for £100 million and one for £10 million, compared with a normal daily rate of around £30 million. There was thus a case for suspending CTDs.

3. On the other hand, because of the need to alert Revenue offices around the country, CTDs could be suspended only at 1½ hours notice. Suspending CTDs so late in the day would therefore only cut the time available to companies to buy CTDs by half an hour. It would be unprecedented to suspend CTDs so late in the day. So you advised against suspending CTDs. That was also the Bank's advice. And there was always a case against suspension unless it was absolutely necessary: first because of the market disruption it caused; and second the way the CHAPS system operated could get us into legal disputes (and had done so in the past) about the time at which payments had been made in relation to the time of suspension.

4. The Economic Secretary agreed with your advice that CTDs should not be suspended, but gave contingent authority for you to arrange for this to be done, if there was evidence of a very rapid inflow into CTDs.

5. You subsequently told me that it had not been necessary to suspend CTDs, <sup>and</sup> that the total purchases of CTDs by 2.30pm amounted to around £240 million.

CTDs were in fact  
suspended this morning

P D P BARNES  
Private Secretary



From : D L C Peretz  
Date : 23 October 1987

ECONOMIC SECRETARY

cc Chancellor  
Sir P Middleton  
Sir T Burns  
Mr Cassell  
Mr Kelly o/r  
Mr Grice  
Ms Goodman  
Mr Richardson  
Mr Rich

*We cd wait for ESTG  
VIEWS*

*CL  
somewhat overstated  
AA*

*highly reluctant  
to go with  
this*

Mr Patterson - DNS

*see paras 16-17 of  
note of meeting  
attended*

FUNDING AND NATIONAL SAVINGS CERTIFICATES

The Chancellor asked you to give some thought to the possibility of achieving a burst of funding, if necessary, through the issue of a new fixed interest national savings certificate on more attractive terms than the present 7 per cent 33rd Issue.

2. There is no doubt that in principle we could achieve a burst of funding in this way, if we wanted it. This is one of the traditional ways of using the certificate, and indeed now one of the main reasons for having a certificate at all.

3. The questions are whether :-

- a) The cost is acceptable;
- b) The amounts likely to be secured are worthwhile;
- c) the move is consistent with our longer-term strategy for national savings;
- d) it is sensible to move now.

Cost

4. The current certificate rate of 7 per cent is, as anticipated, not proving very attractive at a time when building



society instant access accounts are offering  $7-7\frac{3}{4}$  per cent net of composite rate tax and 90 day accounts  $7\frac{3}{4}$ -8 per cent, and when there is no immediate expectation of these rates going down. Since it was introduced on 1 May, the 33rd Issue certificate has taken in a total of only £130 million (an average of £26 million a month though actual sales have declined each month), of which about a third represents reinvestment out of GER.

5. In these circumstances, to be sufficiently attractive to stimulate a worthwhile volume of funding in a short period a new certificate would probably have to offer around  $7\frac{3}{4}$  per cent, at least. We would also need to raise the maximum purchase from £1000 to £5000 - adding further to the cost to the extent this drew in more higher taxpayer money. A rate above  $7\frac{3}{4}$  per cent would raise questions about the level of other DNS rates.

6. The attached table shows the financing costs of a new certificate at various interest rates, compared with the equivalent cost of a 5 year conventional gilt. After allowing for the somewhat higher administrative costs of certificates, these comparisons suggest a rate of around  $7\frac{3}{4}$  per cent for a new certificate. Since the calculation was carried out, however, 5 year gilt yields have fallen 9.9 per cent at midday, 23 October). This would suggest a certificate rate nearer  $7\frac{1}{2}$  than  $7\frac{3}{4}$  per cent - and the figure would fall further if, as is quite possible, gilt yields continue to fall.

7. So the conclusion as things look at present is that a rate high enough to secure a significant boost to sales (at least  $7\frac{3}{4}$  per cent) would probably represent rather expensive funding - and might look even more expensive in a few weeks' time.

#### Amounts

8. Of course any certificate can bring in large inflows if it is kept on when other savings rates are falling sharply. But leaving that possibility on one side, we would not expect a new more competitive certificate to bring in more than, at most, an extra



£100 million a month - say £½ billion over the rest of the financial year - and that is probably an overestimate.

### National Savings Strategy

9. There is also the question of whether achieving a short burst of funding in this way would be consistent with the longer-term objective of reducing net inflows to national savings in line with the fall in PSBR. We see no reason why it should not be. One of the long-term purposes of continuing to have the certificate is precisely to be able to produce quick bursts of funding like this. And in the short-term there could be useful benefit to morale in the certificate office in Durham.

### Timing

10. There are however several rather compelling reasons for putting off any decision on this for the time being :-

- i) with market yields moving around the way they are at the moment it is very difficult to judge what would be the right rate to pick, and whether or not any chosen rate would prove expensive;
- ii) the amounts likely to be attracted are fairly modest : the lost funding from a month or so's delay would not be much;
- iii) we would like to wait for a little while to see how far national savings benefits from the stock market shake out without any move in rates on our part. It may be that a better approach will be to try to capitalise on that by some judicious advertising.

### An Interim Proposal

11. For these reasons, our recommendation is to leave the idea of a new certificate on one side for the time being and, perhaps,



come back to it in a month's time. Mr Patterson has, however, made a more immediate proposal which I would support.

12. At present, as you will recall, investors with matured or maturing certificates on general extension terms may switch up to £5000 into the 33rd certificate, in addition to the £1000 limit for new investment. We would like to increase the limit for reinvestment from £5000 to £10,000 : and would like to announce this quite quickly.

13. Over the next two or three weeks the very heavy sales (getting on for £1bn) of the 24th issue made in the last few weeks of its life before it was withdrawn on 4 November 1982 will have matured. Investors who had invested the permitted £5000 maximum will now have a holding, with accrued interest, of £7664. If we raise the reinvestment limit from £5000 to £10,000 we would enable these investors to switch the full amount of their holdings into the 33rd issue certificate. On the one hand this would reduce the risk of what otherwise might prove to be an outflow from national savings over the next few weeks (though our experience is so far that these matured certificate holdings are pretty inert), and on the other hand it would help improve the quality of funding by encouraging a switch out of money on general extension terms, into a new 5 year certificate.

14. If you are attracted by this very modest proposal DNS would ideally like to announce it early next week.

#### Summary

15. In short,

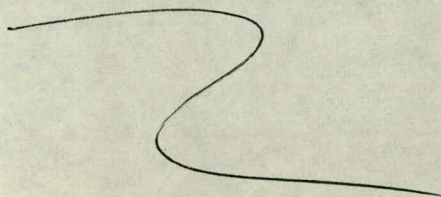
- i) we could achieve a burst of funding by introducing a new certificate, though we would not expect to be able to attract more than at most £500 million extra this financial year;



- ii) to achieve that we would need to set the rate at at least  $7\frac{3}{4}$  per cent, a rate that could easily look rather expensive funding in a few weeks' time;
- iii) partly because of that, and partly because we suspect we may naturally get increased national savings inflows as a result of the recent fall in the stock market, we suggest putting the idea on one side for the time being, and coming back to it in a month's time;
- iv) meanwhile, we have a more modest proposal for increasing the reinvestment limit into the 33rd issue for holders of maturing and matured certificates from £5000 to £10,000. } X

*Y. Englebas (PS)*

p.p. D L C PERETZ





## ANNEX

**COMPARATIVE COST OF AN INITIAL BORROWING OF £100  
BY ISSUING A FINSC AND A CONVENTIONAL GILT**

£s, 1987 prices unless otherwise stated; gilt yields as at 16 October.

Rate (per cent)	FINSC							CONVENTIONAL GILT
	<u>7</u>	<u>7.25</u>	<u>7.5</u>	<u>7.75</u>	<u>8</u>	<u>8.25</u>	<u>8.5</u>	
<u>Cost</u>								
with interest rates and inflation as assumed in:								
(i) MTFFS forecast *	119	121	122	123	125	126	128	124
(ii) the latest internal HMT forecast **	116	118	119	120	122	123	125	122

\* Figures are based on the MTFFS forecast and two other inflation/interest rate scenarios, the 'low' and the 'high' inflation cases. The weights assigned are 5:1:1.

\*\* As in \* above, but with the latest internal HMT forecast in place of the MTFFS forecast.



S E C R E T



FROM: P D P BARNES  
DATE: 26 October 1987

MR RICHARDSON

cc PS/Chancellor  
Sir P Middleton  
Mr Cassell  
Mr Peretz  
Mr Watts  
Mr C W Kelly  
Mr Grice  
Mr Brook  
Mr Cropper  
Mr Pickford

## CERTIFICATES OF TAX DEPOSIT

The Economic Secretary was grateful for your submission of 23 October.

2. Further to your minute, we spoke this morning. You said that movements in market interest rates had left CTDs  $5/16\%$  above the market at the long end. The Economic Secretary therefore agreed with the official Treasury and Bank of England advice that CTDs should be suspended for today.

fb

P D P BARNES  
Private Secretary



CONFIDENTIAL



FROM: P D P BARNES  
DATE: 26 October 1987

MR PERETZ

cc PS/Chancellor  
Sir P Middleton  
Sir T Burns  
Mr Cassell  
Mr C W Kelly  
Mr Grice  
Ms Goodman  
Mr Richardson  
Mr Rich

Mr Patterson - DNS

**FUNDING AND NATIONAL SAVINGS CERTIFICATES**

The Economic Secretary was grateful for your submission of 23 October.

2. The Economic Secretary agrees with your advice that we should defer the introduction of a new higher rate Certificate. The Economic Secretary would also like to defer until the Funding Meeting a decision on raising the reinvestment limit for the 33rd Issue, as he would like to take this decision in conjunction with a decision on the funding target.

P D P BARNES  
Private Secretary



CONFIDENTIAL

B

FROM: M G RICHARDSON  
 DATE: 26 October 1987

ECONOMIC SECRETARY

cc: PPS  
 Sir P Middleton  
 Mr Cassell  
 Mr Peretz  
 Mr Kelly  
 Mr Grice  
 Mr Watts  
 Mr Pickford  
 Mr Cropper

CERTIFICATES OF TAX DEPOSIT

This minute reports CTD developments today.

2. On Friday, after the base rate cut, we reduced CTD rates to the following rates:

<u>Months</u>	<u>1-3</u>	<u>3-6</u>	<u>6-9</u>	<u>9-12</u>
per cent	9	9 $\frac{1}{4}$	9 $\frac{3}{8}$	9 $\frac{3}{8}$

These were comfortably below LIBID at the close. But at 8.30 this morning interbank rates opened sharply lower, and softened further over the next half hour or so. At 9.00 LIBID was as follows:

<u>Month</u>	<u>1</u>	<u>3</u>	<u>6</u>	<u>9</u>	<u>12</u>
per cent	9 $\frac{7}{16}$	9 $\frac{3}{16}$	9 $\frac{1}{8}$	9 $\frac{1}{8}$	9 $\frac{1}{8}$

and the 12<sup>month</sup>/<sub>rate</sub> was down to 9 $\frac{1}{16}$  on some screens.

3. With LIBOR at  $\frac{1}{8}$  above these rates there was a clear risk that today's CTD sales would match Friday's £300m, possibly financed by round-tripping. You therefore agreed with the Treasury/Bank recommendation that the Scheme should be suspended as soon as possible.

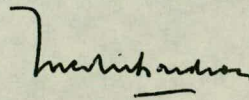
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4. The Scheme was accordingly suspended with effect from 10.45 this morning. This operation appears to have gone very successfully. Only £1.6m sales were made before this time; nor have the Bank had to turn away would-be purchasers subsequently.

5. By midday interbank rates had firmed a little, and 12 month LIBID was up to  $9\frac{1}{4}$  per cent. I have however agreed with the Bank that CTD rates should be reduced to  $8\frac{1}{2}$  per cent for the time being, until the market's excessive volatility is dissipated.



M G RICHARDSON

CONFIDENTIAL





FROM: CATHY RYDING  
DATE: 27 October 1987

PS/ECONOMIC SECRETARY

cc Sir P Middleton  
Sir T Burns  
Mr Cassell  
Mr Peretz  
Mr Kelly  
Mr Grice  
Ms Goodman  
Mr Richardson  
Mr Rich  
Mr Patterson - DNS

**FUNDING AND NATIONAL SAVINGS CERTIFICATES**

The Chancellor has seen Mr Peretz's minute to the Economic Secretary of 23 October.

2. The Chancellor has commented that this is of course somewhat overtaken by events, and he would be reluctant to go ahead at the present time with the modest proposal of increasing the reinvestment limit into the 33rd issue for holders of maturing and matured certificates from £5,000 to £10,000.

A handwritten signature in cursive script, appearing to be 'CR'.

CATHY RYDING



C O N F I D E N T I A L



FROM: P D P BARNES  
DATE: 4 November 1987

NOTE OF A MEETING, HELD IN ROOM 51/2 HM TREASURY PARLIAMENT STREET,  
AT 3.00 PM ON MONDAY 2 NOVEMBER

## Those Present

Economic Secretary  
Mr Peretz  
Mr Kelly  
Mr Rich  
Mr Cropper  
Mr Patterson - DNS  
Mr Wilson - DNS  
Mr Ward - DNS  
Mrs Cullum - DNS

*The PSB Spoke*  
*to the*  
*amount of the plan*  
*& submission*  
*had a*  
*note*

## DNS CORPORATE PLAN

The Economic Secretary thanked Mr Patterson for his Corporate Plan and subsequent submissions. He thought that the exercise had been a valuable one.

2. The Economic Secretary said that the Government's interests lay in ensuring that DNS's funding contribution was of the right size in relation to the PSBR; that it retained flexibility, given the inherent uncertainty of funding requirements; and that its funding should be done at the lowest possible cost. Secondly, it would be necessary to present any changes needed in a way acceptable both to the public and to staff. The Economic Secretary asked Mr Patterson how he intended to achieve these objectives, particularly since the outlook for the PSBR was now much lower than when the Corporate Plan had been written.

3. Mr Patterson said that, as it happened, DNS was on course for a (temporary) negative funding contribution in October, though of course over the year as a whole the contribution would be positive. There was a danger of trying to change things too quickly, because past experience had indicated that a smooth increase or decrease in DNS funding was difficult to achieve. Rather, a certain change in rates usually had a negligible impact on net inflows or outflows,

C O N F I D E N T I A L



and then a further change could bring a rush of investment or repayment applications. Sudden changes had management implications, both in the problems for staff of handling an increased volume of repayments, and on morale, if staff thought that their product was being deliberately run down. In addition, it might be difficult subsequently to attract funds back into products such as income bonds, once there was a public perception that rates were uncompetitive.

4. Mr Patterson thought that the best approach to achieving a zero contribution to funding would therefore be a gradual reduction in the GER. This approach would avoid casting a lasting blight over national savings products generally. At the same time it would reduce the management problems involved in generating large repayments, since each GER repayment would typically be of around £2,000, compared with, for example, an average £50 on the Ordinary account.

5. Mr Peretz noted that in addition to the other objectives it was an aim to improve the quality of funding. In this context neither the Ordinary Account or Premium Bonds would have been invented if they did not already exist. The medium term perspective of a corporate plan was the right one in which to consider their future. Mr Patterson said that abolition of either of these products would require primary legislation. Both products had been in existence for a long time, the Ordinary Account for 125 years, and the cost and length of time needed to make repayments would be great. Privatisation of the Ordinary Account was unlikely to be successful, as the product would not interest potential purchasers. Mr Patterson said that he thought that the only sensible way of approaching our present objective was a gradual one, to improve the return on some products, and worsen it on others. He had in mind introducing a £5 minimum deposit for the ordinary account in 1988; and some reduction in Premium bond prize money would be possible.

6. The Economic Secretary said he thought the discussion had been useful. Notwithstanding Mr Patterson's comments, he would like the Treasury and DNS to review more radical options for the Ordinary Account and for Premium Bonds, including ideas for privatising or contracting out part of the operations. It was accepted that the



1988 plan, to be produced in May, would need to be different in some respects: in particular there should be more discussion of the resource implications of the prospects for DNS, and of the various policy options.

PB

P D P BARNES  
Private Secretary

cc Those present  
PPS  
Sir P Middleton  
Mr Cassell



(M) ✓

From : D L C Peretz  
Date : 13 November 1987

ECONOMIC SECRETARY

Ch/  
Content with draft  
PQ as vehicle for  
announcement?

No. 1 hour v. substantial  
answers, & status  
an-...  
n.

cc Chancellor  
Sir P Middleton  
Sir T Burns  
Sir G Littler  
Mr Cassell  
Mrs Lomax  
Mr R I G Allen  
Mr C W Kelly  
Mr Grice  
Mr Dyer  
Ms Ryding  
Mr Cropper

mpw 13/11

## FUNDING POLICY

The Chancellor announced the main, immediate, change to funding policy in the Mansion House Speech : that intervention will not necessarily be funded within the financial year. You will recall that it was agreed at the Chancellor's meeting on 14 October that we should announce the other change - the exclusion of debt sales to building societies from the definition of "funding" - in a low key way.

2. I have considered this together with the Bank of England, and concluded that the best vehicle is a written Parliamentary answer. We would see considerable advantage in timing the Answer so that it could be press released on the same day as the October money figures (19 November), a day on which commentators will naturally be talking to the Bank of England and Treasury about monetary matters.

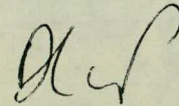
3. I attach a draft PQ and answer and also some short draft notes for editors which could go with the press release. These are agreed with the Bank of England.

4. If you and the Chancellor are content with this procedure, and subject to any comments on the proposed draft answer, I suggest we arrange to have the question tabled on 17 November for answer on 18 November, but in fact delay tabling the answer until



the morning of 19 November (which I understand is possible), press releasing it at the same time.

5. We will of course need to prepare some defensive Q and A briefing for use by the Treasury and Bank of England press offices, which we will clear separately. This will include something on the difference the change will make to the current year's funding task. The answer is that it depends on how many gilts building societies buy or sell over the rest of the year; and how much intervention we decide to fund next year rather than this. Over the financial year to September (we will not have the October figures until 18 November) we were underfunded on the new basis by £½ bn less than on the present definition - not a very large difference given the uncertainties in the arithmetic.



D L C PERETZ

cc Mr George ) Bank of  
Mr Plenderleith ) England



D R A F T

*John*

Q. To ask the Chancellor of the Exchequer whether he will make a statement on funding policy

A. The broad aim of funding policy is to neutralise the public sector's contribution to the growth of liquidity in the economy.

To that end the policy continues to be to fund the PSBR fully over time, in general within each financial year. Within that policy framework, net exchange market intervention will be sterilised - in other words, fully funded - over time. But, as the Chancellor said in his speech at the Mansion House on 4 November, this will be done as and when appropriate, and not necessarily entirely within the financial year in which the intervention takes place. In particular it would not be sensible in present market conditions to extract liquidity on a major scale. If for this or any other reason the PSBR turns out to be over or underfunded in a financial year, the aim will be to offset that in the course of the following financial year.

Hitherto policy has been defined as being to fund the PSBR by sales of debt outside the banking sector. With the evolving status of building societies, following the Building Societies Act, it has become increasingly anomalous to distinguish between sales of debt to banks and building societies. For the future, therefore, and for the 1987-88 financial year, ~~it will be the policy to fund the PSBR by sales of debt other than to banks or building societies.~~ *it will be the policy to fund the PSBR by sales of debt other than to banks or building societies.*

The authorities will also continue to take account of the liquidity and maturity of debt being issued, and avoid relying on over liquid instruments whichever sector they are sold to.

X



## Notes for Editors

1. Funding policy was defined in the 1987 FSBR as being "to seek over each financial year to fund the PSBR fully, and no more, by sales of debt outside the monetary sector".

2. The Parliamentary Answer confirms that, as the Chancellor announced in his speech at the Mansion House on 4 November, within this policy framework net intervention will be sterilised - that is fully funded - as and when appropriate, and not necessarily within the same financial year.

3. It also announces <sup>a</sup> ~~one other~~ modest change to <sup>this.</sup> ~~funding policy~~. With the evolving status of building societies it is no longer appropriate to treat debt sales to building societies differently from debt sales to banks, and henceforth the aim will be to fund the PSBR by debt sales other than to banks or building societies, and by external flows.



mpw



FROM: MISS M P WALLACE

DATE: 16 November 1987

PS/ECONOMIC SECRETARY

cc Sir P Middleton  
Sir T Burns  
Sir G Littler  
Mr Cassell  
Mr Peretz  
Mrs Lomax  
Mr R I G Allen  
Mr C W Kelly  
Mr Grice  
Mr Dyer  
Mr Cropper

**FUNDING POLICY: ANNOUNCEMENT**

The Chancellor has seen Mr Peretz's minute of 13 November, and is content with a written Parliamentary Answer as the vehicle for announcement. However, he has a number of amendments to the text:

- Question: amend to read "To ask the Chancellor of the Exchequer whether he will make a further statement on funding policy";
- Answer: delete all but the first sentence of paragraph 1;  
Paragraph 2, third sentence: to read "... for the 1987-88 financial year, funding will be defined in terms of sales of debt other than to banks or building societies.";  
Delete last sentence of paragraph 2;
- Notes for Editors: delete paragraph 2, and amend first sentence of next paragraph to read "The Parliamentary Answer announces a modest change to this."

mpw

MOIRA WALLACE



CONFIDENTIAL



FROM: G R WESTHEAD  
DATE: 16 November 1987

PS/CHANCELLOR

cc: Sir P Middleton  
Sir T Burns  
Sir G Littler  
Mr Cassell  
Mr Peretz  
Mrs Lomax  
Mr R I G Allen  
Mr C W Kelly  
Mr Grice  
Mr Dyer  
Mr Cropper

*Ch/Economic Secretary prefers to delay PQ if it is not also announcing earlier change to the House. Can we have your views in time to table or not table PQ?*

*John PQ as suggest 5/11*

*mpw 17/11*

**FUNDING POLICY : ANNOUNCEMENT**

The Economic Secretary has seen the Chancellor's comments on Mr Peretz's minute of 13 November, recorded in your minute of earlier today.

2. The Economic Secretary would prefer to retain the sense of the first paragraph in the draft answer, since he thinks there could otherwise be some criticism that Parliament had not been properly informed about the change in policy announced in the Mansion House speech. He also has a mild preference for retaining the last sentence of the second paragraph, as something that could be referred back to in future.

3. If, however, the reference to the Mansion House speech change is to be dropped he sees less need to unveil this further change immediately. He would rather delay the announcement until the November money figures are published on 18 December, since he thinks it would be better, if possible, to avoid announcing the change at the same time as a rise in M3 as large as that in October.

*Guy Westhead.*

GUY WESTHEAD  
Assistant Private Secretary

CONFIDENTIAL





*mpw. mpw*  
*bf 10/11*

FROM: MISS M P WALLACE

DATE: 17 November 1987

APS/ECONOMIC SECRETARY

cc Sir P Middleton  
Sir T Burns  
Sir G Littler  
Mr Cassell  
Mr Peretz  
Mrs Lomax  
Mr R I G Allen  
Mr C W Kelly  
Mr Grice  
Mr Dyer  
Mr Cropper

**FUNDING POLICY: ANNOUNCEMENT**

This is to confirm that, as I told you on the phone, the Chancellor has seen your minute of 16 November and is content for the PQ to be delayed as suggested by the Economic Secretary.

*mpw.*

MOIRA WALLACE



COVERING SECRET

*Handwritten notes and initials at top right.*

FROM: CATHY RYDING  
DATE: 27 November 1987

ECONOMIC SECRETARY

cc: Chancellor  
Sir P Middleton  
Sir G Littler  
Sir T Burns  
Mr Cassell  
Mr Peretz  
Miss O'Mara  
Mr Grice  
Mr Rich  
Mr Carr  
Ms Bronk  
Mr Cropper  
  
Mr Patterson )  
Mr Wilson ) DNS  
Mr Plenderleith - B/E  
Prof Griffiths - No 10

*Oh  
To note funding  
arithmetic in case  
Eddie raising it @  
your meeting*

*AA*

FUNDING MEETING

There are three items on the agenda for the meeting on Wednesday 2 December:

- (i) Funding arithmetic
- (ii) National Savings
- (iii) Gilt-edged funding in November

2. I attach papers on each of these items, and a fourth on cost of funding.

*Cathy Ryding*

CATHY RYDING



SECRET

FUNDING ARITHMETIC 1987-88(Note by MGI)

This note discusses the total funding requirement for the current financial year, based on the current funding rule. The annex discusses the funding requirement on an M4 based rule.

Table A shows the main elements of the arithmetic. The table is constructed assuming a PSBR of £1 billion as published in the Industry Act forecast. The table also assumes that there will be no further intervention (either buying or selling) beyond the end of November, and that intervention so far this year will be funded within the financial year.

National savings are forecast to contribute £1.5 billion over the year (a lower assumption than last month).

The redemption/buying in assumption excludes any element for purchases of 1989-90 maturities made to level the hump of stocks maturing that year.

On these assumptions, the arithmetic implies a gross gilt sales task of over £17 billion for the year. This would leave just over £9 billion sales to be achieved over the last 5 months of the year - an average of almost £2 billion a month for December to March.

Many of the assumptions are of course uncertain, but the major uncertainties are the PSBR and intervention. The latest internal forecast is for a surplus on the PSBR of £1 billion and all else being equal this would reduce the gross gilt sales task by £2 billion over the year and £500 million a month over the 4 months December to March.

If it were assumed that intervention was funded over the next twelve months rather than within the financial year, then the gross gilt sales task for the rest of the year would be less. By how much it would be less depends on how much intervention is assumed to have been funded already. On the stylized assumption that 7/12 of intervention <sup>so far this year</sup> has been funded between April and October, then funding the remainder over the next twelve months rather than before the end of the financial year reduces the gross gilt sales task for December to March by around £500m a month.

SECRET



SECRET

## FUNDING : FINANCIAL YEAR POSITION 1987/88

24/11/87

£ million

	FORECAST ----- Financial Year 87/88	OUTTURN ----- April - Oct 1987	RESIDUAL ----- Nov 87 - March 88	
<b>PSBR AND FUNDING TARGET</b>				
1 PSBR excl asset sales	6000	3836	2164	
2 Asset sales (sales-)	-5000	-3378	-1622	
3 PSBR	1000	458	542	
<b>FINANCED BY:</b>				
4 OPS debt sales to nbps (sales-)	2000	1697	303	
5 National Savings (sales-)	-1500	-1143	-357	* -71
6 CTDs (sales-)	750	-401	1151	
7 Treasury bills etc (sales-)	0	-63	63	
8 Intervention (reserves inc+)	8658	8628	30	
9 Public sector externals excl intervention and gilts (inc-)	-500	-544	44	
10 NET GILT SALES TO NBPS & OVERSEAS NEEDED FOR FULL FUND (sales+)	10408	8632		
11 Adjustment for 1986/87 underfund	400			
12 OVER(-)/UNDER(+) FUNDING	-400	3816	-4216	
<b>GILT SALES:</b>				
13 Net purchases by nbps and overseas (purchases+)	10808	4816	5992	
14 Net purchases by monetary and other public sector (purchases+)	-500	-547	47	
15 Maturities	6950	3899	3051	
16 GROSS OFFICIAL SALES	17258	8168	9090	
17 Monthly average gross gilt sales	1438	1167	1818	

\* average per month

Relationship between lines:

$$\begin{aligned}
 3 &= 1 + 2 \\
 10 &= 3+4+5+6+7+8+9 \\
 12 &= 10 + 11 - 13 \\
 16 &= 13 + 14 + 15
 \end{aligned}$$



SECRET

ANNEX 1

FUNDING ARITHMETIC 1987-88 ON AN M4 RULE

Table B attached shows the main elements of the funding arithmetic on an M4 rule. The lines in the table affected are marked by an asterisk.

OPS debt sales to the non-bank private sector are assumed to increase the funding task by only £1 billion on an M4 rule compared with £2 billion on an M3 rule. This reflects the fact that building societies have run down their holdings of local authority debt (and are assumed to continue this trend) and that local authorities have increased their holdings of building society whole-sale deposits (although as in earlier years, local authorities are assumed to unwind these deposits slightly over the rest of the financial year). Building societies are expected to redeem around £250 million of CTDs over the financial year and to purchase £300 million of gilts.

On an M4 rule, the arithmetic implies a gross gilt sales task of £16.3 billion over the year as a whole, leaving just over £8 billion sales to be achieved over the last 5 months of the year - an average of just over £1.7 billion a month. As with the M3 based rule, assuming a PSBR surplus of £1 billion would reduce the gross gilt sales task by £500 million a month December to March and funding intervention over a 12 month period rather than by March would reduce the task by a similar amount.

SECRET



## FUNDING : FINANCIAL YEAR POSITION 1987/88 - M4 RULE

24/11/87

£ million

	FORECAST ----- Financial Year 87/88	OUTTURN ----- April - Oct 1987	RESIDUAL ----- Nov 87 - March 88	
<b>PSBR AND FUNDING TARGET</b>				
1 PSBR excl asset sales	6000	3836	2164	
2 Asset sales (sales-)	-5000	-3378	-1622	
3 PSBR	1000	458	542	
<b>FINANCED BY:</b>				
* 4 OPS debt sales to nbps (sales-)	1000	813	187	
5 National Savings (sales-)	-1500	-1143	-357 *	-71
* 6 CTDs (sales-)	500	-280	780	
* 7 Treasury bills etc (sales-)	0	-96	96	
8 Intervention (reserves inc+)	8658	8628	30	
9 Public sector externals excl intervention and gilts (inc-)	-500	-544	44	
* 10 NET GILT SALES TO M4ps & OVERSEAS NEEDED FOR FULL FUND (sales+)	9158	7836		
11 Adjustment for 1986/87 underfund	400			
* 12 OVER(-)/UNDER(+) FUNDING	-400	2613	-3013	
<b>GILT SALES:</b>				
* 13 Net purchases by M4ps and overseas (purchases+)	9558	5223	4335	
* 14 Net purchases by OPS, banks and building societies (purchases+)	-200	-954	754	
15 Maturities	6950	3899	3051	
* 16 GROSS OFFICIAL SALES	16308	8168	8140	
* 17 Monthly average gross gilt sales	1359	1167	1628	

\* average per month

Relationship between lines:

$$\begin{aligned}
 3 &= 1 + 2 \\
 10 &= 3+4+5+6+7+8+9 \\
 12 &= 10 + 11 - 13 \\
 16 &= 13 + 14 + 15
 \end{aligned}$$



**CONFIDENTIAL****NATIONAL SAVINGS - NOTE by MGI**

This note reports the latest position on National Savings and comments on prospects for the period to the end of January 1988. A table on recent funding and the implied contribution for the rest of the year is attached.

**Results for October and November 1987**

2. There was a total outflow of £43 million, mainly because repayments of Savings Certificates was so high. Repayments of fixed interest certificates reached were £292m - the highest level ever. Of this over £100 million was repayment at maturity of 24th Issue. There were also increased repayment of other matured certificates on the GER though it is too early to analyse the effect of GER reductions. There was a negative inflow of principal. These losses were offset by net contributions from Income Bonds (£84 million) and Investment Account (£55 million, almost entirely accrued interest). New sales of both types of certificate (£50m) were £18m more than September, but remain modest overall. Income Bond sales remain at about £150 a month.

3. DNS estimate the outcome for November in the range - £15m to + £15m. A full analysis is not yet available. The outflow from savings certificates is still running at a high level but appears past its peak. The pattern is relatively uniform across recently matured certificates and these on GER.

**Current position and prospects to January 1988**

4. The total net contribution to funding for the first seven months of 1987-88 is £1,148 million. This is £19 million less than the pro-rata amount (£1,167 million) needed to achieve a National Savings contribution to funding of £2 billion.

5. At this stage, the DNS forecast assumes that interest rates will remain unchanged throughout the forecast period, though that could change. It indicates a net contribution to funding of



£183 million. This implies a total of £1,331 million - £345 million under the striking rate needed to achieve a funding contribution of £2 billion.

6. Present indications are that the full year contribution to funding from national savings will be £1,500 million rather than £2,000 million. But interest rates offered by competitors are beginning to change, and the timing and amount of any possible sympathetic changes in National Savings rates are uncertain. These factors could affect the relative placing of National Savings in the personal investment league table, and the inflow.

**MGI DIVISION**  
27 November 1987



£ million (figures at cob  
26 November)

**GILT-EDGED FUNDING IN DECEMBER AND JANUARY**  
(Note by Bank of England)

1 This note reviews the prospects for gilt-edged funding in December and January.

The funding arithmetic

2 The latest funding arithmetic shows three main changes from that presented last month:

- (i) It has now been assumed that the reserves will show an increase of 8658 during 1987/88 (the total rise recorded to date) as against a figure of some 7700 incorporated last time;
- (ii) Forecast sales of National Savings have been revised down from 2000 to 1500;
- (iii) Banks' net sales of gilts, formerly forecast to be 1000 during 1987/88, have been revised down to 500.

In net terms these changes raise the gross gilt sales target for the year as a whole from 15338 shown last month to 17258.

This total gives a striking rate for the year of some 1440 per month. So far this financial year gilt sales have been at a slower rate than this, averaging 1170 per month. This leaves 9090 of gross gilt sales to be made between November and March, a striking rate of 1800 per month. Thus far in November gross gilt sales have amounted to 1230, implying sales of almost 2000 per month to be made between December and March.



3 This figuring may be unduly pessimistic, since it is based on a PSBR deficit of 1000, as published in the Autumn Statement. The internal Treasury forecast suggests that a surplus of 1000 is more likely, which would reduce the striking rate between December and March to 1470 per month. Besides the PSBR, the major uncertainties are:

- (i) Intervention so far accounts for about half of the gilt sales target for the year as a whole. With sterling at DM 2.99 it seems more likely that the reserves will rise than fall over the remainder of the year;
- (ii) The banks have been heavy buyers of gilts in recent months, but the sharp fall in their holdings at the outset of 1987/88 shows just how uncertain the forecast is;
- (iii) The run-down of other net public sector debt, which averaged 240 per month between April and October, is forecast to slow down sharply over the remainder of the year. Were the rapid run-off so far to continue, more gilt sales would be required.

4 A switch to the M4 definition of funding (Table 2 shows the funding arithmetic on this basis) would reduce the funding need. On the assumption that the building societies buy some 700 of gilts between November and March, thereby reversing the fall in October (which probably reflected anticipation of deposit outflows connected with the BP sale), the M4-based gilt sales target would imply a striking rate of 1630 per month between November and March; this assumes a PSBR of 1000. Were the PSBR to be in surplus by 1000, the striking rate declines to 1230 per month, or the same total as has been achieved so far in November.

5 These figures can, of course, be shaded given the year to year flexibility, in relation to heavy intervention particularly, announced in the Mansion House speech. But it would be unwise in our view to build in any significant allowance for that at this stage, since we are always at risk of falling short of our target especially with the often dormant Christmas and pre-Budget periods to come.



Market Conditions

Yields %	29 Sep 86 (peak)	8 May 87 (trough)	19 Oct 87 (recent peak)	28 Oct 87 (last funding meeting)	26 Nov 1987
Shorts	11 5/8	8 5/16	10 9/16	9 5/16	9
Mediums	11 1/4	8 11/16	10 9/16	9 7/16	9 5/16
Longs	10 5/8	8 3/4	10 1/16	9 1/8	9 3/16
IGs (2006) (real yield at 5% inflation)	3 7/8	3 5/8	4 11/16	4 3/8	3 15/16

6 In common with bond markets abroad, yields on gilts have come down since the sharp fall in the equity markets, reflecting a switch of demand towards bonds and the reduction in short-term interest rates. Compared with the most recent peak (Monday 19 October, the first day of the sharp fall in equities in London) gilt yields have fallen by about 1 1/2% at the short end, by 1 1/4% in mediums and by 7/8% in longs; real yields on indexed stock have fallen by around 3/4%.

7 Equity markets seemed to have flattened out, though they still remain tender. With receding expectations of further interest rate cuts, gilt yields have also bottomed out. Long yields are now about 1/4% higher than three weeks ago, when they fell, briefly, below 9%. The gilt market now looks somewhat uneasy. How the markets will evolve over the next few weeks is far from clear. Much will depend on the outcome of a possible G7 meeting after the US budget package is finally set in place, but it is likely that conditions will remain unsettled.

Funding Tactics

8 Against this background, we have sold 1230 of gilts so far in November, of which 320 represents calls secured in the long gilt auction in September. We might have sold more but for a concern not to exacerbate the position in the equity market.

In addition to near maturities we have in our portfolio:

- (i) 400 of full-coupon conventional stock.



(ii) some 70 of index-linked, mainly in the 2024.

Our debt to NILO is 410.

9 For the next two months the funding arithmetic suggests a target of £1 1/4 billion-£1 1/2 billion per month. This is close to the gross sales achieved in October and November. But it will not be easy to achieve given the uncertain market prospect. It will mean taking advantage of opportunities promptly as they occur and this suggests using tranches, in both the conventional and indexed sectors. It is relevant too that December is a short month. Depending on how we get on on this basis we may need to raise a large amount through the auction in January. A separate note on the auction is attached.

Bank of England  
27 November 1987



Table 1

M3 basis

FUNDING : FINANCIAL YEAR POSITION 1987/88  
Not seasonally adjusted

£ millions

	REVISED FORECAST	OUTTURN	RESIDUAL
	Financial Year 87/88	April - Oct 1987	Nov 87 - March 88
<b>PSBR AND FUNDING TARGET</b>			
1 PSBR excl asset sales	6000	3836	2164
2 Asset sales (sales-)	-5000	-3378	-1622
3 PSBR	<u>1000</u>	<u>458</u>	<u>542</u>
Financed by:			
4 Other public sector debt sales to nbps (sales-)	2000	1697	303
5 National Savings (sales-)	-1500	-1143	-357 (71)a
6 CTDS (sales-)	750	-401	1151
7 Treasury bills etc (sales-)	0	- 63	63
8 Intervention (reserves inc+)	8658	8628	30
9 External finance of public sector excluding intervention and gilts (increase+)	<u>-500</u>	<u>-544</u>	<u>44</u>
10 Target net gilt sales to nbps and overseas for full fund (sales+)	10408	8632	1776 (355)
11 Over(-)/Under(+) funding brought forward	400		
12 Over (-)/Under (+) funding 1987/88	-400	3816	-4216
<b>GILT SALES</b>			
13 Net purchases by nbps and overseas (purchases+)	10808	4816	5992
14 Net purchases by monetary and other public sector (purchases+)	-500	-547	47
15 Maturities	6950	3899	3051
16 GROSS OFFICIAL SALES	<u>17258</u>	<u>8168</u>	<u>9090</u>
17 Monthly average gross gilt sales	1438	1167	1818
a average per month for remainder of year			
Relationship between lines:	3 = 1 + 2		
	10 = 3 + 4 + 5 + 6 + 7 + 8 + 9		
	12 = 10 - 13		
	16 = 13 + 14 + 15		



Table 2

M4 basisFUNDING : FINANCIAL YEAR POSITION 1987/88  
Not seasonally adjusted

£ millions

	REVISED FORECAST	OUTTURN	RESIDUAL
	Financial Year 87/88	April - Oct 1987	Nov 87 - March 88
<b>PSBR AND FUNDING TARGET</b>			
1 PSBR excl asset sales	6000	3836	2164
2 Asset sales (sales-)	-5000	-3378	-1622
3 PSBR	1000	458	542
Financed by:			
4 Other public sector debt sales to nbnbsps (sales-)	1000	813	187
5 National Savings (sales-)	-1500	-1143	-357 (71)a
6 CTDS (sales-)	500	-280	780
7 Treasury bills etc (sales-)	0	- 96	96
8 Intervention (reserves inc+)	8658	8628	30
9 External finance of public sector excluding intervention and gilts (increase+)	-500	-544	44
10 Target net gilt sales to M4-ps and overseas for full fund (sales+)	9158	7836	1322 (264)a
11 Over(-)/Under(+) funding brought forward	400		
12 Over (-)/Under (+) funding 1987/88	-400	3819	-4219
<b>GILT SALES</b>			
13 Net purchases by M4-ps and overseas (purchases+)	9558	5223	4335
14 Net purchases by monetary and other public sector (purchases+)	-200	-954	754
15 Maturities	6950	3899	3051
16 GROSS OFFICIAL SALES	16308	8168	8140
17 Monthly average gross gilt sales	1359	1167	1628

a average per month for remainder of year

Relationship between lines:

3 = 1 + 2

10 = 3 + 4 + 5 + 6 + 7 + 8 + 9

12 = 10 - 13

16 = 13 + 14 + 15



**THE MEDIUM GILT AUCTION**

(Note by the Bank of England)

- 1 This note reviews the possible form of the third gilt-edged auction in the present experimental series, this time of a medium-dated stock.
  
- 2 We have already indicated that we envisage holding a further auction, for up to £1 billion of a medium-dated (7-15 years) stock, in January 1988. The latest funding arithmetic indicates a funding requirement of around £1 1/2 billion per month over the remainder of the year. An auction of up to £1 billion would fit well with this, but the precise size of the auction will need to be determined nearer the time, in the light of market circumstances and bearing in mind the relatively low level of coverage (one and a half times) at the last auction. The funding need over the remainder of the year may be an argument for making the auction stock fully-paid. This would also help in assessing the auction technique, since the first two auctions were partly-paid. However, a final decision on that feature too, would depend on market conditions at the time.
  
- 3 The timing of the auction raises difficulties, which we would like to try to resolve as soon as possible, so that we can make an early announcement (preferably next week) of approximate timing, thus giving the market time to prepare.



4 We would want to avoid the early part (first two weeks) of January, to give the market time to settle into gear after the Christmas/New Year lull. In view of the experience of the last auction, when unexpectedly poor trade figures followed close on the heels of the auction, we would not want to hold the auction in the immediate run-up to the December trade figures, scheduled for Thursday 28 January. But the December money figures are due on 21 January, and the same concern applies to the period immediately ahead of them. A yet earlier date would put the auction in the middle of a heavy crop of real economy statistics.

5 The best available date, given this calendar, is 29 January. That is a Friday, and it would be very unattractive to investors to hold the auction on a Friday because they are then locked in for two days over the weekend with no opportunity to adjust their positions until the following Monday.

6 We would therefore like to explore with the Treasury the possibility of advancing the trade figures one or two days, so that the auction could be held immediately after the trades on 27 or 28 January. Failing this, we see no alternative but to consider delaying the auction until early in February. But besides clashing with the US quarterly refunding (3, 10 and 30 year auctions), delaying to February has the serious disadvantage that we would not get the proceeds of the auction in January. It is likely to be very difficult for us to fund on sufficient scale in January with other stocks without undermining the run-up to the auction; and with the prospect of only being able to achieve limited funding in the (short) December month because of the Christmas/New Year lull, we could find ourselves falling seriously behind on the funding effort in the New Year. The market would of course be able to see that this was happening and this would tend to discourage it from participating in the auction. We thus very much hope that it might be possible to advance the December trade figures slightly; delaying to February we see as very much a second best option.



7 If we can give the market an advance notification in the next week or so of the general timing of the auction, details of the precise date and the choice of stock need not be released until seven days in advance. At the moment we are thinking of a further tranche of an existing stock (probably FOTRA), so as to enhance liquidity, with a maturity roughly in the middle of the medium range, and carrying a coupon in line with current yields. Relatively few stocks satisfy these criteria. Treasury 8 3/4% 1997 is already one of the largest stocks in issue, and a further tranche would make it the largest; it is in any case one of our present unsold tranchettes. It would be preferable to add to smaller issues, and the choice effectively lies between Treasury 8 1/2% 2000 (£1200 million in issue) or Conversion 9% 2000 (£1404 million in issue).

Bank of England  
27 November 1987



**COST OF FUNDING : 23 NOVEMBER 1987****(Note by MG2)****Main Points**

- Since the last calculations (20 October), yields on conventional gilts have fallen by around 1 per cent on average. There has been a marked change in the yield curve which is now upward sloping to 10 years out. This has increased the attractiveness of short borrowing and breakeven yields have accordingly fallen by just over  $\frac{1}{4}$  per cent. (Table 2)
  
- The revised Guidelines adopted at the last meeting suggest that about 55 per cent of gross conventional issues in the year to date should have been shorts. The outturn has been somewhat lower. (Table 3)
  
- The average life of conventional dated stocks has remained unchanged since the last calculations at 9.5 years, just below the 9.6 years average life at the beginning of the financial year. (Table 3)
  
- The fall in gilt yields means National Savings Certificate rates now look to be broadly in line, having been relatively low at the time of the last meeting. (Table 4A)



## SECRET

TABLE 1: COMPARATIVE COSTS OF AN INITIAL BORROWING OF £100 BY ISSUING A GILT.

1987 prices, net of tax \*

## Inflation Scenarios \*\*

	MTFS Case	Low Inflation Case	High Inflation Case	Weighted Projection	Autumn Case
(a) Five Years					
5 year Conventional	119- 122	124- 127	102- 104	117- 120	115- 118
5 year Index-Linked	109- 111	109- 111	109- 111	109- 111	109- 111
(b) Ten Years					
5, then 5, year Convs	138- 145	154- 160	103- 110	135- 142	142- 149
10 year Conventional	160- 167	185- 192	106- 112	156- 163	159- 166
10 year Index-Linked	138- 141	138- 141	135- 138	138- 141	138- 141
(c) Twenty Years					
5, then 15, year Convs	198- 213	243- 258	123- 138	194- 209	221- 239
20 year Conventional	240- 258	322- 343	112- 126	234- 251	245- 264
20 year Index-Linked	215- 220	215- 220	209- 214	214- 219	215- 220

\* Average marginal tax rates are not known with precision and likely ranges are used here instead so that the cost figures also emerge as ranges.

\*\* (i) The MTFS, low and high inflation scenarios are weighted 5:1:1 for the Weighted Projection case.  
(ii) The MTFS case assumes the MTFS inflation forecast (of around 3 per cent a year) to 1991 and 2.5 per cent a year thereafter in line with the central case of the long-term assumptions paper (which is used by departments for public expenditure planning purposes).  
(iii) The Low Inflation case has inflation falling to 2 per cent by 1990 and price stability achieved and sustained after 1994.  
(iv) The High Inflation case has inflation accelerating to 6.5 per cent by 1990 and thereafter gradually to 10 per cent by 1995. Inflation is then taken to remain at this level.  
(v) The Autumn case assumes the Autumn internal forecast to 1992 (with inflation peaking at 5.3 per cent in 1988 H2 and falling to 2.9 per cent in 1992 Q1) and 2.5 per cent a year thereafter (see ii)



SECRET

TABLE 2: BREAK-EVEN YIELDS AND BREAK-EVEN INFLATION RATES

		Per cent				
A: Break-Even Yields		MTFS	Low	High	Weighted Projection	Autumn
(a)	10 Years **	6.6	5.1	12.9	7.3(7.6)*	8.3
(b)	20 Years ***	7.0	5.3	13.3	7.7(8.0)*	8.6

\* MTFS, low and high inflation scenarios are weighted 5:1:1

\*\* Below the rate shown it would be cheaper to issue a 10 year conventional than a five, followed by a five, year conventional.

\*\*\* Below the rate shown it would be cheaper to issue a 20 year conventional than a five, followed by a fifteen, year conventional.

+ Bracketed figures refer to last funding meeting (October).

#### B: Break-Even Inflation Rates \*

		Break-even Inflation Rate		Average Inflation Rate in Each Scenario				
		at 23 November 1987		MTFS	Low	High	Weighted Projection	Autumn
a.	5 years	4.2-5.1	(4.3-5.4) +	3.0	2.0	6.4	3.3	3.7
b.	10 years	4.1-4.8	(4.3-5.1) +	2.7	1.0	8.0	3.2	3.1
c.	20 years	3.7-4.3	(3.7-4.3) +	2.6	0.5	9.0	3.2	2.8

\* At the break-even inflation rate the cost of an index-linked gilt is the same as that of a conventional. Below it, the IG will be cheaper than a conventional, and above it more expensive.

+ Bracketed figures refer to last funding meeting (October).



## SECRET

TABLE 3: GROSS SALES OF GILTS TO DATE IN RELATION TO THE GUIDELINES

## A. The Guidelines for Gross Issues of Conventionals

<u>Yields on medium and Long Stocks (%)</u>	<u>Proportion of Gross Issues (%)</u>	
above 11	Shorts	Mediums and Longs
10½-11	100+	consider buying in
10-10½	95	5
9½-10	80	20
9-9½	65	35
8½-9	50	50
8-8½	35	65
7½-8	20	80
below 7½	5	95
	consider refinancing with longs/mediums	100+
Proportions implied by average yields in F.Y. to 23 Nov.	55	45

## B. Gross Sales

£ billion (Percentage of total in brackets)

Conventionals

	<u>Shorts</u>	<u>Mediums</u>	<u>Longs</u>	<u>Total</u>
1987-88*	2.4 (26)	3.3 (36)	3.3 (36)	9.1
[New Issues**	3.0 (37)	2.8 (35)	2.2 (28)	7.9 ]
1987 Q2	0.9	1.5	1.7	4.1
Q3	1.1	0.4	1.0	2.6
Oct	0.4	1.0	0.1	1.5
Nov***	0.0	0.4	0.5	0.9
Calls	0.0	0.0	0.0	0.0

Index-linked

1987-88*	0.0 (-47)	0.0 (32)	0.1 (115)	0.1 *
[New Issues**	0.0 (0)	0.1 (50)	0.1 (50)	0.2 ]
1987 Q2	0.0	0.0	-0.1	-0.1
Q3	0.0	0.0	0.1	0.0
Oct.	0.0	0.0	0.1	0.1
Nov***	0.0	0.0	0.1	0.1
Calls	0.0	0.0	0.0	0.0

<u>Memo item:</u>	<u>1-7 Years</u>	<u>7-15 Years</u>	<u>Over 15 Years</u>	<u>Total</u>
1987-88 Conv	3.1 (34)	2.7 (30)	3.2 (35)	9.1
IG	0.0 (-46)	0.0 (31)	0.1 (115)	0.1

## C. Average Life of Dated Gilts

	<u>All</u>	<u>Conventionals only</u>
End 1986-87	10.7	9.6
23 November 1987	10.6	9.5
(New issues**	11.2	10.9)

\* Sales secured for 1987-88. \*\*Announced in 1987-88. \*\*\*To 23 Nov.

SECRET



## SECRET

TABLE 4A: NATIONAL SAVINGS INSTRUMENTS: FIXED RATE PRODUCTS

## A. Costs of an Initial Borrowing of £100 over Five Years

£s, net of tax, cash

	MTFS Case	Low Inflation Case	High Inflation Case	Weighted Projection	Autumn Case
Fixed Interest National Savings Certificate (FINSC)	121	127	103	119	117
Index-Linked National Savings Certificate (ILNSC)	121	121	121	121	121
Conventional 5 Year Gilt	119-122	124-127	102-104	117-120	115-118

## B Equalising National Savings Rates.

	Per cent				
Rate on FINSC to match Cost of Conventional Gilt	6.6-7.1	6.5-7.0	6.8-7.3	6.6-7.1	6.7-7.2
Current rate on FINSC	7.0	7.0	7.0	7.0	7.0
Rate on ILNSC to match Cost of Conventional Gilt *	3.6-4.1	4.5-5.0	0.4-0.9	3.3-3.8	3.0-3.5
Current rate on ILNSC *	4.0	4.0	4.0	4.0	4.0



# MATURITIES OF DATED STOCKS

POSITION AT 23 NOVEMBER 1987

