# Financial forecasts in the United Kingdom

This is an abbreviated text of a paper presented in Paris in April 1977 by M. E. Hewitt, a member of the Bank's Economic Intelligence Department, to a seminar of central banks and international institutions, organised by the Banque de France.

### Introduction

This paper describes the process by which short-term financial forecasts are constructed by the Treasury and the Bank. Such forecasts have assumed a greater importance for policy-making purposes since the adoption by the authorities of specific targets for the growth of monetary aggregates.

Short-term economic forecasts are normally prepared in the Treasury three times a year – before the annual Budget in the spring, in the summer, and in the autumn. These forecasts are generally prepared on the assumption of unchanged policies, but may be supplemented by variants or simulations to show the effects of policy changes or to consider possible variations in key variables, such as exports or wages, which are currently subject to special uncertainty. If the Government need to consider the introduction of policy measures at other times, additional exercises may be commissioned.

The complete exercise consists essentially of four separate, but related, forecasts: of world economic prospects, of output and expenditure at constant and current prices (including the current account of the balance of payments), of external capital movements, and of domestic financial flows. The financial forecast, which is compiled jointly by the Treasury and the Bank, is at present in flow of funds form and covers one or two financial years ahead (including seasonally-adjusted quarterly paths, where appropriate). It is prepared in conjunction with the other forecasts and is based on the same assumptions; its particular aim is to exhibit the possible implications of the other forecasts for monetary policy, and to provide a plausibility and consistency check which might cause those forecasts to be modified. This role as a consistency check has, indeed, been enhanced and extended by the adoption by the Government in 1976 of formal monetary targets. If, under the conditions predicated by the other forecasts, the financial forecast shows the target variable – whether it be the broad money supply (M<sub>3</sub>) or domestic credit expansion – failing to meet the objective, this will lead to a reconsideration of the whole set of economic forecasts and, in particular, of the policy assumptions underlying them.

Ideally, real and financial variables should interact directly in an integrated forecasting model. In practice, it has not yet proved possible to develop such a model for the United Kingdom, although research to this end is currently being undertaken in both the Treasury and the Bank. In consequence, the forecasting round at present consists of a series of interrelated, but distinct, forecasts (though these are completed at a speed which allows iteration). Taken together, the four forecasts give a coherent view of economic prospects as a whole.

## The forecasting procedure

Monetary assumptions in the form of an initial set of interest-rate assumptions are fed into the first round of the national income forecast. Domestic short-term interest rates are made consistent with the assumed path of the exchange rate and with a forecast of international interest rates. Long-term rates are usually related

more to domestic factors, such as the expected rate of inflation and the size of the public sector borrowing requirement. Subsequent judgments are made as to whether the outcome for the domestic monetary system is consistent with the policy objectives of the authorities. These might lead to a revision of the interest-rate and/or exchange-rate assumptions or, at a later stage, to consideration of new policy measures to act either on external or on monetary conditions.

The national income forecast, expressed in current prices, yields the starting data for the financial forecast – the surpluses and deficits of each of the eight sectors distinguished in the flow of funds matrix as set out in line 5 of the table on page 196, which shows figures for the financial year 1975/76. As a next step, estimates of the public sector's financial transactions which contribute to its borrowing requirement are also taken from the national income forecast (derived from the Treasury's annual public expenditure survey and related forecasts, including the capital expenditure of the nationalised industries). These include (in line 18) lending for house purchase by local authorities and public corporations; and (in line 6) export credit refinance, central government lending abroad and – within the public sector – to local authorities and public corporations. Given these transactions, it is possible to produce a forecast of the public sector borrowing requirement, by summing the borrowing requirements of central government, local authorities and public corporations contained in line 34.

The separate forecast of external capital flows provides the majority of the overseas cells for the matrix. These include the external financing of the public sector, shown in lines 35-40.

When these inputs have been received from the other forecasts, it remains for the financial forecasters to proceed in a series of steps towards forecasts of the financing and liquidity position of the private sector and of the domestic financing of the public sector. This involves a series of judgments, and it may be helpful to describe the kind of thought processes which lie behind some of the individual predictions.

The largest domestic flows within the non-bank private sector (lines 10-25 of the matrix) are deposits with, and lending on mortgage by, building societies (lines 10 and 17); contributions to life assurance and pension funds (line 13); and transactions in company securities, including new issues (lines 24 and 25). The Department of the Environment, the Treasury and the Bank have all constructed models which yield predictions for net inflows into building societies, but none of them is regarded as wholly reliable. In practice, the departments concerned agree on estimates, both for inflows and for mortgages, which represent a compromise between their different results. The financial forecasters in turn may either accept these estimates (as further amended by iteration within the Treasury national income model), or they may themselves revise them if, for example, the estimates show a divergence between the predicted inflows and predicted mortgages, which appears inconsistent with the future liquidity positions of the societies, or if they look out of balance with other flows in the system.

Contributions to life assurance and pension funds have been rising fairly steadily for several years, and here it currently seems sensible to make a straightforward projection of a continuing trend. Whether the projection is in line with, exceeds, or falls short of, the predicted growth of nominal personal disposable incomes, the potential margin of error is unlikely to be large, given the contractual nature of the bulk of the contributions.

The forecast of transactions in company securities and the allied forecast of new issues are an especially tricky matter of judgment. The forecasters have to weigh in their minds the prevailing economic context assumed in the forecast and its likely impact on market confidence, the relative attractiveness to the financial institutions of investment in government securities, and the liquidity and need for funds of industrial and commercial companies. In this context, it is interesting to note that econometric studies in the Bank, while failing to establish stable relationships for the forecasting of new issues, have suggested that companies raise long-term capital from the financial markets when market conditions are propitious, rather than when they have most need of funds. This reinforces the crucial nature of the judgment which has to be made about market attitudes and expectations – a judgment which is bound to be all the more precarious as to the timing as well as the size of the flows projected, because of the tendency of markets to change mood in anticipation of, as well as in reaction to, changes in economic trends. One further factor which the forecasters also take into account is that the personal sector has continually been a net seller of company securities over at least the last twenty years; even so, the amount held by persons is still large and, in the absence of any other compelling reason to the contrary, a continuation of this trend, though not its exact size, can be assumed with reasonable conviction.

To forecast bank lending in sterling to the private sector, the forecasters again have to use their judgment, supplemented by the results of recent econometric work in the Treasury on the factors determining bank advances. They will assess such factors as the level of economic activity, stockbuilding, the cost of borrowing, and the size of the personal and company sector surpluses (or deficits), measured both absolutely and relatively to the figures for previous years, as well as the banks' balance sheets. According to the weight put upon these factors, the forecast will diverge from the path which bank advances would take if they simply rose at the rate required to remain in a constant relationship to national expenditure. If, for instance, the outlook is for a depressed economy and high interest rates, the prediction is usually likely to fall below that rate.

But such a judgment may be more complicated if the outlook is for a recovery of economic activity at the end of the forecasting period, which might be preceded by an acceleration in the growth of bank borrowing. In addition, special factors may need to be taken into account. These could notably include the effect of monetary restrictions, such as the supplementary special deposits scheme, which put constraints upon the growth of bank balance sheets. The consequent effect on bank loans can be very roughly quantified (though not as exactly as under the direct lending ceilings which were formerly used as an instrument of policy). Another special factor in the financial year 1976/77, which may have some continuing – albeit smaller – effect in 1977/78, was the imposition in November 1976 of exchange control restrictions on the sterling financing of third-country trade.

Sales of various forms of public sector debt to the general public are entered in lines 41–52 of the matrix. Bank notes and coin in circulation (line 41) are assumed to grow broadly in line with money GDP, and the changes are conventionally distributed equally between the personal and company sectors. Because the terms of existing national savings media (line 42) are fixed, the forecast of their sales in the forecast year usually involves an upward adjustment from the outturn of the previous year if interest rates in general are assumed to be falling, and a downward adjustment if they are assumed to be rising. This approach may,

however, be modified if a new issue on competitive terms is known to be in prospect, or if the forecast growth of total personal saving is reckoned to be large enough to override the interest-rate effects.

By far the most important figure in this part of the matrix, however, is that for sales of gilt-edged securities (government bonds) to the non-bank private sector (line 44). It is probably also the most difficult to forecast. Some attempts have been made to devise rules-of-thumb for assessing the effects of changes in interest rates induced by the authorities. Thus, a judgment was made of the likely effect on gilt-edged sales when the authorities decided in October 1976 to increase minimum lending rate by 2\% and to call for additional special deposits equivalent to 2\% of eligible liabilities. This was indeed the prelude to a recovery in sales on a very large scale but, though the rise in interest rates played a part in this, especially at first, it seems safe to assert that the subsequent rise in market confidence generated by a succession of favourable events (the IMF loan, the accompanying government measures, the arrangement of the facility related to official overseas sterling balances, etc.) was even more important. So an assessment of market expectations has again to be made by the forecasters. The assumed path of interest rates will, of course, be relevant to this, but that will itself have been based on the forecasters' view of the reaction of financial markets to the general course of economic developments over the period, especially trends in price inflation, in the public sector borrowing requirement, and in the current account of the balance of payments. If these trends appear favourable, a decline in interest rates will probably be assumed, and the conditions will be suitable for large sales of government debt. The forecasters will also take account of the size of net demand for funds by the Government after the refinancing of stocks maturing within the period and, on the supply side, of the effect on the portfolios of the financial institutions which are the main holders of gilt-edged, noting whether, for example, the building societies are forecast to be building up, or running down, their liquid assets.

Three further points about the assessment of future market behaviour may be worth making. First, successful adherence to monetary targets, whatever its impact on the real economy, has now become a factor in creating a favourable context for gilt-edged sales. This leads to the second point, characteristic of financial markets, that expectations tend in the short term to be selffulfilling. A dearth of gilt-edged sales when confidence is low is succeeded by a glut when confidence returns. It is often hard for the forecasters to make a realistic forecast of total gilt-edged sales, which stands nicely poised somewhere in the middle of the extremes. If this view is right, it implies a confession of weakness in the judgmental approach; but it also suggests that even greater difficulties will be faced in constructing econometric models which can satisfactorily predict the breaking of the confidence barrier. Third, the importance of the underlying policy assumptions should be emphasised. The forecasters have to make judgments about market reactions to events which may never occur. In a pre-Budget forecast, for example, they might have to take a view on the reaction to an announcement of a higher or lower than expected public sector borrowing requirement, forecast on the assumption of unchanged fiscal policies, although such a forecast might well, in practice, encourage the Government to take restrictive or expansionary fiscal action and so restore the borrowing requirement to a level closer to general expectation.

In forecasting sales of short-term public sector debt to the non-bank private sector – Treasury bills (line 45) and local

authority temporary and other debt (lines 47 and 48) – account is taken of the forecast interest-rate differentials among short-term rates (both the differentials between Treasury bill and local authority rates, and the differentials between each of them and bank certificate of deposit rates). If – as, for example, when the supplementary special deposits scheme is biting – banks are not actively bidding for deposits and are themselves running down their holdings of local authority debt, this can be expected to increase local authority debt sales outside the banking system.

When these calculations are completed, net bank finance of the public sector (line 53) can be derived as a residual (which, indeed, reflects UK practice in public financing). This completes the asset side of the banks' balance sheet and, allowing for non-deposit liabilities (mainly additions to reserves) and for domestically-held foreign currency deposits (line 30), sterling bank deposits (line 31) are simultaneously determined (subject to the further checks to be discussed). This done, it is possible to calculate the resulting forecasts of the key monetary aggregates (as shown in the footnotes to the matrix).

## Implications of the forecast

Throughout these series of individual judgments and calculations, the forecasters obviously keep in mind the balance within the various sectors and the consequent need to match the supply and demand for funds. By its accounting constraints, completion of the matrix imposes internal consistency in the arithmetical sense. The sum of changes in assets and liabilities across each line must necessarily be zero, and the column sum of the net financial transactions of each sector must be equal to that sector's financial surplus or deficit. There is an important technical caveat to this. In past years, there have always been discrepancies between each sector's financial surplus or deficit and its total identified financial transactions. The largest discrepancies have usually occurred in the personal and company sectors: the former has regularly been recorded as acquiring significantly more financial assets than its surplus warranted, implying the existence of unrecorded liabilities (or an error in the estimation of the surplus), while the reverse pattern has applied to the company sector. So to be realistic, the financial forecast must also contain a projection of unidentified financial flows (line 33).

An arithmetically consistent forecast need not, of course, be an especially credible forecast. For this reason, the forecasters will take a second look at the results to see if the picture of the future which they portray is a plausible one. For example, they might judge that the derived increase in bank deposits of the personal sector was too low to be consistent with past experience, and that the sector's acquisitions of other assets were consequently overestimated. They might, as one possibility, then conclude that the inflow into building societies, the banks' main competitors for persons' deposits, was too high. If this particular judgment were made, consequential adjustments would need to be made to the size of the loans on mortgage made by the societies and, since in this case at least there is a link between monetary and real variables, to the estimates of housing investment in the national income forecast. Or the increase in deposits held by the financial institutions might appear larger than was suggested by experience, in which case it might be reasonable to assume that their purchases of gilt-edged or of company securities were underestimated. Alternatively, of course, such results might reflect a genuine change in behaviour likely to be induced by relative interest rates or by other factors in the particular economic conjuncture postulated. A comparison would usually also be made between

the prospective increase in money supply and the predictions obtained by applying demand-for-money equations. But such equations have not held up at all well in the last five years and so have come to be regarded as a less significant test than in the past. Nevertheless, a large difference between the two results might still lead the forecasters to reconsider their results. At any rate, the forecasters will again normally exercise their judgment on the overall picture given by their first efforts, and may well make some adjustments which will have to be carried through the matrix until a new, internally consistent, forecast is completed.

The forecasters will then pursue the implications of the forecasts further (and in the process make further tests of the consistency and plausibility of their results). A table is prepared, from the combined data of the national income forecast and the financial forecast, showing the sources and uses of funds of industrial and commercial companies, from which any implied change in the ratios in which internal and borrowed funds are used can be observed. The movement in overall company liquidity is also worked out, together with the ratios of both gross and net liquid assets of industrial and commercial companies to total final expenditure at current prices (used as a proxy for turnover). If, for example, a sharp deterioration in company liquidity was foreseen, this would lead, in possible sequence, first to a reconsideration of the financial forecast; second to a reconsideration of the forecast of the real economy (since the question would arise whether, rather than run down their liquid assets, companies might not reduce their capital or other expenditure instead); and third, perhaps to a reconsideration of fiscal or other policies affecting companies.

A calculation will also be made of personal liquidity, taking the ratio of gross liquid assets of the personal sector to total personal disposable incomes. Again, the extent to which this diverges from recent trends or appears inconsistent with other predictions (e.g. the movements in real personal incomes and consumers' expenditure) acts as a plausibility check on the forecasts. It must be admitted at this point that consumer behaviour, particularly the unexpected rise of the personal saving ratio in a period of accelerating inflation, has been one of the more puzzling economic phenomena in recent years. Nevertheless, recent research has suggested that persons may have sought to build up their liquid assets as a deliberate response to the erosion in the value of those assets by inflation (see the article by J. C. Townend in the March 1976 Bulletin, page 53). If, as this theory may possibly imply, persons have a stable demand for liquid assets, which they seek in part to satisfy by variations in their spending, this would provide one important route whereby monetary factors could influence the development of the real economy. The real value of the stock of personal sector liquid assets is, in fact, now included as one of the variables in the Treasury equations for consumers' expenditure.

Because of the need to assess the appetite of the main non-bank financial institutions for public sector debt, formal attempts have recently begun to forecast separately the acquisition of financial assets by insurance companies, pension funds, building societies and the remainder. In this way, estimates can be made, for each of the main groups, of the proportion of new inflows going into gilt-edged (and into other securities), and the resulting change in the proportion of their total holdings. This imposes a further plausibility check on the forecasts.

Above all, the forecasters examine the implications of the forecast for the banking sector. A calculation is made of the combined reserve ratio, i.e. the ratio of reserve assets to total

eligible liabilities. The forecast growth in sterling bank deposits provides an approximate figure for the latter, while reserve assets are calculated by making various adjustments (e.g. deductions for estimates of the growth of till money and for any special deposits called) to the forecast growth in central government borrowing in sterling from the banking system (line 53 of the matrix). If the implied ratio threatens to fall below the required minimum  $(12\frac{1}{2}\%)$ , it may be reasonable to envisage attempts by the banks to take avoiding action, perhaps by curtailing their lending or, perhaps, by bidding away Treasury bills from non-bank holders by offering higher rates on certificates of deposit. If the reserve asset ratio came out abnormally high (say, 20%), then, conversely, higher bank lending might be suggested. Such calculations obviously also throw light on the extent to which variations may be required in the amount of special deposits that are called, in the pursuit of the authorities' policy objectives.

If the supplementary special deposits (SSD) scheme is already in force, or is assumed to come into force during the forecast period, further calculations need to be made. Under this scheme, a limit is placed upon the growth of the interest-bearing eligible liabilities of the banks (IBELs). These can be related to the predicted growth of total eligible liabilities by assuming – boldly that banks' non-interest-bearing liabilities, i.e. their current accounts, will grow broadly in line with nominal incomes. Thus, a given growth of banks' total eligible liabilities can be translated into one for interest-bearing eligible liabilities, and vice versa. After several further technical adjustments, an approximate relationship can be established between the growth of banks' IBELs and the growth of sterling deposits with the banking system (as defined in line 31 of the matrix), and so with the growth of M<sub>3</sub>. The results of this exercise might show that the growth in bank deposits (interest-bearing and non-interest-bearing) predicted in the financial forecast was compatible with the limit placed on the growth of interest-bearing deposits. In that case, the 'corset', as the SSD scheme is colloquially known, would be hanging loose. If this did not turn out to be the case, however, the financial forecast would be revised, since the banks would be unlikely to allow themselves to exceed the limit more than marginally, and so enter the severe penalty zone prescribed under the scheme.

When the authorities wish to restrict M<sub>3</sub> growth to a given maximum rate, whether by employing the SSD scheme or by other methods, this will effectively constrain the financial forecast by predetermining the increase in sterling bank deposits. Accordingly, the matrix will have to be constructed in such a way as to make public sector debt sales, and not bank deposits, the residual of the calculations. Or, to the extent that it was unconstrained, bank lending could be the residual. (Such flexibility is an advantage of the flow of funds matrix as a forecasting tool.) This process will necessarily entail interest-rate effects which will have to be predicted either with the help of demand-for-money equations or, if they are not reliable, by rules-of-thumb and the use of judgment.

This paper has discussed the forecasting procedure in terms of the construction of a single central forecast, which the authorities can use as a basis for policy consideration. In practice, the initial central forecast is usually the precursor of a series of simulations in which the effects of alternative fiscal and monetary policies are examined. The forecasters then have to pursue the implications of the changes in their initial assumptions – some of which will be fairly straightforward, such as the effect of a reduction in government expenditure on the public sector borrowing requirement, whereas others will involve the same kind of difficult

judgments about the impact on market confidence as have already been discussed. One method of dealing with such problems is to make alternative assumptions about market reactions; for example, alternative assumptions may be taken of good and poor sales of government debt by the authorities following the announcement of government measures, and their respective implications for the banking system further explored.

The financial forecasting procedure discussed in this paper amounts to an iterative process, whereby consistent estimates of the supply of, and demand for, funds by the different sectors of the economy are brought together in an integrated set of financial accounts. The aim is to arrive at the most plausible of the many possible financing patterns associated with given outturns for national income and the balance of payments. The procedure clearly has its limitations and is subject to wide margins of error. The financial forecasters are from the outset highly dependent on the outcome of the national income and the balance of payments forecasts; if these contain errors, they will be carried forward into the flow of funds matrix. Moreover, there is obviously considerable scope for an improvement in the understanding of the relationships between financial conditions and real activity; until this exists, the forecasters will have to rely on informed, but necessarily subjective, judgment, backed up by available econometric evidence. Even then, of course, econometrics would hardly become a complete substitute for thought.

The main virtue of the flow of funds approach is that it can be used to reveal where the main pressures in the financial system are likely to be felt, and how they are likely to be absorbed. Moreover, it is in undertaking a series of simulations for policy-forming purposes, rather than in the construction of a single central forecast, that the procedure is shown to its best advantage. For the accounting constraints of the procedure impose a discipline upon the forecasters, which compels them to pursue the implications of variations in the underlying policy or other assumptions in a way which is logically, as well as arithmetically, consistent.

# Flow of funds in 1975/1976

£ millions

		Central	Local authorities	Public corporations	Overseas	Persons	Industrial and commercia companies	l Banks	Other financial institutions	Unallocated
Capital account	Line	6	1	,,		,	,			· · · · · · · · · · · · · · · · · · ·
Receipts + , payments -										
Saving	1 2	-1,977	2,057	1,682		11,464	9,425 401		92 92	
Capital transfers (net) Fixed investment	3	- 409 -1,332	-4,005	332 - 4,193		- 252 - 3,210	- 6,917	- - 1,0		
Stockbuilding	4	- 55	_	- 625		- 614	- 2,567	A STATE OF THE STA	50	
Financial surplus/deficit	5	-3,763	- 1,928	- 2,804	1,204	7,388	342	-1,:	103	864
Financial transactions								200	1,503	
Receipts - , payments +										
Government lending	6	3.914	-1,150	-2,120	- 594	- 9	- 168		127	
Lending by public corporations (other than for house purchase)	7			97	- 86		- 11			
Trade credit (net) extended and received by public					00					
corporations	8			24		- 322	298			
Accruals adjustments etc. (see notes) Deposits with:	9	957	40	- 675		- 29	- 213	- 33	- 47	
Building societies Savings banks	10					4,488	29		- 4,517 - 221	
Hire-purchase companies etc.	12				179	- 221 - I	50		- 221 - 228	
Life assurance and pension funds Unit trust units	13					4,783			- 4,783 - 101	
Company borrowing through hire purchase	15						14		- 14	
Borrowing through hire purchase for consumption Loans for house purchase:	16			- 4		- 79	73		10	
Building societies	17		442	220		- 3,042			3,042	
Other (excluding banks) Lending to central government by public sector	18		462	228		- 748			58	
pension funds Loans and mortgages by other financial institutions	19 20	- 277				7	27		277	
UK private investment overseas	21				- 1,355	,	- 27 1.355		20	
Overseas investment in UK private sector External liabilities and claims/banking adjustment (see note	22 s) 23				2,523 - 746		-2,531 $727$	19	8	
Capital issues	24				- 740		- 1,360	- 299	- 303	
Other company and overseas securities	25	367	70700	107	- 134	- 1,271	532	$   \left\{     \begin{bmatrix}       a \\       b     \end{bmatrix}     =     \begin{bmatrix}       a \\       10     \end{bmatrix}     \\     \begin{bmatrix}       c     \end{bmatrix}     =     \begin{bmatrix}       a \\       10     \end{bmatrix}     $	2,322	
Banks' foreign currency claims on deposits with non-residents Banks:	26				810			- 810		
Foreign currency lending for investment overseas	27						- 145	320	- 175	
Other bank lending in foreign currency to private sector Bank lending in sterling	28 29				- 432	- 60 - 12	- 345 476	273 96	- 128 - 128	
Domestic foreign currency bank deposits	30	102	50	103	∫ - \	914	869	∫- 50\	32	
Sterling bank deposits	315				389			(-2,409)	32	
Subtotal Unidentified		5,063	- 598	- 2,240	554	5,061	- 377	-2,854	-4,609	0.1
	33	- 27	- 8	- 60	- 553	1.311	- 419	- 321	- 787	864
Public sector borrowing requirement		- 8,799	- 1,322	- 504	1,203	1,016	1,138	3,375	3.893	
Treasury bills British government stocks	35 36	517 59			- 517 - 59					
Direct borrowing by central government	37	84			- 84					
Reserves etc. (= currency flow) Borrowing by local authorities and public corporations	38 39	-1.170	4	- 697	1,170 693					
External finance	40	- 510	4	- 697	1,203	40000				
Notes and coin	41	- 463				222	220			
National savings	42	- 496				233 496	230			
Certificates of tax deposit British government stocks	43 44	-3,827				- 10 590	130		3,107	
Treasury bills	45	- 808					506		301	
Northern Ireland central government debt Local authority short-term debt	46 47	- 18	381	1		- 35 - 144	17 19		- 257	
Other local authority debt Public corporations' debt (pension funds etc.)	48 49		- 659	i		- 102	28		790	
Issue Department transactions in commercial bills	50	- 263	- 43	109		- 12	- 5 263		- 49	
Other Issue Department transactions	51	234	- 234							
Non-banks	52	- 5,601	- 55	109		1,016	1,138		3,893	
Banks	53	-2,688	- 771	84				3,375		
				0,				2,213		

nil or less than £1 million.

PSBR (borrowing –) = line 34 (CG + LA + PC) = £ – 10,625 million. Sterling DCE = lines 25b + 29 + 53 (banks) + line 40 (overseas) + line 41 (persons + ICCs) = £5,127 million. Change in sterling  $M_0$  = line 31 (CG + LA + PC + persons + ICCs + OFIs) + line 41 (persons + ICCs) + line 30 (banks) = £2,483 million. DCE (old definition) = lines 25b + 28 + 29 + 53 (banks) + line 40 (overseas) + line 41 (persons + ICCs) = £5,400 million. Change (increase –) in banks' non-deposit liabilities = lines 33-5+24+25a+9 (banks) = £ – 882 million.

Government lending (line 6) includes CG refinance of export credit.

Line 9: the national income accounts record items (such as payments of VAT) as they accrue, the financial accounts as they are actually paid. This adjustment reconciles the respective figures.

Line 23; this is an adjustment to reconcile differences of coverage etc. between figures of UK banks' net external liabilities as used in the balance of payments accounts and those used in the financial accounts.

The entry for 'banks' on line 25 ('other company and overseas securities') comprises:

[a] mainly banks' take-up of shares of own subsidiaries;

[b] banks' take-up of shares of non-banks;
[c] banks' take-up of overseas shares (sterling and foreign currency).