Conference on financial statistics

The sixteenth conference in the annual series organised by the Statistics Users' Council was held in London on 13 November; it was the second on the theme of financial statistics and, like the first (in 1977), was organised in conjunction with the Bank of England. Some 250 people, representing a wide spread of interests, attended. The following account summarises the main topics and issues discussed. A full record of the proceedings will be issued by the Statistics Users' Council[1] *in due course.*

Opening the conference on behalf of the Governor, George Blunden said that it was appropriate for the Bank to have played a leading part in organising this conference in view of its longstanding involvement in financial statistics, illustrated particularly by the recent celebration of the 100th issue of its *Quarterly Bulletin*—an important vehicle for the dissemination of financial statistics for the last 25 years. It was particularly timely in the present period of upheaval in financial markets that such a conference should focus on change in the financial system and the statistical response to such change. With the appetite for financial statistics continuing to grow, it was right to provide users with this opportunity of making known their justifiable needs and to weigh these against the cost to the providers. Much had been achieved since the previous conference on the subject, but substantial gaps and deficiencies remained. Policy needs had also changed and further changes were in prospect as a result of legislative, institutional and market developments that had either already occurred or were clearly visible on the horizon. In particular, it was necessary to ask the question whether the present institutional approach to financial statistics based on balance sheet analysis was likely to remain an adequate basis for recording financial activity, which was more and more taking place outside the traditional institutional framework. Furthermore, technological developments in data handling needed to be taken into account. Clearly a degree of flexibility was needed if the statistical system was to respond sensitively to the uncertainties and changes that lay ahead.

The current scene *(Chaired by Ms Sarah Hogg)*

For the first session of the conference two main papers[2] were provided. One, by John Alexander (Central Statistical Office), gave an overview of financial statistics—how they are compiled, the main developments since 1977, current and future work—and was supplemented by a note on financial statistics of insurance companies and pension funds by Peter Richardson (Department of Trade and Industry). Warwick Hood (H M Treasury), in his paper, described the use of financial statistics in the modelling and forecasting work of the Treasury.

As discussant of Alexander's paper, Bill Robinson (London Business School) suggested that users look for five main properties in official statistics: relevance, accuracy, consistency, timeliness and transparency. Users must recognise that resources available for the provision of statistics are limited. While recognising that their main customer was the Treasury, Robinson felt that official statisticians had insufficient awareness of outside interest in their figures. He approved of the priority given to improving quality rather than expanding detail but felt too little attention was given to whether and when to make revisions to statistics. Taking up the author's point on using more computer leverage, Robinson wondered whether the computer database was yet sufficiently recognised as the crucial representation of the data; the database structure could be used as direct input to the *Financial Statistics Explanatory Handbook.*

It was suggested in subsequent discussion that there had been a decline in quality since the early 1980s; Alexander, nevertheless, felt that after allowing for inflation the sector balancing items were not unprecedented. Quality labelling of financial statistics, requested by one participant, had been introduced in the *Financial Statistics Explanatory Handbook.* In answer to a plea for greater international comparability of definitions, the difficulty of changing the existing framework of flows of funds—which predated the international definitions—was explained. Work continued on reconciling this framework with the balance sheet system, which in some respects corresponded more closely to international guidelines.

Introducing discussion on the second paper, Professor Marcus Miller (University of Warwick) considered that Hood had provided a clear and concise guide to the use of financial statistics in forecasting and modelling. The Treasury had undertaken innovative work in the financial area, and contributed substantially to the understanding of the effects of wealth on consumption and of corporate liquidity and the cost of capital on investment. There were still many problems, however. Modelling of the behaviour of £M3 had not been very successful and was not helped by a tendency of the system to adapt in a way that offsets the authorities' efforts to control it (Goodhart's law).

(1) Available from the Secretary, Ian Maclean Esq, IMAC Research, Moor Lane, Esher, Surrey, from February 1986; price (including conference papers), £25.

(2) The papers, authors and opening discussants are listed on page 590.

Miller reviewed the implications of developments in economic theory for the structure of the model, emphasising that recent theory suggested that it was better to model asset prices and interest differentials rather than financial flows and stocks. Recent theoretical developments had also placed emphasis on the effects of asymmetric information (the situation in which not all operators in a market have the same set of information) which leads to the conclusion that markets may not clear through price movements alone.

Hood's paper had emphasised the importance of reliable wealth data and consistent stocks and flows, a point echoed in the subsequent discussion. Alexander explained that the CSO were undertaking a project to reconcile stock and flow information and hoped this would show results in a year or two—news that was welcomed.

Responding to remarks of the discussant, Hood said that although the theory of rational expectations had yielded some important economic results, there were considerable practical difficulties in setting up a financial model which incorporated rational expectations. Some very restrictive assumptions about behaviour were required and there were problems of estimation. The Treasury's approach had been to develop ways of solving the existing model under rational expectations. He thought the poor recent tracking record of the £M3 equation was largely due to the financial liberalisation of the early 1980s and the tendency of £M3 to become more a savings and less a transactions medium. The trend in velocity was therefore less predictable than in earlier periods.

Adaptation and change in UK financial statistics *(Chaired by Professor Charles Goodhart)*

The second session discussed three papers concerned with the effects of innovation and structural change on financial statistics. The impact of changes in the economic and regulatory environment on banking activity were considered by Peter Bull (Bank of England) in a paper that traced developments since the late 1960s. The watershed was the introduction of *Competition and Credit Control.* He went on to note the growth of supervisory interest, the abolition of exchange controls, the development of monetary policy leading to the introduction of a medium-term financial strategy, and changes in monetary control arrangements with implications for competition in the banking system. Many of these changes had been influenced by major developments in the economic environment—oil price rises and the consequential imbalances on current accounts, the development of UK oil resources, worldwide inflation and subsequent recession, developing countries' debt difficulties, and increasing prudential concern with the restructuring of banks' balance sheets. They had prompted statistical responses, both domestic (eg expansion of monetary statistics) and international (better monitoring of the euromarkets and exposure to country risk), and had complicated the task of interpreting developments.

Professor Mervyn Lewis (University of Nottingham), as discussant, contrasted these changes with the stability of the previous century; the distribution of banking assets in 1960 had not been markedly different from that in 1880. But recent developments represented the most substantial period of adjustment and change since the mid-nineteenth century, when a period of some fifty years had seen the ending of bi-metallism, and the introduction of chequing facilities and joint stock banking. Bull's message was that, in the midst of such rapid change, of unknown duration, flexible statistics were needed. But Lewis was prompted to ask further questions. Since the meaning of international banking and balance of payments statistics was being eroded by market developments, were they still necessary? And, if intermediation was shifting from institutions to markets, was there an appropriate statistical infrastructure to record it? The traditional balance sheet approach alone did not cover options and other off-balance-sheet activity. Indeed he felt that all banking business was best expressed in terms of an options balance sheet. Banks, he thought, were institutions which issued options contracts and the focus of recording should shift from realisations to options.

Contributors to the discussion argued that more attention should be paid to markets—interest rate information in particular was deficient—and that longer runs of data should be made available. Replying to the various points, Bull explained that international banking statistics were needed for prudential purposes, to monitor risks—by the banks themselves, by supervisory authorities and by international organisations such as the BIS. Domestic monetary statistics had responded to the shift from bank intermediation towards markets by including short-term paper held by non-banks in broader measures of liquidity, and blurring of institutional boundaries had been recognised by including building society liabilities in certain aggregates. In general, official compilers were willing to provide long runs of statistics and, where these were not already available in publications and public data bases, the Bank and the CSO would do what they could to respond to requests.

Dimitri Vittas (Committee of London and Scottish Bankers), leading the discussion on the paper by Giles Keating (London Business School), noted with approval that it proposed improvements in the presentation of financial statistics to help focus on areas of particular importance. The paper went on to suggest that new information be collected on interest rates, maturities and contingent liabilities, and proposed a new survey of financial services analogous to the CBI survey of manufacturing. Vittas was sceptical about whether such a survey would make a timely contribution to understanding structural change—time lags in regular statistics were already short—and he wondered whether users of such information would be prepared to pay suppliers to provide it. Demand for monetary and financial statistics had grown considerably and might best be met, as in other industries, by basic aggregate monthly data supported by more detail at a lesser frequency.

The cost and marketing of financial statistics was a topic of subsequent debate with suggestions that there was scope for privatisation; CSO felt their experience in this direction had not been encouraging. Responding to several requests, representatives of both banks and building societies offered to see what could be done to improve the availability of interest rate information. In connection with the growing importance of financial markets, a plea was made that aggregated supervisory information should be made available for statistical purposes.

Commenting on the final paper of the session by Alec Grayson (Committee of London and Scottish Bankers), Dr Forrest Capie (City University) felt that it failed to disentangle the banks' own requirements for statistics from those which they were asked to supply for official purposes. There was little additional burden in making available figures required for banks' own management purposes, eg balance sheets and profits. Although happy to endorse pleas for better statistics, Capie was not convinced that their present quality was insufficiently high. Nor was he supportive of the proposal to change the statistical treatment of the Bank of England Banking Department, although no other users present were prepared to support the current separate sectorisation of the Banking and Issue Departments; reference was made to the problems involved in introducing a 'central bank sector' approach in UK circumstances.

Further discussion ranged over the forthcoming change to end-month reporting by banks, the problems of dealing with breaks in series, and the need for information on terms of access to deposits. CSO were asked to consider publishing total credit statistics on lines similar to what is done in the United States.

Industrial and commercial companies: problems and prospects *(Chaired by Mr John Caff)*

In her paper, Pam Walker (CSO) outlined some problems and likely sources of error in the company sector accounts. Opening the discussion of it, James Morrell (JM Associates) felt that an important source of error was the slipshod way that many firms and trade associations responded to statistical enquiries. There were three particular areas where he thought the quality of statistics was poor. Trade credit was badly covered, partly because there was no separate sector of unincorporated businesses and also because of unrepresentative sampling—the trade credit position of small companies and unincorporated businesses is often different from that of large ones. Stocks and work in progress, another weak area, tended to be included at directors' valuation—often very conservative—and could be substantially affected by inflation and by changes in the tax system. Capital expenditure estimates were also likely to be deficient (although good information should be available from company accounts).

Walker had drawn attention to some difficulties of using published accounts and felt that more direct reporting by companies (and also more integrated reporting) would help. Morrell considered that VAT returns were an under-used but potentially valuable source of data covering companies and unincorporated businesses. He felt that there should be a statutory requirement to provide quarterly figures of capital expenditure and value added and that all businesses should show value added, capital expenditure and balance sheet information separately for domestic and overseas activity.

International activity was a focus of the ensuing discussion with the suggestion that leads and lags in trade credit, especially when exchange rates moved, could be an important source of error in the statistics. This gap had been made worse when the company sources and uses of funds survey had to be abandoned because of poor response. Another topic drawing comment was the history of revisions to company profits figures; final figures based on corporation tax statistics were inevitably delayed and earlier sample information drawing necessarily on large companies may have given a biased view.

The DTI explained that their efforts to cover small companies in their liquidity survey had been unavailing; but they hoped to provide more timely information on company accounts by publishing figures based on those companies in the top 500 that had reported in the latest three months. Some use was made of VAT information, and this sometimes allowed smaller samples to be used (eg in construction), but the large amount of activity exempt from VAT posed problems.

The paper by Geoffrey Meeks (Department of Applied Economics, Cambridge) considered the uses that could be made of disaggregated company statistics in monitoring and forecasting sector aggregates, modelling, cross-section studies, and studies of individual industries and firms. This was thought by Mark Pratt (Bank of England), the discussant, to provide a natural foil to the previous paper, although the Bank was less sanguine about the use of Z-score techniques, its experience suggesting that they could be regarded only as a coarse screening device. The Bank made use of company accounts through *Datastream* as the information in *Business Monitor MA3* was out of date. This information was valuable in illustrating the diversity of company experience and helping to understand aggregate behaviour; also, company accounts did not have the large errors and balancing items that bedevil national accounting figures. But there were disadvantages too: window dressing could be a problem, company accounting practices varied, accounts were available only annually at best with a lag of six to nine months, and the information could not be readily integrated with the national accounts.

In the final paper, Jonathan Miller (Society of Investment Analysts) argued that for the purposes of investment analysts the national accounts were not very relevant, although these accounts could provide valuable insights on the economics of the corporate sector. Statistical refinement could be less valuable to investment analysts than might be supposed because market prices, their main interest, were only loosely related to net sector financial flows as reported in the national accounts; lack of timeliness and revisions also reduce the usefulness of official statistics. Perhaps one of the most striking demonstrations of the value of national accounting statistics, however, was in showing the effects of inflation on company profitability in 1974; while security analysts were in uncharted waters, accountants absorbed in constant purchasing power adjustments and company managements largely wedded to money illusion, the national accounts portrayed clearly the potential scale of stock appreciation and the threat to corporate financial health.

Simon Wren-Lewis (National Institute of Economic and Social Research), the discussant, considered there was a lack of soundly-based empirical and theoretical knowledge of the relationship between real and financial behaviour. More attention to this would have an important policy payoff. He also felt that some limited disaggregation of the company sector into sub-sectors—manufacturing, North Sea oil and a residual—would be helpful to understanding such behavioural links, although CSO said in later discussion that they had not been encouraged by results when they had tried this.

Panel discussion *(Chaired by Mr Jack Hibbert)*

Introducing a concluding open forum session, and replying to earlier remarks, Jack Hibbert, Head of the Government Statistical Service, said that he was quite clear that the purpose of the GSS was to provide statistics needed by government, but the way in which this role was exercised was open to discretion. Costs of compiling statistics, although important, were not the only consideration and the burden of reporting and the availability of information sought also had to be taken into account. In response, other participants thought that statistics should be seen as a public good which it was the proper function of government to provide.

Users were invited to comment further on timeliness and accuracy of statistics. Would they prefer for example to wait until more reliable estimates were available before publication, in order to reduce revisions? The general consensus was that statistics should be disseminated as fully and quickly as possible. Users learned to adapt to the quality of estimates produced. A suggestion was made that it might be better to announce ranges rather than single figures, although the difficulties of this when figures fitted into an accounting framework were pointed out.

Another problem for official compilers was to know when figures had outlived their main purpose and should be dropped in order to free resources for something else. Users offered little help in resolving this difficulty.

Discussion ranged back over various topics raised in earlier sessions and also covered means of dissemination; participants advocated better availability of computer readable data and more graphical presentation. Feedback of results to contributors was also recommended as a way of improving response. This, it was pointed out, was already done in some areas (eg with banks) but was more difficult with non-financial companies. One specific suggestion was that concessionary terms should be offered on official publications as an incentive to better reporting.

Drawing the conference to a close, Hibbert felt that because few suggestions heard during the day had been really new there was a danger that the official side might appear dismissive—that would be wrong. He felt there was a need to reassess many of the issues raised and in this context he found such occasions valuable. He saw enormous potential for the dissemination of statistics through electronic information systems, and felt that every opportunity should be taken of exploiting them.

Conference papers

Session A: **The current scene**
Chaired by: Sarah Hogg, Economics Editor, The Times

Financial statistics: the view from the Central Statistical Office
Author: John Alexander, CSO

Opening discussant: Bill Robinson, London Business School

Financial statistics of insurance companies and pension funds
Author: Peter Richardson, DTI

The use of financial statistics in modelling and forecasting
Author: Warwick Hood, HM Treasury

Opening discussant: Professor Marcus Miller, University of Warwick

Session B: **Adaptation and change in UK financial statistics (domestic and external)**
Chairman: Professor Charles Goodhart, Professor of Banking and Finance, LSE

Shifting frontiers in financial activity
Author: Peter Bull, Bank of England

Opening discussant: Professor Mervyn Lewis, University of Nottingham

Financial statistics and structural change
Author: Giles Keating, Centre for Economic Forecasting, London Business School

Opening discussant: Dimitri Vittas, Committee of London and Scottish Bankers

The banks: some perspectives and problems
Author: Alec Grayson, Committee of London and Scottish Bankers

Opening discussant: Dr Forrest Capie

Session C: **Industrial and commercial companies: problems and prospects**
Chairman: John Caff, Confederation of British Industry

Some problems with the sector aggregates in the national accounts
Author: Pam Walker, CSO

Opening discussant: James Morrell, JM Associates Ltd.

The case for a disaggregated approach
Author: Geoff Meeks, Department of Applied Economics, Cambridge

Opening discussant: Mark Pratt, Bank of England

The use of industrial and commercial companies' statistics in the securities markets
Author: Jonathan Miller, Chairman, Society of Investment Analysts

Opening discussant: Simon Wren-Lewis, NIESR