(Reserve Bank Bulletin, September 1987, pp 227-230)

The new monetary aggregates and other new statistical data: changes to the *Bulletin* tables

New statistical material is presented for the first time in this issue of the Bulletin. This article, prepared by David Grindell and Neil Humphries, discusses the nature of the new data collected by the Reserve Bank.

Introduction

This Bulletin introduces a new set of statistical tables based upon the Bank's Standard Statistical Return. The new return was first used by financial institutions in April 1987. The institutions surveyed have been categorised into three groups – Financial Corporations, Registered Banks, and Savings Institutions.

Information from the new survey will supersede many of the tables published up to now. Except for some tables containing quarterly information not available at the time of printing, the new set of tables (A to J) are displayed in the shaded pages. These include a number of tables which are not affected by the new statistical survey (for example, those relating to Government and external finance, and those giving general economic indicators). The tables to be superseded follow the new set of tables and appear for the last time in this issue of the Bulletin. However, a few of them may need to be maintained for a little longer until one group of institutions (the former trading banks) are able to adapt fully to the new reporting format.

The previous issue of the Bulletin (pages 134 – 135) outlined the developments leading to the new return, and the consequent reformatting of many of our data tables. In particular, reference was made to the report of the Review Committee on Finance Statistics, and to the changing nature of the financial market. The article gave an overview of how such influences helped shape the new statistical return. The following discussion provides some further detail on the nature of the new statistical data, with particular reference to the new monetary and credit aggregates. These aggregates of course represent the summation of much of the material presented in the other tables dealing with the activities of various financial institutions.

First though, a mention of the institutional coverage of the new survey is appropriate. 'Financial corporations' cover finance companies, merchant banks, stock and station agents and the Rural Bank. There are around fifty such organisations in the survey. 'Savings institutions' currently include the building societies, Post Bank, the group of institutions previously known as the trustee banks, and the PSIS. The figures for 'Registered banks' at the time of writing include the four former trading banks and their private savings bank subsidiaries. The private savings banks are the somewhat artificial creation of legislation and operate from the same premises and with essentially the same staff as their banking parents. Their balance sheet growth has been negative in recent years, with the savings bank operations being subsumed into the parent banks' business.

With the first new banks being registered in July and further registrations likely in the future, reclassifications from the Financial Corporations and Savings Institutions surveys to the Registered Banks survey will occur. For this and other reasons, in future Bulletins there may be some discontinuities from time to time in the published data pertaining to the individual institutional groups. Totals across the institutional groups, eg for funding and claims and of course for the monetary and credit aggregates, will be largely unaffected by such discontinuities. In addition, a number of the data tables in the Bulletin will be of a 'snap shot' variety, rather than time series, eg the maturity analysis, so that different institutional coverage a different points of time is not so directly a problem.

Money and liquidity

In recent years interpretation of the behaviour of the monetary and credit aggregates has become increasingly difficult. Inadequacies in the Reserve Bank's statistical collection system became ever more apparent following deregulation of the financial sector and the acceleration of changes to both the structure of the financial system and the nature of business undertaken by financial institutions. To the extent possible, provision was made in the new return for the additional data needed to overcome the previous inadequacies – particularly, better data on inter-institutional balances and a clearer and updated treatment of funding and claims in general, together with significantly broader institutional coverage.

The new monetary and credit aggregates have been backdated to January 1981 using records and material from earlier statistical collections and from additional data provided by the surveyed institutions. Some backdated material has yet to be supplied and will be incorporated in a revised series when available. This additional information is not expected to significantly change the trends of aggregates.

With the introduction of the new survey, it was intended that the money and credit aggregates would exclude New Zealand dollar funding from and claims on non-residents. However, the split between resident and non-resident customers has not initially been possible as the data is not currently available for all surveys. When feasible a set of monetary and credit aggregates excluding non-resident funding and claims will be constructed.

The format of the money and liquidity tables in the Bulletin has been rationalised following the introduction of the new monetary and credit aggregates. The new table 'Monthly Estimates of Monetary and Credit Aggregates' (A1) reflects a merging of the old tables 'Selected Monetary Aggregates', 'Monthly Estimates of Monetary and Credit Aggregates' and 'Average Primary Liquidity' (formerly D1, D2 and D5). The second new table 'Monetary Aggregates and Claims of Selected Institutions by Sector' (A2) combines the previous tables 'Monetary Aggregates and Claims of Selected Institutions by Sector' and 'Claims of Monetary Institutions by Sector' (formerly D3 and D4) in a slightly modified format, eg inter-institutional transaction balances are shown explicitly.

When introducing the new return the opportunity was taken to introduce financial institutions previously not included in our monetary and credit aggregates. The broader institutional coverage of the new aggregates is reflected in the fact that the new private sector credit and domestic credit aggregates are approximately 50 percent larger than the old series in dollar terms, and the new M3 is 20-30 percent larger. Previously excluded institutions such as merchant banks and building societies, and a number of new financial institutions, have at times experienced generally higher rates of growth than those institutions covered by the old series. This applies especially from early 1985 through to early 1986. As a result of their inclusion, the new aggregates now reflect a more comprehensive picture of the changes which have taken place since the deregulation of the finance sector in 1984 and early 1985.

The introduction of a broader institutional coverage also resulted in a shift in institutional shares in the credit aggregates. In the private sector credit figures for March 1987 the trading bank share of gross claims has fallen from 60 percent in the new, while the share of financial corporations (finance companies and merchant banks) has risen from 24 percent to 44 percent.

As already noted the introduction of the new survey and the broader institutional coverage has allowed a more comprehensive record of inter-M3 institutional transactions to be collected. This improved data substantially reduces a problem which was associated with the interpretation of the old aggregate series in recent years, namely the changing incidence of 'round-tripping'. The problem arose particularly at times when liquidity tightened fairly sharply. Wholesale money market funding costs, by way of commercial bills for example, would tend to rise more quickly than bank overdraft rates so that there were opportunities for profitable arbitrage between the different instruments, ie drawing on unused overdraft limits and on-lending the funds to the bill market. When this occurred, the old aggregates tended to double count the underlying 'real' financial transaction. An element of the problem remains, however, to the extent that non-M3 institutions, including corporates, engage in such transactions. Without extensive modifications to the monthly survey, further changes to institutions' information systems and/or the introduction of corporate borrowers to the survey, it is not possible to fully capture these transactions.

With the introduction of the comprehensive 'funding' and 'claims' concepts into the new monthly survey, then monetary aggregates now consistently include a broader range of instruments (eg 'euro-kiwi' loans, commercial bills) than under the previous measures of lending and deposits. Given the innovative nature of the finance sector over recent years, significant aspects of financial activity were not being captured by the old statistical reports, or were being captured inappropriately, as they were forced into categorisations not originally designed with such activities in mind. This factor contributes to the differences between the growth paths of the new and old aggregates.

It seems likely that 're-intermediation' has been an influence on the growth of the old aggregates in particular, with the extended institutional coverage of the revised statistical collection presumably reducing the problem for the new aggregates. 'Re-intermediation' is the process whereby financial flows previously outside the surveyed institutions have been re-directed through those institutions. In other works, a certain amount of deposit and lending business which used to carried out by non-regulated financial intermediaries, such as via the solicitors' market, has been attracted to the previously regulated institutions which are now able to compete freely. Since the new aggregates grew even more rapidly than the old aggregates over much of 1984-1986, however, it would seem that re-intermediation has been a less important influence over this period than previously thought. Nevertheless, it is not possible to determine with any accuracy the size of this effect, so that the monetary and credit aggregates still need to be interpreted with some caution.

Another article in this Bulletin (the review of Monetary Conditions and Policy) compares the movements in the new and old money and credit aggregates, and notes periods where some of the factors discussed above appear to have been most relevant.

Finally, turning to the new M1 statistics it should be noted that there is a discontinuity between March and April 1987. This is mainly due to the inclusion of EFTPOS accounts for the first time in April. This data is not readily available prior to this period.

Funding and claims (Tables D1 and D2)

New Zealand dollar denominated funding and claims (excluding those on the New Zealand Government), and foreign currency funding and claims, are presented in tables D1 and D2 respectively for the individual institution groups and in aggregate. The figures given for the institutional groups are gross, in that transaction balance between M3 financial institutions are included. Both gross and net figures are given for the totals across the institutional groups.

As previously noted the 'funding ' and 'claims' concepts have been used in preference to 'deposits' and 'lending'. The distinction between deposit liabilities and other borrowing liabilities is not definitive, particularly in the light of the innovations which have occurred in the instruments used for debt raising, and it is therefore the broader funding concept which is generally more useful. A similar rationale applies to the use of the 'claims' measure rather than 'lending'.

By broadening the terms used, claims on the private sector include for instance, the returning institution's lending, its hire purchase advances, local authorities securities and commercial bills held in portfolio, redeemable preference shares held, debentures and mortgages held and deposits placed with other organisations. Similarly, funding covers all deposits received and all other borrowings made. The latter includes funds received via a mortgage, via the issuing of a bill or a note, or a debenture, or for instance by way of a financial lease.

Balance sheet and associated data (Tables E1 to E9)

Table E1 gives further balance sheet information for the surveyed institutions. At the end of each calendar quarter, detailed balance sheet information is supplied, but, in the intervening months, shareholders' funds and miscellaneous items such as trade creditors/debtors and accounts payable/receivable are not sought. Funding from and claims on New Zealand residents are identified separately in the monthly figures, where possible. Economic agents residing in New Zealand make decisions in response to a set of stimuli that differs from that influencing non-residents, and with different consequences. For economic analysis of the domestic economy, it is therefore desirable that a resident/non-resident split of funding and claims be available. This split is currently only available, however, for financial corporations and savings institutions.

Table E2 gives details monthly of reporting institutions' off-balance sheet activities. Overseas, financial institutions' off-balance sheet commitments and contingencies have grown substantially in recent years. Such instruments have proven very useful to institutions and their clients as a means of spreading various types of risk, for example. Through these, financial institutions have placed some emphasis on earning fee income to supplement revenue from their net interest margin. The growth of off-balance sheet instruments overseas has also been encouraged by the use of compulsory balance sheet ratios by supervision authorities. These have in the past been avoided to the extent that business is done off-balance sheet.

New Zealand financial institutions have also increasingly undertaken off-balance sheet activity, notwithstanding the removal in 1985 of ratio regulations on financial institutions operating in New Zealand. Data is available for the savings institutions and financial corporations, although in the case of the latter, not all organisations in the group are able to supply off-balance sheet items. We have published the data to hand nevertheless as it gives some indication of the type of off-balance sheet activity being undertaken by financial corporations.

Table E3 gives an analysis of overseas items by type of non-resident. This analysis is in line with the standards suggested by the IMF's International Financial Statistics guide, and splits non-residents into the following categories: financial institutions, governments, associates of the returning institutions, and 'others'.

Table E4 - E6 will give a quarterly information on institutions' foreign currency items according to currency denomination. Such information is of course central to the assessment and management of currency risk on institutions' overseas assets and liabilities.

Table E7 - E9 will give a quarterly analysis of funding and claims according to the sector of the economy involved, based on the major divisions of the standard enterprise industry classification (NZEIC). Sectoral analysis may seem somewhat less important with the deregulation of financial markets, and the consequent removal of the official designation of priority sectors for lending. On the other hand, sectoral analyses can in principle be helpful in assessing the risk from institutions' exposure to different sectors. In practice, there may be some weaknesses in the data, eg in the way that different reporting institutions might classify company groupings having a central treasury function. The sectoral analyses should therefore be treated as indicative rather than definitive.

Maturity analyses (Table F1 to F9)

The maturity analysis data is a pivotal pat of the information assembled. It provides information on broad market trends and helps give an understanding of developments in financing. From an economic analysis point of view, it provides data needed to assess monetary policy, to study the monetary transmission mechanisms and to compile a range of monetary indices. We intend to provide for a separate maturity analysis of transferable (marketable) instruments. However, data on New Zealand dollar funding via transferable instruments is not yet available pending the investigation of some apparent problems with information supplied to date.

Separate tables give maturity analyses for domestic currency funding/claims and foreign currency funding/claims. Also shown separately are non-resident domestic currency funding/claims, and foreign currency funding/claims relating to New Zealand residents.

Interest rates (Tables I1 to I7)

Previously, interest rate data was in large part collected in range format. But this has proved unsatisfactory, for the ranges have been so wide that little information is provided. Consequently, interest rate data for new deposits (New Zealand dollar denominated deposits) is 'focused' through the use of weighted average rates in Tables I1 - I3. A distinction is made between retail (under $0.1m) and wholesale ($0.1m and over) deposit interest rates.

New Zealand dollar funding and claims outstanding, analysed by interest rate applying, are given in Table I4. Each quarter, weighted average interest rates on overall funding and claims will be shown in Table I5.

Table I7 gives averages for recent months of certain key money market rates and secondary market government stock yields.

Response to the new survey

The standard statistical return was circulated in the period up to May 1986 for comment, and distributed in November 1986 for use from April 1987, with the understanding that some institutions would require a phase-in period. From the Reserve Bank's point of view the response to date, while uneven, has on balance been satisfactory. Of about 50 organisations participating in the Financial Corporations survey around 80 percent are producing all, or nearly all of the required statistics, while the other 20 percent are returning partially completed forms. The response from savings institutions has been satisfactory too. The former trading banks have yet to adapt their information systems fully to the new format, and in the interim they will continue to supply old style information. It is hoped that the old style trading bank tables will be able to be dropped in the not too distant future.

As a final comment on responses to the new survey, it can be seen from the tables that items appearing in the balance sheet figures are often analysed in some detail. Where an organisation is able to supply the total for a particular item but not the detailed analyses, then an endeavour has been made when compiling the tables to place the figures not analysed into an unallocated provision. In this way figures tally whenever possible between the different tables.