Loans Valuation in the SNA

Back to Basics

Introduction

1. The Australian Bureau of Statistics (ABS) has views on the concepts for recording loans in compiling economic accounts on an SNA basis. The objective of SNA accounts is to capture the economic reality underlying the flows and positions they record, and to do this they rely on some basic principles. The strength and cohesion in SNA93 derives in large part from the application of consistent principles. This paper examines core SNA principles for valuation of loans and other non-tradable instruments. The analysis is extended to cover the specific case of non-performing loans. The conclusion of the ABS is that SNA principles make it essential that all financial assets, including loans, be recorded at market values, with interest flows recorded on an accrual basis based on the market price of the loan and market yields. It is recognised that there is a demand for face value and contractual rates outside the SNA framework, but the ABS believes that the compilation and presentation of these memorandum items must not be allowed to undermine the integrity of the core SNA accounts.

2. Throughout this paper, "SNA" is used to refer to the family of standards based on the principles established in the System of National Accounts 1993. The standards are the *Balance of Payments Manual, Fifth Edition* (BPM5), the *Monetary and Financial Statistics Manual* (MFSM) and the *Government Finance Statistics Manual* (GFSM). While there are some minor differences in these standards, their treatment of the issues covered in this paper are consistent enough for them to be considered together.

SNA Accounting Principles

3. Three SNA core principles that are important for asset and liability accounting are:

- *market prices*

4. In principle, the SNA requires that all transactions in, and stock levels of, assets and liabilities be recorded at their current market value. Market value is defined as the amount of money a willing buyer pays to acquire something from a willing seller, when such an exchange is between independent parties and one into which only commercial considerations enter. This results in the economic accounts measuring the current exchange value of all assets and liabilities in current money terms, that is the value at which they are transacted, or could be exchanged for cash.

5. In the absence of observable, independent valuations for some classes of assets, notably loans, deposits and trade credit, SNA suggests a departure from the general principle and recommends recording stocks and flows at face value (with the exception of valuation changes arising from foreign currency translation). We consider this to be a practical implementation recommendation, not a core principle. If robust, independently observable valuations were available, there would be no reason to account for loans, deposits and trade credit any differently to tradable securities.

- accrual recording

6. The SNA records flows on an accrual basis. Flows are recorded at the time economic value is created, transformed, exchanged, transferred or extinguished. This means that asset sales and purchases are recorded when ownership passes, services are recorded when provided, output at the time products are created and intermediate consumption when materials and supplies are used. The SNA favours accrual accounting because the timing of accounting is consistent with the real world economic events being recorded. This agreement allows, for instance, the evaluation of the profitability of productive activities correctly (without the disturbing influence of leads and lags in cash flows) and the calculation of the net worth of a group of institutional units correctly at any point in time. Accrual accounting is particularly relevant to the timing of internal transactions (such as output that is added to the inventories of the producer), exchanges in which the parties deliver at different times (such as sales with deferred payments) and obligatory transfers (such as taxes and flows connected with social security).

- symmetry

7. Each flow and stock in the SNA is intended to be recorded in the system symmetrically for the parties involved. For example, the value of supply of commodities equals the value of use of commodities in any period; for every sale there is a purchase of the same value; and for every asset there is a liability of the same value (equity is treated as both an asset and a liability in the SNA). Accrual recording of flows has as an objective that the two sides of a transaction be recorded at the same time and market valuation of assets ensures that assets and their liability counterparts have the same value.

Fair valuation of loans and deposits

8. SNA market value is similar to the fair valuation of assets concept used in business accounting standards, except for the case of loans, deposits and trade credit, as mentioned above.

9. The value of a loan asset portfolio depends on the risks involved and rewards for taking those risks. For a loan portfolio, there are several major types of risks which need to be assessed.

The risks are:

- interest rate risk

11. Interest rate risk is the risk of adverse movements in interest rates reducing a portfolio's value. For example, if the portfolio has a significant proportion of loans with fixed contractual rates of interest and prevailing interest rates increase, the value of the fixed rate part of the portfolio is less. (Of course there is the possibility of valuation gain if prevailing interest rates fall.)

- exchange rate risk

12. Exchange rate risk is the risk of adverse movements in foreign currencies reducing the value of loan assets that are denominated in foreign currencies. (Of course there is the possibility of valuation gain if the domestic currency depreciates against the currency of denomination of the loans.)

- operational risk

13. Operational risk refers to the risk arising from causes such as systems failures, natural disasters, fraud and human error.

- credit risk

14. Credit risk is the risk that loss may occur if a counterpart to a transaction fails to meet its obligations. In the case of loans, the realisation of substantial credit risk results in classification as non-performing.

- liquidity risk

15. For securities, liquidity risk is the risk that an investor may not be able to trade securities in reasonable quantities in a timely manner without a significant impact on price. By comparison with securities portfolios, loan portfolios are illiquid and therefore interest rates on loans need to cover a high liquidity risk.

16. These risks are the same as faced in managing a debt securities portfolio. Market prices for tradable securities implicitly factor in all of these risks. Similarly, a comprehensive fair valuation regime for a loan portfolio should assess all types of risk and reward relating to the portfolio.

Business and Government Accounting

17. Business accounts have objectives which are different from those of national accounts. Their main objective is to report on the solvency and profitability of an individual enterprise in order to meet a variety of purposes including reporting to shareholders and regulators, determining taxes to be paid and determining who has a claim on the residual value of the business in the case of bankruptcy. The accounting is from the perspective of the business being reported. Given the fundamental differences between SNA and business accounts, national accounts outcomes can be different to outcomes resulting from business and government reports.

18. For example, business (and government) accounting is not constrained by symmetry. This can mean that commercial balance sheets and operating statements may contain entries which modify contractual or market values to expected values without impact on counterpart's' valuation of the same circumstances.

19. Additionally, business and government accounting employ a doctrine of conservatism: whilst assets may be valued at fair values, debt liabilities are usually carried at face (cost) values. The result is a tendency to understate net worth.

20. A trend in accounting policy is towards transparency. The investor has a right to know what a firm is worth, a citizen has a right to know what the government is worth. This is consistent with continuous disclosure regimes encouraged by equity market regulators (in Australia the Australian Stock Exchange). Furthermore, we understand Basle 2 is tending to ask for effectively continuous revaluation based on risk.

The Identification of Non-performing loans

21. Many countries, including Australia, have experienced financial crises over the last 15 years. Most such crises are characterised by a rapid deterioration in the real or perceived credit quality of financial institutions' loan portfolios. If the SNA recommendations are followed and loans are recorded at face value, such deterioration is not visible in the macro-economic accounts until irrecoverable loans are written off. This may be many years after significant effort at legal action, liquidating collateral etc. The SNA treatment does not signal the crisis nor confirm anecdotes and partial data in a useful time frame.

22. From the point of view of a depositor in a lending financial institution, institution loan valuation has an indirect impact on risk associated with their deposit. This risk is buffered by the capital of the institution, but in a crisis capital may prove insufficient.

23. The classification of loans as "performing " and "non-performing" does not fit with the application of market valuation principles. If loans are valued at market value, there is a continuous process of revaluation which takes into account all the risk factors described above. The classification of certain loans as "non-performing" should not make any difference to their statistical valuation.

24. By comparison, business accounting standards may tend to overstate the impact of non-performing loans. Loan provisions recognised in the current period contain an element of expectation about contingencies in future periods.

Issues for implementation

25. Fair valuation regimes for assets of businesses provide a basis for proxy for market value for loans and deposits. Accounting standards require that at each balance sheet date an entity should assess whether there exists any objective evidence that a financial asset may be impaired. If any such evidence exists, the entity must estimate the recoverable amount of the amounts receivable and recognise any impairment loss. The standards require the impairment in receivables to be recognised either as a net amount of the asset value or as a contra asset. The display of receivables as the gross amount, with the allowances as a deduction, is generally used on the basis that this provides useful information.

26. The quantification of a fall in the value of loan assets resulting from an increase in some or all of the risks described above in business accounts is usually called a provision. If the provisions are identified as being related to specific assets, subtracting the provision from the face value of the asset results in an approximation of fair value. Provisions may relate to groups of assets (for example loans to residents of a specific country), in which case methods need to be devised to allocate them to specific assets. In principle, any provision which has been made to take into account an increase in risk should be subtracted from the face value of the asset to arrive at an approximation of fair value.

27. Irrespective of the method of determining fair value, the central issue for implementing a fair valuation regime for loans and deposits within an SNA framework is the extent to which the symmetry principle should be applied. This principle dictates that the same value of a loan or deposit transaction be accorded to both the debtor and creditor.

28. The argument put forward to support a departure from the SNA symmetry principle is that recording the same value for an asset and a corresponding liability would not explain the behaviour of the two parties (which is, after all, the objective of economic accounts). The proposition is that we can record the drop in the value of an asset, but it would not be correct to record an equivalent drop in the value of the corresponding liability as the debtor is still liable for the full amount agreed upon at the time of contract.

29. There is also the issue of moral hazard. Objections are raised to recording loan liabilities at their market value as it would somehow let debtors off the hook and send signals that they need not bother to repay the debt.

30. Neither of these issues should affect what SNA accounts should reflect. We believe that is unrealistic to postulate that a debtor does not have a fair assessment of the value of their liability. An example which comes up in the debate is of a small country borrowing from a large country. The proposition is that the banker in the large country is able to make a realistic assessment of the risks facing their asset and revalue it and behave accordingly, but that the government of the small country has no idea that anything but full payment of the contractual amount is expected and behaves accordingly. Given the market in distressed debt which exists and the fact that the use of derivatives makes virtually any debt tradeable, this argument is not convincing.

31. The issue of moral hazard has no place in SNA accounts. If certain data are restricted or sensitive, this must be taken into account in deciding what to publish, but the sensitivity of data should not dictate the theoretical treatment of the valuation of loans.

32. However, in terms of judging if a country is a credit risk, it does not help to know that they have low liabilities because creditors have given up hope of getting any money back from them, so recording a memorandum showing contractual obligations seems reasonable. Similarly, recording contractual rates of interest, while not needed to compile SNA accounts, is of interest. These also can be published as memorandum items.

33. However, compilation and presentation of these memorandum items must not be allowed to undermine the integrity of the core SNA accounts. They must be presented separately from the SNA accounts. The cost of collecting alternative estimates and the possible confusion of users presented with two different valuations for the same instrument must be taken into account.

Interest

34. The appropriate method of interest accrual has been debated with relation to debt securities. As with debt securities, fair valuation of stocks of loan assets require interest accrual methods based on market yield proxies rather than contractual rates.

SNA in practice

35. A failure to bring the SNA recommendations loan valuation into line with core SNA principles will result in a loss of credibility for the SNA family of standards as countries struggle to implement inconsistent recommendations. Australian Governments have been early and enthusiastic adopters of the GFS standards, as the coherence of the framework provides a solid basis for consistent and open reporting of government finances demanded of them. However, the failure of the GFS to treat loans in a way which is consistent with the core SNA principles has seen the Australian Governments adopt business accounting standards for this purpose in their GFS-based presentations. Having to resort to standards outside the framework to present data consistent with the core principles of the framework undermines the credibility and perceived coherence of the framework. Australian Governments have expressed a strong desire to see the SNA treatment of loans made by government brought into line with core SNA principles.

SUMMARY OF VIEWS

36. Economic accountants have a responsibility to compile a set of accounts based on SNA principles. These principles make it essential that all financial assets (and liabilities) be recorded at market values. This means that loans must be valued at market price (fair value), with interest flows recorded on an accrual basis based on the market price of the loan and market yields. Neither the face value nor the contractual interest rate are needed to compile SNA accounts.

37. It is recognised that there is a demand for face value and contractual rates outside the SNA framework, but the compilation and presentation of these memorandum items must not be allowed to undermine the integrity of the core SNA accounts. They must be presented separately from the SNA accounts. The cost of collecting alternative estimates and the possible confusion of users presented with two different valuations for the same instrument must be taken into account.

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