

## Chairman summary on session IPM83: Measures of output and prices of financial services

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IPM 83, at the 56th Session of the International Statistical Institute (ISI 2007) in Lisbon, Portugal, provided a professional forum for discussion of conceptual questions and estimation issues in measuring FISIM (Financial Intermediation Services Indirectly Measured). Four papers were presented, covering practices in both developed and developing countries, and were ably discussed by Dr. Steven Keuning of the European Central Bank. The discussions that followed the presentation of each paper furnished useful input for further work. It was my pleasure to chair the session.

As a major component of the financial system, banks generate the bulk of their revenue by providing financial intermediation services between depositors and borrowers, and receive net income from the differential interest rates associated with various financial services, though an explicit breakdown of this is not available. A depositor receives a lower rate of interest than the risk-free or notional interest rate, while a borrower is charged a higher rate that includes a risk premium. Banks' intermediation services include a component that is not an explicit charge, and thus must be measured indirectly. The SNA 1993 classifies these activities as FISIM. It defines financial intermediation as "*a productive activity in which an institutional unit incurs liabilities on its own account for the purpose of acquiring financial assets by engaging in financial transactions on the market*". The estimation of FISIM raises many issues.

FISIM suggests a "reference rate method", which has its origin in a "user cost approach" for measuring output (Fixler 1993, Hancock, 1985). The user cost of a financial product can be calculated as its holding cost minus the reference rate. However, it is difficult to translate this concept into practice for several reasons (Barman and Samanta, 2007). The complexities involved in measuring income begin with the initial conceptualisation of a bank's output set, and continue with the issues involved in pricing various inputs and outputs. For example, is the service of taking deposits an input or an output? What is the price paid by the depositor for indirect banking services such as safe custody and the issuance of cheques? And, as related questions, how are financial services sold? Are they transaction based or money based? The recognition and estimation of output and prices for these components of intermediation services present many challenges, both methodological and empirical, and have come under close scrutiny preparatory to the ongoing exercise of revising SNA 93.

As is well known, although SNA 93 indicates that property income receivable should be excluded from investment of own funds, unlike the case of intermediation services, it is extremely difficult to distinguish own funds from intermediation funds.

To place a value on the intermediation services provided to depositors and borrowers, it is necessary to have a "reference rate", from which risk premium has been eliminated to the greatest extent possible. This is easier said than done, because there is no clear, single way of measuring the risk-free interest rate.

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Briefly, there are four major issues in measuring FISIM: first, measuring the output generated by intermediation services at current prices; second, measuring the same output at constant (ie base year) prices; third, allocating the output thus measured (both current and constant price estimates) to the user sectors/sub-sectors of the economy; and fourth, constructing price and output/quantity indices of intermediation services. While the first three issues are widely discussed in the context of compiling national accounts series, the fourth is also important for constant price estimates of NAS and for measuring inflation.

Banks receive income from many other types of services, such as consulting, payment services, portfolio management, mortgages, etc. An additional portion of bank revenue comes from capital gains. Though these outputs are distinct, the inputs used to generate them are not.

In practice, countries have taken a broad range of approaches. This is mainly because there is divergence in the choice of key parameters such as reference interest rate deflator, internal rates for residents and external rates for non-residents, adjustments required for NPLs, maturity structure of financial assets/liabilities, single or multiple rates for assets/liabilities, inclusion or exclusion of bonds, and the types of institutions and services to be covered.

The four papers published here cover both theoretical and practical aspects of measuring FISIM. They make it clear that some countries still follow SNA 68, due to the fact that SNA 93 compounded the problems of estimating FISIM. Thus, inter-country comparison of banking output has become very difficult. Dr. Steven Keuning succinctly discussed these papers in the session, and offered suggestions for further work to address some of the methodological challenges. In my view, the major areas requiring more work are reference rate selection and determining appropriate deflators for converting output to constant prices. These issues provide considerable scope for further methodological research as a step towards greater uniformity among countries in empirical estimates of FISIM. As mentioned above, consensus is also needed on the selection of other key parameters, with a view to achieving methodological convergence.

## References

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