MEETING OF THE TASK FORCE ON
FINANCIAL INTERMEDIATION SERVICES INDIRECTLY MEASURED (FISIM)

Hosted by the IMF

March 3 & 4, 2011

IMF Headquarters 1 (HQ1)
Room 2-530, 700 – 19th Street N.W., Washington D.C.

Measuring and Recording Financial Services

To be presented by Reimund Mink, Directorate General Statistics, European Central Bank
Measuring and recording financial services

Reimund Mink
Directorate General Statistics
European Central Bank

ISWGNA  FISIM Task Force
International Monetary Fund, Washington, DC, 3-4 March 2011
Outline

• Background

• Financial services and financial intermediation services indirectly measured (FISIM) in international statistical standards

• Recommendations to improve the calculation of FISIM

• Treatment of credit default risk

• Conclusions
Background

- Discussions of an appropriate method to compile FISIM in the context of
  - Updating the 1993 System of National Accounts (1993 SNA); and
  - Revising the 1995 European System of Accounts (1995 ESA)

- Concerns have arisen from the financial crisis, but the shortcomings of the current framework are more general

- ECB research project launched in 2007

- Discussion of an ECB issue paper at the Committee of Monetary, Financial and Balance of Payments Statistics (CMFB) meeting in July 2008
Within the framework of 1995 European System of Accounts (ESA)

- Financial services cover
  - Financial intermediation services directly measured (include insurance and pension funding services)
  - Financial intermediation services indirectly measured (FISIM)
  - Services for which fees or commissions are explicitly charged

- FISIM
  - Are imputed for all loans and deposits vis-à-vis residents and non-residents (excluding interbank-transactions);
  - Are provided by deposit-taking corporations and other financial intermediaries, excluding insurance corporations and pension funds

- Estimates of FISIM
  - Are derived by comparing bank interest rates on loans and deposits to a reference rate
  - Refer to a single reference rate reflecting the inter-bank market (risk-free [?] and short-term)
Financial services and FISIM in statistical standards (2/3)

- From 1993 SNA to 2008 SNA
  - Report of the OECD Task Force on Financial Services of 13 September 2005
  - Advisory Expert Group (meeting in Jan/Feb 2006) adopted various recommendations related to financial services and FISIM
    - Extended definition for financial services - the production of financial services is the result of financial intermediation, risk management, liquidity transformation and auxiliary financial activities
    - Lending of own funds is also a financial intermediation service
    - Use a reference rate to calculate and allocate FISIM
    - Reference rate has no service element in it and reflects the risk and maturity structure of financial assets and liabilities to which FISIM applies
    - Different reference rates should be used in other currencies
  - Recommendations are reflected in 2008 SNA
• **FISIM in 2008 SNA**

  • FISIM should be compiled on the basis of the difference between market interest rates on loans and deposits and a reference rate as a rate between bank interest rates on deposits and loans

  • The reference rate should contain no service element and reflect the risk and maturity structure of deposits and loans

  • The inter-bank rate may be a suitable choice

  • Various reference rates for loans and deposits have been proposed
    • By user (internal and external); and
    • By currency denomination (domestic currency and foreign currencies)

• **FISIM in draft ESA 2010, Chapter 14, is fully in line with 2008 SNA**
Recommendations to improve the calculation of FISIM (1/5)

• General agreement that the current method as reflected in the standards (2008 SNA and draft 2010 ESA) offers room for improvement

  • The 2008 SNA Research Agenda includes the issue of calculation of FISIM

  • A Special Topic Contributed Paper Meeting (STCPM) at the 57th ISI Session in August 2009 provides an overview of the methods proposed for the FISIM calculation

  • A European Task Force on FISIM has been launched in October 2010 and will finalise its work by-end 2011
The STCPM at the ISI 57th Session provides an overview of the methods proposed for the FISIM calculation.

Two camps - the *single reference rate method* versus the *multiple reference rates method*.

- The single reference rate method
- The multiple reference rates method
Recommends to improve the calculation of FISIM (3/5)

• **The multiple reference rates method**
  
  – Risk-related income should not be considered as value added of banks
  
  – Main risk components
    • Refer to liquidity risk and default risk
    • Are reflected in the term premium and the credit default risk premium
    • Both should not be treated as financial services
  
  – Exclude the risk components from the calculation of FISIM
    • Only intermediation services should be recorded in the production account and cost of borrowing plus the risk premium recorded in the income account
    • Intermediation services refer to the processing of financial information and transactions like any other professional service, e.g., accounting and consulting
    • Calculation of a standard service component for deposits and for loans
  
  – To take account of the risk in financial instruments, the reference rates for loans are proxied by yields on debt securities
  
  – It is demonstrated that this approach can be applied in the regular and timely compilation of quarterly and annual national accounts
• For the multiple reference rates method, two different approaches are distinguished:

  • **Term premium adjustment:** Output excluding term premium
    • Term premiums are to be identified on the basis of a risk-free yield curve (government bond yield or swap curve for maturities above one year) and of secured inter-bank rates (for maturities below one year)

  • **Credit default risk and term premium adjustment:** Output excluding credit default risk premium and term premium
    • When adjusting for term premium and for credit default risk in the case of loans it would be appropriate to rely on a pool of debt securities with the same maturity/risk characteristics
Recommendations to improve the calculation of FISIM (5/5)

- European Task Force on FISIM has been prepared
  - Timetable (three meetings: October 2010, March and June 2011)
  - Final report by end-2011
  - Change 2010 ESA if appropriate by modifying the current text
  - This means that a proposed solution (if agreeable) can still be implemented according to the 2010 ESA in 2014

- The Task Force addresses conceptual and practical aspects related to FISIM
  - How to reflect different maturities, different currency denominations and varying degrees of default risks of deposits and loans in FISIM?
  - How to derive price and volume measures?
Recommendations to improve the calculation of FISIM (8/10)

- Should different maturities be reflected in FISIM calculations?
  - Transforming short-term deposits into long-term loans is inherent to financial intermediation and provides "matching benefits" to financial intermediaries.
  - Should this transformation element be included into FISIM output (in this case, there is no need to calculate reference rates by maturity), or should the transformation element be excluded from FISIM output (in this case, it would be necessary to introduce several reference rates by maturity)?
  - Is it feasible to introduce several reference rates according to the maturities of loans and deposits, as this would require breaking down by maturity the stocks of loans and deposits and the corresponding interest?
Recommendations to improve the calculation of FISIM (9/10)

- **Should different currency denominations be reflected in FISIM calculations?**

  - Is it relevant and feasible to have different reference rates by currency, which would necessitate a breakdown of loans and deposits by currency in which they are denominated?

  - Would it not be sufficient and more relevant to try to improve the measurement of imports and exports of FISIM on the basis of reference rates by main groups of currencies?
Recommendations to improve the calculation of FISIM (10/10)

- Should the **varying degrees of (default) risk** be reflected in the service element (FISIM), in accrued interest or in other flows?
  
  - Should riskier clients pay higher service charge, considering that risk-taking is inherent to the activities of financial intermediaries; or
  
  - Should FISIM be calculated excluding this risk element, considering that it is better and possible to separate production and risk?

- **How to measure prices and volumes of FISIM?**
Treatment of credit default risk (1/3)

- The most controversial issue is the treatment of credit default risk

Is bearing the credit default risk part of financial services or not?
In analogy to the treatment of non-life insurance (especially credit insurance) FISIM related to loans could be derived as

<table>
<thead>
<tr>
<th>Loans</th>
<th>Transactions</th>
<th>Description</th>
<th>May be replicated by</th>
<th>Non-life insurance technical reserves</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest receivable (includes risk premiums (market, default, term))</td>
<td>Exchange rate risk Default risk Term risk (liquidity transformation)</td>
<td>Credit default swap (CDS); the loan loss will be covered in the case of a credit event (default) in exchange of paying a premium; valuation of credit risk on the market.</td>
<td>Premiums earned plus implicit premium supplements (covers default risk premium)</td>
<td></td>
</tr>
<tr>
<td>Refinancing (price charged for receiving 'capital' for a specified period of time, risk free)</td>
<td>Price charged for providing capital or price set for receiving 'capital' for a specified period of time (risk free)</td>
<td>Interest swap with the same life time (corresponds to interest (coupon par rate) or a synthetic debt security with an AA rating)</td>
<td>Adjusted claims incurred</td>
<td></td>
</tr>
<tr>
<td>Cost attributable to input of capital and labour (includes cost to monitor risk (market, default, term))</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating surplus (includes risk premiums (market, default, term) but excludes cost to monitor risk)</td>
<td>Price charged to pay for a credit default (credit default risk)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FISIM interest less refinancing cost, cost directly attributable to input of capital and labour and operating surplus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EUROPEAN CENTRAL BANK
Are there options to measure financial intermediation services directly?

Would it be possible to get - via the profit and loss account of deposit-taking corporations and other financial intermediaries and also market statistics - more detailed data on the components which determine financial intermediation services (to grant loans and to provide deposits)?

Components are:

- ‘Refinancing’ cost
- Capital and labour cost
- Operating surplus
- Risk premiums (market (exchange rate), default and term)
Conclusions

• General agreement that the current method to compile FISIM as reflected in the standards *(2008 SNA and draft ESA 2010)* offers room for improvement

• Controversial issues are the treatment of risk: Is risk part of financial services or not?
  - Market risk (mainly exchange rate risk)
  - Credit default risk
  - Term risk (term or liquidity transformation risk)

• In analogy to the treatment of non-life insurance FISIM related to loans should exclude credit default risk

• Further conceptual and practical work on this topic is needed as foreseen by the European Task Force on FISIM and the ISWGNA FISIM Task Force