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**ALLOCATION OF FISIM: CURRENT DEVELOPMENTS AND ISSUES FOR
DISCUSSION**

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INTRODUCTION

Financial intermediation services indirectly measured (FISIM) have presented problems to National Accountants for many years. Building a consensus on how to treat FISIM has been a long and difficult task. This paper gives a brief summary of the major recent developments in the area of FISIM and the main challenges it now presents, mainly within the context of EU regulations but other important developments on the international level are also referred to.

BACKGROUND

It has been said that the problems associated with estimating the production and consumption of FISIM are more practical than conceptual. Such practical problems lie in the availability of the necessary data and the choice of an appropriate '**reference rate**' (or 'pure' interest rate)².

The 1968 revision of the SNA proposed that the output of FISIM be recorded as the intermediate consumption (IC) of a "**nominal industry**". There were various shortcomings to this approach however, which meant that there was a high risk that GDP would be understated to a variable extent from country to country. Thus the 1993 revision of the SNA stated that in principle total output should be allocated among the various recipients or users of FISIM - that is as the IC of corporations, the final consumption of households and government, and the exports of non-residents. Moreover, the SNA93 recommends that developing guidelines for the explicit allocation of FISIM to specific users should be given a high and immediate priority.³

DEVELOPMENT OF METHODS FOR THE ALLOCATION OF TOTAL FISIM WITHIN THE EU

The allocation of FISIM to users is based on the application of reference rates. A Council Regulation of 1998 (No. 448/98) stipulated a number of different methods for determining reference rates which Member States (MS) were to test and then report their results to Eurostat. Analysis of these results led to a Commission Regulation in 2002 (No. 1889/2002) stipulating that '*method 1*⁴ should be used by MS. This could be described as the **inter-bank rate** between resident Financial Intermediaries (FIs). Specifically, the regulation defines method 1 as follows:

*"To obtain the FISIM output of the resident FIs by institutional sector, the 'internal' reference rate is calculated as the ratio of interest receivable on loans between S122 and S123 to stocks of loans between S122 and S123"*⁵

This means EU MS must have data on both the interest receivable on loans and the stock of loans between S122 and S123. ESA95 defines these sectors as:

² See 'Services of Financial Intermediaries or FISIM revisited' - P.Hill, for this point and an overall background to the topic.

³ See Page xliii of SNA93

⁴ Details on the other proposed methods and preliminary results can be found in 'Results of the implementing the FISIM calculations by Member States' CES Working Paper, Eurostat (2000).

⁵ Annex III Calculating FISIM - Council Regulation (EC) No 448/98

S.122: Other monetary financial institutions⁶:

"all financial corporations and quasi-corporations, except those classified in the central bank sub-sector, which are principally engaged in financial intermediation and whose business is to receive deposits and/or close substitutes for deposits from institutional units other than monetary financial institutions, and, for their own account, to grant loans and/or to make investments in securities."

S.123: Other financial intermediaries, except insurance corporations and pension funds⁷:

"all financial corporations and quasi-corporations which are principally engaged in financial intermediation by incurring liabilities in forms other than currency, deposits and/or close substitutes for deposits from institutional units other than monetary financial institutions, or insurance technical reserves."

THE MAIN CHALLENGES FOR NSIS IN ALLOCATING FISIM AS PER 'METHOD 1'❖ *Dealing with S123*

The results of the testing by EU MS showed that data on the S122 sector in most countries could be satisfactory, but problems were experienced with the S123 sector. S123 contains many small units and it is also often difficult to clearly identify those units actually producing FISIM in this sector. It was commonly found however that the contribution of S123 to the total production of FISIM was of relatively minor importance (e.g. around only 2% in the Netherlands). In some cases the stocks and interest flows on credits between units in S122 have therefore been used as a proxy for calculating the implicit rate in S123, and in other cases S123 was excluded from the test calculations.

❖ *Allocating FISIM to the household sector*

In determining consumption by sector, various difficulties across countries have been experienced in establishing a breakdown of deposits and loans for households. This is an important problem as results from the testing of different methods by EU MS showed that FISIM allocated to households as consumers has the greatest impact on GDP (the total impact of allocating FISIM was an average 1.5% increase in GDP across the EU)⁸. It is often the case however that there is better data available on loans in the household sector than on deposits.

❖ *Imports of FISIM*

The aforementioned EU regulations state that imports and exports of FISIM should be measured using an **external inter-bank reference rate** which is described as:

⁶ For more details see page 25 (paragraphs 2.48-2.52) of ESA95

⁷ For more details see page 26 (paragraphs 2.53-2.56) of ESA95

⁸ see 'Results of the implementing the FISIM calculations by Member States' CES Working Paper, Eurostat (2000).

"The average inter-bank rate weighted by the levels of stocks in the headings 'loans between S122 and S123 on the one hand, and non-resident FIs on the other hand' and 'deposits between S122 and S123 on the one hand, and non-resident FIs on the other hand', which are included in the balance sheet of the FIs"⁹

The data needed to calculate imports of FISIM have been more difficult to obtain than those necessary for calculating exports. In some countries there is simply no data available, or not enough data, on transactions between resident and non-resident FIs, or, in other cases, a clear distinction between resident and non-resident FIs cannot be drawn from the data that is available.

❖ *Backwards calculations*

Commission Regulation No. 1889/2002 stipulates that MS shall supply the Commission with the results of their calculations based on 'method 1' *including backwards calculations from 1995 onwards*. Some countries however have encountered difficulties in obtaining the detailed stock and reference rate data for specific sectors and financial institutions necessary to make such backwards calculations.

OUTCOME OF THE DISCUSSION ON THE ALLOCATION OF FISIM AT THE UNECE SESSION ON NATIONAL ACCOUNTING ISSUES OF CONCERN TO TRANSITION ECONOMIES, OCTOBER 2003

A special session for transition economies was held back-to-back with the Annual OECD Meeting of National Accounts Experts in Paris, October 2003. Papers were presented by Hungary, Poland, the Slovak Republic and Slovenia which all pointed to a set of common experiences and problems. Most countries stated that they were calculating FISIM on the global level and allocating it to a nominal sector. The necessity of allocating FISIM to users was recognised, but it was recognised that more preparatory work and methodological assistance would be needed to achieve this.

There was agreement that FISIM is generally much higher in transition economies as interest margins tend to be quite high - this is due to a lack of competition in financial markets and persisting perceptions within financial institutions of higher risk. Therefore, it was felt that FISIM may have a greater impact on GDP than in developed economies.

By and large, the data necessary for calculating FISIM was seen to be available in many countries (cooperation with Central Banks (CBs) in particular had proven useful and in some cases CBs were providing detailed data), but it had proven difficult to allocate FISIM across institutional sectors. It was noted that dealing with the household sector was particularly difficult, especially in establishing the breakdown of loans and deposits and determining between intermediate and final consumption. The proportion of FISIM used by households can be significantly higher in some transition economies as FISIM has been financing consumption rather than investment, while household deposits (savings) can be quite high. On the other hand, in some countries the financial products market was still very small.

⁹ Annex III Calculating FISIM - Council Regulation (EC) No 448/98

Problems calculating the import of FISIM and external interest flows were widely noted, with subsidiaries of foreign banks causing a particular problem. In some cases, no data at all was available on imports and it was therefore presumed to be zero.

Participants noted that the definition of units in sectors S.122 (Other monetary financial institutions) and S.123 (Other financial intermediaries, except insurance corporations and pension funds) presented some problems. It was also noted that the definition of sectors should be approached differently depending on the situation in a particular country, and that this should be achieved as a precursor to determining the availability of data.

OTHER INTERNATIONAL DEVELOPMENTS OUTSIDE THE EU CONTEXT

The OECD Task Force on Financial Services (Banking Services) in National Accounts produced its draft Final Report in September 2003. It pointed out that there are at present a number of different practices in the choice of reference rates - a notable difference exists between that stipulated by current EU regulations and the revised measure of banking output in the USA. The Task Force supported the reference rate approach in general as a working tool for measuring production. The clear majority of Task Force members favoured the use of a single reference rate, preferably reflecting the maturity structure of risk-free assets. No specific recommendation was put forward however concerning how exactly this single reference rate should be applied¹⁰.

In March 1993, the Statistical Commission launched the process for updating the SNA93. This work is managed by the ISWGNA which established an Advisory Expert Group (AEG) to help in the updating process. Allocation of FISIM is included in the list of issues to be reviewed in the updating process. At its first meeting held in February 2004, the AEG reviewed the outcome of the OECD Task Force, noting that their recommendations should be regarded as work-in-progress.

There was large support in the AEG for using the reference rate approach in measuring FISIM, although not necessarily using a single rate. Nevertheless, the AEG agreed that there is a need to consider alternative approaches as well, since the reference rate approach may not be applicable in many developing countries.

ISSUES FOR DISCUSSION

- ◆ Participants may wish to consider and share experiences of dealing with the four main problems with allocating FISIM, within the context of EU regulations, as outlined above.
- ◆ Have there been any significant changes in country experiences since the UNECE's last special session in October 2003? Do other countries' experiences differ in any important ways?

¹⁰ See pages 11-12 of the draft Final Report

REFERENCES

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