

**OECD Meeting of National Accounts Experts**  
**UNECE Special session on issues of concern**  
**to economies in transition**  
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**ALLOCATION OF FISIM:**  
**Current Developments and issues for discussion<sup>1</sup>**

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<sup>1</sup> Current developments in the allocation of FISIM will be discussed under items 14-16 of the OECD meeting of NA experts. The outcome of this discussion will be taken into account at the special session for transition economies.

## 1. 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. This paper gives a brief summary of the major recent developments in the area of FISIM and the main challenges it now presents within the context of EU regulations.

## 2. 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)<sup>2</sup>.

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.<sup>3</sup>

## 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*<sup>4</sup> 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"*<sup>5</sup>

This means 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:

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

<sup>3</sup> See Page xliii of SNA93

<sup>4</sup> 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).

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

S.122: Other monetary financial institutions<sup>6</sup>

*"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 funds<sup>7</sup>

*"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."*

**4. 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)<sup>8</sup>. 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:

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<sup>6</sup> For more details see page 25 (paragraphs 2.48-2.52) of ESA95

<sup>7</sup> For more details see page 26 (paragraphs 2.53-2.56) of ESA95

<sup>8</sup> 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"*<sup>9</sup>

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.

## **5. 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.

Also, are there any other specific problems that transition economies would experience in implementing international standards for FISIM?

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

### References

**Council Regulation (EC) No 448/1998** - See the Official Journal of the European Communities, Vol. 41, (L58) 1998.

**Commission Regulation (EC) No 1889/2002** - See the Official Journal of the European Communities, Vol. 45, (L286) 2002.

**'Results of Implementing the FISIM calculations by Member States'** - Invited Paper submitted by Eurostat to the CES Joint ECE/Eurostat/OECD Meeting on National Accounts, Geneva April 2000

**'The estimation and allocation of FISIM in Korea, 1995'** - Paper submitted by the Bank of Korea to the Joint OECD/ESCAP Meeting on National Accounts, Bangkok May 1998

**'The Services of Financial Intermediaries or FISIM revisited'** - Paper submitted by the ABS, prepared by P.Hill, to the CES Joint ECE/Eurostat/OECD Meeting on National Accounts, Geneva 1996

**'Allocation of FISIM'** - Invited Paper submitted by Statistics Netherlands to the CES Joint ECE/Eurostat/OECD Meeting on National Accounts, Geneva April 2000

**'Reference Rates and FISIM Allocation'** - Supporting Paper submitted by the Central Bureau of Statistics of Israel to CES Joint ECE/Eurostat/OECD Meeting on National Accounts, Geneva April 2000

**'Availability of Data for Allocating FISIM on the Basis of EU Harmonised Gain and Loss Account for Credit Institutions'** - Supporting Paper submitted by the Federal Statistics Office of Germany to the CES Joint ECE/Eurostat/OECD Meeting on National Accounts, Geneva April 2000

**'FISIM: examination of results of experimental calculations, Belgium: First results for the period 1995-98'** - Invited Paper submitted by the Banque Nationale de Belgique to the CES Joint ECE/Eurostat/OECD Meeting on National Accounts, Geneva April 2000 (original in French).

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