Meeting of the Task Force on Financial Intermediation Services Indirectly Measured (FISIM)
New York, 5-6 July 2011
DC2 Building – 16th Floor Conference Room (DC2-1684)

Treatment of maturity in FISIM calculations

Christian RAVETS

Eurostat

Meeting of the Task Force on Financial Intermediation Services Indirectly Measured (FISIM)
New York, 5-6 July 2011
DC2 Building – 16th Floor Conference Room (DC2-1684)

Treatment of maturity in FISIM calculations

Christian RAVETS

Eurostat

INTERNATIONAL TASK FORCE ON FISIM (NEW YORK, 5-6 JULY 2011)

Treatment of maturity in FISIM calculations

Christian RAVETS, Eurostat

PRESENT METHOD OF ALLOCATION OF FISIM IN THE EU

Regulation 448/98 of 16 February 1998 introduced the principle of allocating FISIM in the ESA 95, and a trial period based on data for years 1995 to 2001.

The choice of the reference rate to be used was made by Regulation 1889/2002 of 23 October 2002, on the basis of the results obtained by Member States during the trial period.

SEVERAL METHODS OF CALCULATING THE REFERENCE RATE WERE TESTED ACCORDING TO THE REGULATION 448/98

- <u>Methods of calculating the reference interest rate:</u>

- Method 1: Interest receivable on resident interbank loans divided by stock of resident interbank loans.
- Method 2: Interest receivable on resident interbank loans and on securities other than shares issued by FIs, divided by stock of resident interbank loans and of securities other than shares issued by FIs.
- Method 3: Method 1 applied to short-term transactions. Published rates for securities other than shares applied to long-term transactions.
- Method 4a: Average of the average rates of credit and deposit interest applied to resident user institutional sectors (other than central banks)
- Method 4b: Average of Methods 4a and 1.
- Method 4c: Average of Methods 4a and 2.
- Method for exports and imports: Weighted average interbank rate on loans and deposits between resident FIs and non resident FIs.

eurostat

THE CHOICE OF A REFERENCE RATE

The choice was based on the following criteria:

- **Relevance of the rate from a theorical point of view**
- **Reliability of results with regard to available data**
- **Volatility of results (index of volatility)**

$$\text{Absolute value of } \frac{\text{impact on GDP year n+1} - \text{impact on GDP year n}}{\text{impact on GDP year n}}$$

- **Occurrence of negative FISIM**

eurostat

RESULTS OBTAINED (1)

Method 1 (based on inter banks transactions, calculated from FIs balance sheet): this method was chosen, as the most straight forward to calculate and the most easily understood by users.

Method 2 (based on inter banks transactions, but also including the rate of securities in order to apply to transactions over a wider maturity band): the difference with method 1 was considered as not significant (average impact on GDP: 1,38%, instead of 1,26%)

Method 3 (introduces two reference rates, one for long-term transactions, another for short-term transactions): this method was eliminated considering its difficulty to be implemented (a majority of Member States were ten years ago not able to make the split long/short term of stocks and interest at sector level). Another major reason was that, almost unanimously, the method was considered as having the conceptual inconvenient to eliminate the "matching benefits"

RESULTS OBTAINED (2)

Methods 4 (based on the average of lending and deposits rates which are undertaken with the resident institutional sectors): these methods obviously imply lower volatility (between 6.2 and 6.5%) but not so different from volatility of method 1 (7.6%). They were considered from a theorical point of view as not able to reflect the "pure cost of funds" appropriate for borrowing or lending transactions.

Reference rate for exports and imports of FISIM:

The « external » reference rate is to be calculated as the weighted average inter banks rate on loans and deposits between resident FIs and non resident FIs.

It was recommended to use several reference rates by group of currencies, to calculate imports and exports of FISIM.

WEAKNESS OF THE EUROPEAN METHOD IN THE WAKE OF THE FINANCIAL CRISIS

The current approach of measuring FISIM using inter bank transactions, which are mainly short-term, to calculate the reference rate resulted in rather surprising outcomes, including occurrence of negative FISIM on deposits and high volatility in FISIM allocated into GDP components.

Concerning negative FISIM, some Member States considered that their occurrence is possible and reflects economic reality: in the wake of the financial crisis, banks were desperate in getting more deposits to increase their liquidity positions, these losses on deposits being compensated by profits on the loans side.

Other Member States asked for a review of the present method.

It was decided to set up an European Task Force on FISIM

eurostat

2010/2011 EUROPEAN TASK FORCE ON FISIM

The Task Force met twice:

in Luxembourg on 4-5 October 2010

in Frankfurt on 28-29 March 2011

The Task Force was chaired by Mr Rudy Acx, from the National Bank of Belgium.

The Task Force considered that FISIM measures the financial services provided on short-term as well as long-term loans and deposits. But the interbank rates have a strong short-term composition.

Hence, it seems appropriate to expand the coverage of the (internal and external) reference rates to better reflect long-term transactions.

This may be done in two ways:

-having at least two references rates according to maturity: one reference rate for short-term loans and deposits, another reference rate for long-term loans and deposits.

-keeping a single reference rate according to maturity, but weighting this rate to include both short-term and long-term transactions

PORTUGUESE CALCULATIONS (1)

As a Member of the Task Force, the Bank of Portugal recommended splitting FISIM on loans and deposits into short-term and long-term calculations, using EURIBOR and ISDAFIX as reference rates, respectively.

The Bank of Portugal presented also another test using a single weighted average reference rate of EURIBOR and ISDAFIX weighted by stocks of loans and deposits.

Weighted average reference rate =(EURIBOR x Wo) + (ISDAFIX x Wl)

$$Wo = \frac{\text{Stocks of loans + deposits} < 1 \text{ year}}{\text{Total stocks of loans + deposits}}$$

$$Wl = \frac{\text{Stocks of loans + deposits} > 1 \text{ year}}{\text{Total stocks of loans + deposits}}$$

$$Wo + Wl = 1$$

eurostat

PORTUGUESE CALCULATIONS (2)

The method using the single weighted average rate has the practical advantage to be less data intensive.

The results for FISIM output on loans and FISIM output on deposits are identical compared with the method using two reference rates.

However, these two methods gave slightly different results for FISIM components allocated into user sectors.

Compared to the present European method, the value of FISIM on loans was on average lower by approximately 32% for 2003-2010 with lower volatility. The value of FISIM on deposits was on average higher, thus leading to solving the persistence of negative service estimates.

ISDAFIX VERSUS SECURITY RATES

Portugal advocated for the choice of ISDAFIX as the reference rate for long-term transactions:

-It is the leading benchmark rate in inter banks operations

-It is analogous to EURIBOR or LIBOR for long-term operations

-It is the rate that the banks take into account in developing the rates for charging their customers on loans and deposits

-It is available in a number of currencies

However, some Members of the Task Force would prefer to use government security and public corporations security rates instead of ISDAFIX.

MAJOR ISSUE: SINGLE (WEIGHTED) REFERENCE RATE OR SEVERAL REFERENCE RATES BY MATURITY (1)

A large majority of the Members of the Task Force consider that matching benefits or “term premium” (a concept that reflects maturity transformation) should not be eliminated from the measure of FISIM.

9 Members (NSIs of Denmark, France, UK, US, the Netherlands and NCBs of Belgium, France, UK, Spain) consider that channelling funds from borrowers to lenders is a fundamental function of banks, and maturity transformation of short-term deposits into long-term loans is inherent to FIs, providing matching benefits. Portugal would also agree with this approach.

MAJOR ISSUE: SINGLE (WEIGHTED) REFERENCE RATE OR SEVERAL REFERENCE RATES BY MATURITY (2)

Additional question: if the single weighted average was used, should the stocks of loans and deposits of the user sectors be used (long term/ short term) to weight the reference rate ? Or should the weighting scheme be based on another formula ?

MAJOR ISSUE: SINGLE (WEIGHTED) REFERENCE RATE OR SEVERAL REFERENCE RATES BY MATURITY (3)

3 Members of the Task Force (Bank of Japan, Statistics Germany and ECB) stated that FISIM should be calculated on the basis of several reference rates in order not to include matching benefits between different maturities, which do not correspond to a service.

RECOMMENDATION ADRESSED BY THE TASK FORCE TO THE CMFB

The Task Force proposes to the Committee of Monetary, Financial and Balance of Payment Statistics (representives from NSIs and NCBs) to agree on a test period. The test would be performed in the course of 2012 by Member States with a time span of least 5 years using:

a- two reference rates: one for short-term loans and deposits using EURIBOR (or equivalent) and one for long-term loans and deposits using ISDAFIX (or equivalent) and government security rates.

b- single weighted average rate of EURIBOR (or equivalent) and ISDAFIX (or equivalent) and government security rates.

Thank you for your attention