



# **Distribution of financial intermediation services indirectly measured (FISIM)**

**Expert Group Meeting  
on Financial Services and Business Registers  
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**United Nations Statistics Division**



# Outline of presentation

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- Overview of FISIM
- 2008 SNA recommendation on allocation of FISIM
- Allocation of FISIM



# Overview of FISIM

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## FISIM

- Is indirect measure of the value of financial intermediation services provided but for which financial institutions do not charge explicitly
- Needs to be imputed because no explicit fees are charged
- Partitions actual bank interest into
  - SNA interest
  - FISIM
- Applies to loans and deposits provided by, or deposited with, financial institutions



## FISIM output

$$FISIM = FISIM_L + FISIM_D = \left( \frac{r_L - rr}{100.0} \right) Y_L + \left( \frac{rr - r_D}{100.0} \right) Y_D$$

- $FISIM_L$  = FISIM on loans
- $FISIM_D$  = FISIM on deposits
- $r_L$  = lending rate
- $r_D$  = deposit rate
- $rr$  = reference rate
- $Y_L$  = average stock of loans
- $Y_D$  = average stock of deposits



## How to calculate reference rate

- Reference rate should be determined according to national circumstances using any of following methods
  - A single exogenous rate for a specific instrument such as interbank lending rates
  - A weighted average of interest rates on loans and deposits

$$rr_w = \frac{R_L + R_D}{Y_L + Y_D} \times 100.0$$

- $rr_w$  = weighted reference rate
- $R_L$  = interest receivable on loans
- $R_D$  = interest payable on deposits

- A simple average of interest rates on loans and deposits

$$rr_s = 0.5 \left( \frac{R_L}{Y_L} + \frac{R_D}{Y_D} \right) \times 100.0$$

- $rr_s$  = simple reference rate
- One reference rate per each currency



# 2008 SNA recommendation on allocation of FISIM

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- Output of FISIM should be allocated between users (lenders as well as borrowers) treating the allocated amounts as
  - Intermediate consumption
  - Final consumption
  - Exports
- 1993 SNA
  - Recognized that in practice it may be difficult to find any method of allocating FISIM among different users
  - Accepted that some countries may prefer to continue to use the convention whereby the whole of the services are allocated to intermediate consumption of a notional industry
- 2008 SNA has removed this possibility



# Allocation of FISIM

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## Two approaches

- Bottom-up approach
- Top-down approach



## Bottom-up approach

- If reliable data on average stocks of loans and deposits and interest by sector are available

	Average stock of loans	Average stock of deposits	Interest on loans	Interest on deposits
Non-financial corporations	Available	Available	Available	Available
Financial corporations	Available	Available	Available	Available
General government	Available	Available	Available	Available
Non-profit institutions serving households	Available	Available	Available	Available
Households	Available	Available	Available	Available
Final consumers	Available	Available	Available	Available
Owners of dwellings	Available	Not applicable	Available	Not applicable
Owners of unincorporated enterprises	Available	Available	Available	Available
Rest of the world	Available	Available	Available	Available

- Calculate domestically-produced FISIM directly for each sector
- Sum up sectoral FISIM to get total FISIM





# Allocation of FISIM

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## Bottom-up approach

- Worked example 3.1 in the Handbook of Financial Production, Flows and Stocks in the System of National Accounts shows how to calculate FISIM using the bottom-up approach



## Top-down approach

- If reliable data on average stocks of loans and deposits and interest by sector are unavailable

	Average stock of loans	Average stock of deposits	Interest on loans	Interest on deposits
Total	Available	Available	Available	Available
Non-financial corporations	Not available	Not available	Not available	Not available
Financial corporations	Not available	Not available	Not available	Not available
General government	Not available	Not available	Not available	Not available
Non-profit institutions serving households	Not available	Not available	Not available	Not available
Households	Not available	Not available	Not available	Not available
Final consumers	Not available	Not available	Not available	Not available
Owners of dwellings	Not available	Not applicable	Not available	Not applicable
Owners of unincorporated enterprises	Not available	Not available	Not available	Not available
Rest of the world	Not available	Not available	Not available	Not available

- Calculate domestically-produced total FISIM for loans and deposits separately
- Allocate to sectors using appropriate ratios calculated from breakdown of data on stock of loans and deposits from various sources



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## Top-down approach

- Worked example 3.2 in the Handbook of Financial Production, Flows and Stocks in the System of National Accounts shows how to allocate FISIM by industry using the top-down approach



**Thank you**