

24th Voorburg Group

Mini-paper: SPPI for Banking

**ISIC 6419 Other Monetary Intermediation** 

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## **Outline of presentation**

- Classification
- Concept of FISIM
- Changing asset values
- Data sources and scope
- Aggregation structure and results
- Challenges for the future

### Classification

#### Class 64.19 Other monetary intermediation

- This class includes the receiving of deposits and/or close substitutes for deposits and extending of credit or lending funds. The granting of credit can take a variety of forms, such as loans, mortgages, credit cards etc. These activities are generally carried out by monetary institutions other than central banks, such as:
  - Banks
  - savings banks
  - credit unions
- This class also includes:
  - postal giro and postal savings bank activities
  - credit granting for house purchase by specialized deposit-taking institutions
  - money order activities
- This class excludes:
  - credit granting for house purchase by specialized non-depository institutions, see 64.92
  - credit card transaction processing and settlement activities, see 66.19

#### Subclass 64.19/1 Banks

- This subclass includes only:
  - Monetary intermediation by those institutions other than the Bank of England, authorised by the Financial Services Authority under the Banking Act of 1987 to accept deposits in the UK
  - Monetary intermediation by those European authorised institutions which are entitled to accept deposits through a branch in the UK on the basis of their home state authorisation
  - Monetary intermediation of the National Savings Bank
  - Monetary intermediation of the Savings Certificate Office

## **Monetary intermediation**

- Some units have no immediate use for their funds
- Other units have insufficient funds to meet their needs
- Banks provide a mechanism to allow the first unit to lend to the second
- Units pay the bank fee for this service
  - Implicit and indirect; and
  - Direct

# Financial Intermediation Services Indirectly Measured (FISIM)

User cost approach to financial intermediations

#### Loan Price

$$= \left[ \left( \frac{\text{Earned interest income} + \text{Loan fees}}{\text{Average loan balance over the period}} \right) - \text{Reference rate} \right] \times £1000$$

#### **Deposit Price**

$$= \left\lceil \text{Reference rate} - \left( \frac{\text{Interest Payments} - \text{Deposit fees}}{\text{Average deposit balance over the period}} \right) \right\rceil \times £1000$$

# Financial Intermediation Services Indirectly Measured (FISIM)

- Choice of reference rate?
- London Interbank Offered Rate (LIBOR)
- Aligns with 2008 SNA
  - "The rate prevailing for inter-bank borrowing and lending may be a suitable choice as a reference rate"

## **Changing asset values**

- SPPI prices the same service from period to period
  - User cost approach
- Service of "investing £1000" changes over time
  - Inflation erodes the value of the asset
    - Less goods and services may be consumed in later periods
  - The user cost approach suggests that deflation of assets is a cost to the user

## **Changing asset values**

- How to include the cost of change in asset value
  - Deflate the balances in the formula for the price by some "suitable measure of change in purchasing power"?
  - Assume that the evolution of balances reflects a response to erosion of assets
    - Replace the nominal £1000 with average balances from each period

## Price measurement for UK Banking SPPI

- Resulting price measurement is an average unit value
  - And can be considered as separate Fees and FISIM components

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Loan price
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$$= \frac{\text{Interest Earned Income - (Reference rate \times Average daily loan balance)}}{\text{Number of loans}} + \frac{\text{Loan Fees}}{\text{Number of loans}}$$

Deposit price

$$= \frac{\text{(Reference rate } \times \text{ Average daily deposit balance)} - \text{Interest payments}}{\text{Number of deposits}} + \frac{\text{Deposit Fees}}{\text{Number of deposits}}$$

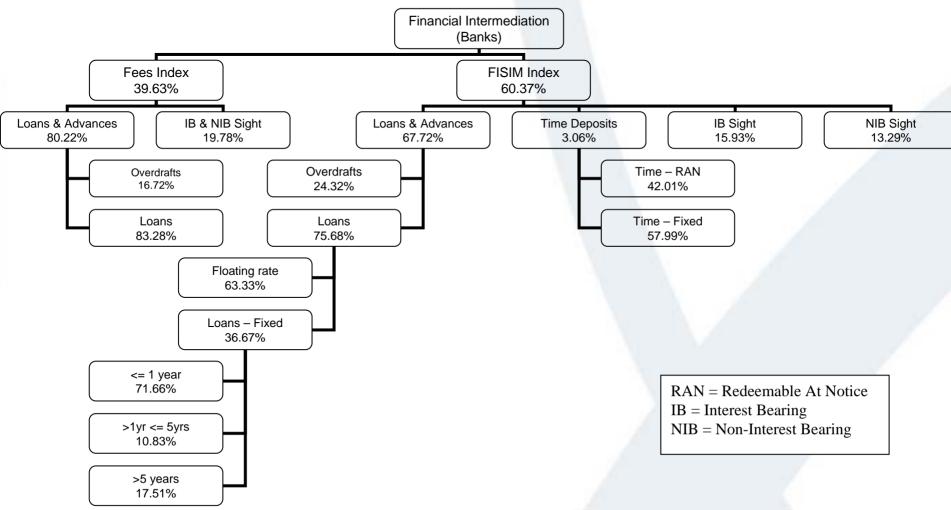
### **Data sources**

- Bank of England surveys
  - Regulatory
  - Used in national accounts
- Effective Rate (ER)
- Profit and Loss (PL)

### **Data sources**

- Aggregate data only
- Data in use currently restricted to Private Non-financial Corporations (PNFC's)
  - Net business-to-business
- FISIM aggregates classified by broad duration of loan or deposit
- Fees data only available at less detailed level
- Allow construction of broad level average unit value indices for each component

# Aggregation structure of the UK Banking SPPI

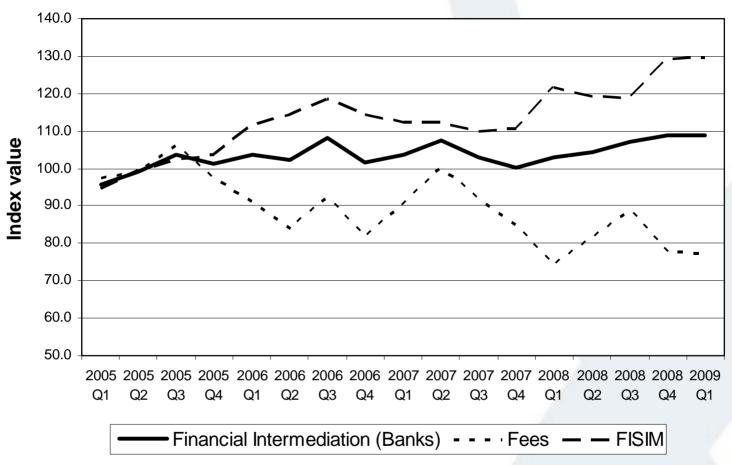


### Results

- Original series started in 2004
- Concerns regarding quality resulted in cessation of index in 2007
- New series from November 2008
  - Introduction of detailed data on Fees
  - Finer levels of disaggregation
    - 2005=100.0 basis

### Results

## UK Banking SPPI (2005=100.0)



## **Future challenges**

- Inclusion in "Top level" SPPI
- Coverage (Net B2B vs. B2A)
- Average unit value vs. heterogeneous products
- Proxy data for number of loans and deposits
- Negative prices?
- FISIM

## **Summary**

- Quarterly SPPI for "Other monetary intermediation 64.19"
  - Banking subclass
    - Deposits & Loans only
    - Net Sector, Business to business
- User cost (FISIM plus Fees)
- LIBOR as reference rate
- Broad level average unit values
  - Aggregate data from Bank of England survey
  - Proxy data for quantities
- Response to "deflation" issue uses changes in average balance

## **Questions?**

Thank you