

**MEETING OF THE TASK FORCE ON
FINANCIAL INTERMEDIATION SERVICES INDIRECTLY MEASURED (FISIM)**

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Liquidity Transformation Element in FISIM Calculations

To be presented by Chihiro Sakuraba, Bank of Japan

Liquidity Transformation Element in FISIM Calculations

Presentation to the First Meeting of
the ISWGNA FISIM Task Force

March 3-4, 2011
at IMF Headquarters 1

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The views expressed are those of the speaker and should not be
attributed to the Bank of Japan.

Liquidity transformation and FISIM

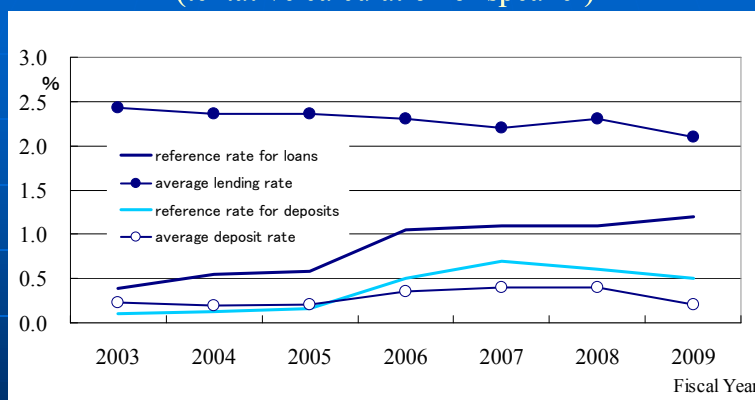
- The *SNA 2008* paragraph 6.166 states, “the reference rate should contain **no service element** and **reflect the risk and maturity structure** of deposits and loans.”
- Transforming short-term deposits into long-term loans is a common function of financial intermediation and **not a product unique to depository institutions**.
- Term risk premia are subject to the yield curve and **uncontrollable** by financial intermediation.

Principle of different reference rates

- Reflecting the maturity difference between deposits and loans, both reference rates **need** to be different.
- A reference rate is calculated by the average interest rate correspondent to maturity structure of deposits or loans respectively.
- The gap of both reference rates reflects the term risk premia. This formula implies that **term risk is excluded from FISIM**.

Figures of term risk premia in Japan

(tentative calculation of speaker)



- Term risk premia account for approximately 20% of the whole interest margin for recent years.

Heavy use of interest rate swaps

Interest Payments and Receipts through Interest Rate Swaps in Japanese Market
(billion yen)

| | City banks | | Regional banks | | Trust banks | |
|------|------------|----------|----------------|----------|-------------|----------|
| | reciepts | payments | reciepts | payments | reciepts | payments |
| 2003 | 17,329 | 902 | 325 | 8,391 | 1,705 | 1,347 |
| 2004 | 16,505 | 0 | 357 | 8,090 | 3,120 | 1,522 |
| 2005 | 9,412 | 44 | 383 | 8,980 | 2,070 | 2,119 |
| 2006 | 3,070 | 6,772 | 558 | 8,426 | 1,246 | 3,130 |
| 2007 | 2,010 | 12,301 | 559 | 6,331 | 324 | 6,292 |
| 2008 | 7,367 | 10,956 | 421 | 3,481 | 320 | 4,294 |
| 2009 | 24,405 | 14 | 566 | 3,162 | 7,541 | 757 |

Data source: Japan Bankers Association

- Average maturity of Japanese banks: 1 year for deposits, 3-4 years for loans.
- Most regional banks have been compelled to cover their relatively short funding.

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Practical issues

- What happens to FISIM calculation when term risk premia are **negative**?
- Market rates** tell nothing for the actual average interest rate correspondent to maturity structure.
- Complete data of maturity structure require heavy **reporting burden**.

Thank you for your attention.

Chihiro Sakuraba

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