ISWGNA Task Force on Islamic Banking

Output of Islamic Financial Services

Russell Krueger

Economic and Social Commission for Western Asia (ESCWA)
Beirut
October 24 – 26, 2017
Services offered by banks

- Banks can offer services to both sides to facilitate transactions that they cannot do themselves. The services are the production of the banking sector.

- Example – Mudarabah: a partnership or trust financing contract where one partner, *(rabb-ul-mal)* or "silent partner"/financier) gives money to another *(mudarib)* or "working partner") for investing in a commercial enterprise.
  - The *rabb-ul-mal* party provides 100 percent of the capital and the *mudarib* party provides its specialized knowledge to invest the capital and manage the investment project.
  - Profits are shared between the parties per a pre-agreed ratio.
  - If there is a loss, *rabb-ul-mal* loses his capital, and the *mudarib* party loses the time and effort invested in the project (Wikipedia)
FISIM

- FISIM (Financial Intermediation Services Indirectly Measured) is a component of the SNA measure of production of banks.
- The concept of FISIM is parallel for conventional and Islamic Banks.
- Banks are viewed as intermediating between parties with surplus funds and those needing funding.
- Banks offer services to both sides that they cannot do themselves. The services are the production of the banking sector.
- Funding units and borrowing units pay for the services in various ways. Some services are purchased directly through fees or sales of services; some production is paid indirectly through interest or in the case of Islamic banks by two concepts discussed yesterday:
  - Embedded profits on sales or leases
  - "Interest and similar investment returns" that also encompasses economic flows of profits on Islamic investment instruments that *de facto* closely emulate interest streams.
FISIM focuses on the implicit nonfee payments for bank services. For conventional banks, these payments are viewed as embodied in interest flows. FISIM is not limited to interest and includes services provided by conventional or Islamic banks that are not explicitly charged.

- Conventional bank: Borrowers pay an interest rate greater than the prevailing market rate of return, with the difference representing borrowers’ implicit payment for services provided. Depositors receive interest less than the prevailing market rate of return (foregone interest), as an implicit payment for services received.

- Islamic bank: The rationale is equivalent, but returns on investments take the place of banks’ interest receipts and distributions of profits to depositor/investors take the place of payments of interest to depositors. Unlike conventional banks, the receipts and payments are not guaranteed, but depend on the results of the investments and ventures made by the bank.
FISIM

- 2008 SNA calculates FISIM only on loan and deposit-like instruments handled by banks and similar financial institutions. For Islamic banks, the equivalent items are financings and fundings.

- It is not assumed that the amount of financing offered directly corresponds to an equivalent amount of funding. Therefore, the FISIM formula is applied independently to each side of the ledger, then summed to obtain the total production of the banks.
Bank production on lending side

- Production on the lending side is measured as interest receipts in excess of the market rate of return, which is referred to as the “reference rate” in SNA.

\[
\text{Implicit services to borrowers} = (r_L - r_r) \times \text{Loans}
\]

- \( r_L \) = interest rate charged on loans
- \( r_r \) = reference rate
Bank production on deposit side

- On the funding side, production is measured as interest foregone by depositors; that is, interest paid is less than the reference rate.

\[
\text{Implicit services to depositors} = (rr - rD) \times \text{Deposits}
\]

\[
rr = \text{reference rate}
\]

\[
rD = \text{interest rate paid on deposits}
\]
Total FISIM and its distribution

FISIM =
Implicit services to borrowers + Implicit services to depositors

= \[(r_L - \bar{r}) \times \text{Loans}\] + \[(\bar{r} - r_D) \times \text{Deposits}\]
Distribution of FISIM by sector

- Once total FISIM is estimated, purchases of services by each sector must be calculated, based on the amount of loans and deposits of each sector.
- The distribution can change GDP and intermediate costs of sectors.
  - For example, an interest payment by a corporation to a bank is an intermediate cost to the corporation, but payments for implicit services by nonresidents are final purchases that increase GDP.
- Data on the distribution of loans and deposits by sector are available from the IMF monetary and financial statistics.
  - Separate data for Islamic banks and windows are not yet available in monetary statistics - recommend creating Islamic bank peer group
  - PSIFI covers financing by ISIN, but not sector; No data on funding side
  - Or compile the data on national basis
- There is no direct information about the reference rate (rr), and thus an economy-wide rate should be applied. The midpoint between the average rates of return on financing and funding might be used.
A parallel formula can be constructed for Islamic banks.
- Returns on financings substitutes for interest rate charged on loans
- Distribution of profits to depositor/investors substitutes for interest paid to depositors
- The market rate of return, \( rr \), is the same

**Implicit services embedded in financings**

\[
(r_{Fin} - rr) \times \text{Financing}
\]

**Implicit services to depositors**

\[
(rr - r_{D}) \times \text{Funding}
\]

- \( rr \) = reference rate
- \( r_{Fin} \) = return on financings
- \( r_{Fund} \) = profit distributions on fundings
FISIM Calculations for Islamic Banks

- Calculating FISIM for Islamic banks is apt to be more complex than for conventional banks because of the diversity of instruments used, but banks should have information because of the documentation needed on profits earned and the distributions paid.
- Two strategies can be employed. A broad approach that parallels the calculations for conventional banks, and an instrument-by-instrument approach.
- Broad approach: total FISIM equals the difference between revenue on jointly-funded assets and the payments to IAH, which equals the sum of distributions available to IAH from jointly funded accounts and funds transferred to the PER.
In table 3 below from the Islamic bank income statement, FISIM equals lines 1 less the sum of lines 7 and 9.

<table>
<thead>
<tr>
<th></th>
<th>Table 3 – Islamic bank income distributable to IAH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Revenue from Jointly Funded Assets</td>
</tr>
<tr>
<td>2</td>
<td>By type of income</td>
</tr>
<tr>
<td>3</td>
<td>less Provisions for Accrued Income on Non-Performing Assets</td>
</tr>
<tr>
<td>4</td>
<td>Financing and nonfinancing costs</td>
</tr>
<tr>
<td>5</td>
<td>Provisions for sub-standard or bad financing</td>
</tr>
<tr>
<td>6</td>
<td>Other costs</td>
</tr>
<tr>
<td>7</td>
<td>Transfer to Profit Equalization Reserve (PER)</td>
</tr>
<tr>
<td>8</td>
<td>Income available to unrestricted IAH and bank</td>
</tr>
<tr>
<td>9</td>
<td>Income distributable to IAH</td>
</tr>
</tbody>
</table>
Instrument-by-instrument approach

- This approach recognizes there is no simple interest-rate type calculation to estimate income earned by the bank’s customers.
- Returns paid to bank customers and the distribution of returns between the bank and customers can vary greatly depending on the type of Islamic financial instrument used.
- Types of earning streams vary by instrument – financing of sales, leases, fees, equities, or investment.
- Also, the distribution of returns between the bank and the customers varies by instrument and negotiated shares between banks and their customers.
Applying the instrument-by-instrument approach

- **FISIM-type service production should apply to...**
  - instruments based on sales
  - Instruments based on leasing
  - Non-remunerated deposits and loans (Amanah, Qard, Wahiah)
  - profit/loss sharing accounts (usually mudarabah) in which the smoothed distributions to funding units *de facto* are economically similar to interest on deposits
    - Accounts should be excluded from FISIM calculation if distributions are of a volatile investment nature – whether this is practical is unknown
    - Also, under mudarabah, the financing side might be excluded because returns are investment related.

- **Instruments excluded from the FISIM calculation ....**
  - Musharakah and other partnership instruments
  - Mudarabah in which revenues or distributions are volatile and unsmoothed
  - Wakalah and other fee-based instruments
  - Sukuk