

**Perspectives on Islamic Finance in the National Accounts<sup>1</sup>**

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**Abstract**

2008 SNA (System of National Accounts) did not provide guidance on methods to compile national accounts statistics for Islamic banking and finance, but during the past five years three initiatives have sought to define treatments – by the Islamic Financial Services Board (IFSB), the International Monetary Fund, and United Nations. The initiatives largely began independently, but over time have interacted and converged in many respects although not all. This paper explores (largely from the IFSB perspective) how Islamic finance could be handled in the SNA and monetary statistics.

Islamic financial institutions must follow certain Moslem “Shariah” legal standards that result in important differences between conventional and Islamic finance. Topics discussed include the differing structure of conventional and Islamic bank accounts, IFSB and IMF financial accounting frameworks for Islamic finance, FISIM for Islamic banks, profit distributions by Islamic banks, classification of Islamic finance institutional units, construction of Islamic and conventional banking peer groups, and structural indicators of Islamic banking.

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## Perspectives on Islamic Finance in the National Accounts

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### Introduction: Islamic finance

Islamic banking and other forms of Islamic finance have developed rapidly over the past 50 years. Today, Islamic banking is found mostly in the Middle East, Central Asia, Southeast Asia, and Africa, where it provides banking services mostly to Moslems and to governments and central banks in countries where Islamic finance has official or semi-official status. Several international and regional organizations have recently become increasingly supportive of Islamic finance; including steps such as bolstering supervisory oversight, building legal and market infrastructure, and issuing Islamic financial instruments to create more liquid markets and tap additional sources of capital. Surveillance of various aspects of Islamic finance has been incorporated into international programs, such as IMF Article IV surveillance, Financial Sector Assessment Program (FSAP), and reviews of adherence to the Core Principles of Islamic Financial Regulation (CPIFR).

Islamic finance in some countries is large enough to affect the quality of their national accounts, monetary and financial statistics, and indicators of the structure and soundness of national financial systems.

This paper explores how Islamic finance should be handled in the SNA. The 2008 SNA did not provide guidance to national compilers on definitions, frameworks, and methods to compile national accounts statistics for Islamic banking and finance. This picture is now changing as the UN has launched a project on treatment of Islamic finance in the SNA, the IMF incorporated information on Islamic banking into its revised *Compilation Guide on Financial Soundness Indicators*, and the Islamic Financial Soundness Board (IFSB) developed data collection standards for use in its revised *Compilation Guide on Prudential and Structural Indicators for Islamic Financial Institutions (PSIFIs)* completed in late 2019.<sup>2</sup>

### Features of Islamic Finance

Important differences exist between conventional and Islamic finance. Islamic finance is intended to serve as an ethical framework for economic and social justice that must follow certain Moslem “Shariah” legal standards, hence it is often called “Shariah-compliant”, or “SC”. There are several schools of Islamic finance, but certain general principles are;

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<sup>2</sup> The IFSB *Guide* drew from (and as necessary extended) the macroeconomic statistical standards in 2008 SNA as needed to compile data for the aggregate Islamic financial sector (as opposed to financial data for individual institutions). This paper is drawn mostly from material developed in the course of building the methodology of the IFSB *Guide*, but also draws in important ways from the IMF and UN work.

## Perspectives on Islamic Finance in the National Accounts

Prohibition on payment of interest or other fixed returns on investments<sup>3</sup>,

Encouragement of investment in real economic activities or trading in goods and services for profit,

Avoid profiting from trading in financial assets or “using money to make money”

Islamic banks offer Islamic deposit accounts that closely parallel conventional accounts, but the banks also are heavily funded by accounts in which returns or losses are shared between the bank and the depositor/investor that are called Profit-Sharing Investment Accounts (PSIA) or “participation accounts”; Those funding these accounts are described as Investment Account Holders (IAH),

Excessive risk taking is discouraged, which is often interpreted as prohibiting many types of financial derivatives,

Lending for certain activities, such as alcohol or drugs, is prohibited,

Sharing profits for charitable purposes “zakah” is a religious duty,

Several methods exist to smooth returns to IAH that do not have equivalents in conventional banking,

Shariah-compliant activities should be segregated from non-compliant activities and funds, and

Some Islamic financial instruments have names and financial flows that do not readily fit the standard SNA financial instrument classification.

Due to these practices, the financial accounts of Islamic banks (income statement and balance sheet) differ significantly from those of conventional banks. Separate sets of standards have been developed for Islamic finance including accounting standards promulgated by the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) in Bahrain and bank supervisory standards by the Islamic Financial Services Board (IFSB) in Malaysia.

Significant questions arise on how to translate data for Islamic banks into the national accounts and monetary statistics.<sup>4</sup> This paper seeks to translate several key elements of Islamic banking into the SNA accounts for use in national accounts, monetary statistics, balance of payments, etc.. Also, certain macroprudential issues are compared between Islamic finance and conventional finance as promulgated by the Basel Committee on Banking Supervision (BCBS)

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<sup>3</sup> Which can also be interpreted as prohibition on financial techniques based on “time value of money.”

<sup>4</sup> Broader questions exist beyond the scope of this paper. For example, a broad question is how Islamic banking that lacks interest rate signals and which employs unique financial instruments should be treated within the integrated global financial system and diverse national legal and policy frameworks. This paper limits its focus to statistical, quantitative issues to determine where bridges exist between conventional and Islamic bank, and conversely where patterns diverge that require special treatment of Islamic banking.

and by the IMF and other key international institutions in their Financial Soundness Indicators (FSIs).

Topics discussed in this paper include;

- A. Structure of conventional and Islamic bank accounts
- B. FISIM for Islamic banks
- C. Profit distributions by Islamic banks
- D. Islamic institutional units and windows and their classification
- E. Peer Groups for Islamic and Conventional Banking
- F. Structural Indicators of Islamic Banking
- G. Summing Up and Steps Ahead

### **A. Structure of conventional and Islamic bank accounts**

This section compares income statements and balance sheets of conventional and Islamic banks.<sup>5</sup> There are important differences that affect the estimation of production of Islamic banks and FISIM, as will be discussed later in this note.

#### **Income Statement**

**Conventional bank:** The income statement of a conventional bank (Table 1) differs from that of a nonfinancial corporation by highlighting banks' traditional core function as a deposit-taking financial intermediary – in particular the income accounts are headlined by net interest income (interest receipts less interest payments). That is, the bank receives interest on its funds lent and pays interest on funds received from depositors. By lending funds, the bank acquires a claim (asset) on the borrower for repayment of the amount lent plus interest. By receiving funds from the depositor, the bank incurs an obligation (liability) to repay the deposited funds plus interest.

The income statement of a conventional bank typically shows net interest as a separate line item at the top of the accounts. That is, the top lines separately list interest receipts, interest payments, and net interest receipts less payments (which is core information for the FISIM accounts).<sup>6</sup> Other revenue for banks (typically called noninterest income) are shown below the net interest line. The sum of net interest and noninterest income is the gross income of the bank.

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<sup>5</sup> In the case of a conventional bank that offers Islamic banking services, the Islamic activity sometimes might have only a "quasi" balance sheet and income statement rather than a full set of accounts. Such gaps do not affect the general discussion here, but do potentially present thorny problems for compilers.

<sup>6</sup> FISIM – Financial Intermediation Services Indirectly Measured: Borrowers from banks pay interest as a return for banks' services of gathering funds and making them available; depositors in banks receive interest by making funds available to the banks but often receive no interest or reduced interest because they make implicit payments for services rendered by the bank (safe-keeping, record keeping, transfer services, verification of borrowers' credit worthiness, collection services, etc.). The amounts of bank interest received less interest paid provides an indirect measure of the services provided by the bank to both borrowers and lenders. As discussed in the next section, 2008 SNA modified the definition of FISIM and requires separate estimates on the receipts and expenses sides of the ledger.

## Perspectives on Islamic Finance in the National Accounts

Expenses consist of noninterest expenses (salaries, office expenses, utilities, etc.) and provisions for loan losses. Expenses are subtracted from gross income to derive income before income taxes, which can also be thought of as net operating income. Taxes on income are subtracted from net operating income to derive net income.

Dividends are paid from net income, leaving retained earnings which are then carried over to the balance sheet as part of equity.

<b>Table 1 – Representative Income Statement of Conventional Bank<sup>7</sup></b>	
	<b>Revenue</b>
	Total Revenues
	Net interest income
	Interest income
	Interest expenses
	Noninterest income
	<b>Expense</b>
	Total Expense
	Noninterest expense
	Provisions for loan loss
	<b>Income</b>
	Income before income tax (Operating income)
	Income tax
	Net Income
	Dividends
	Retained Earnings

**Islamic bank:** The income account of an Islamic bank (Table 2)<sup>8</sup>, differs in important ways from that of a conventional bank.

- Islamic banks raise funds through “deposits” and through “funding” from depositors/investors (Investment Account Holders – IAH).<sup>9</sup> Islamic banks have quasi-equity obligations to the IAH in contrast to the liability of conventional banks to repay depositors.<sup>10</sup>

<sup>7</sup> This table synthesizes Table 5.1 in the revised IMF *Compilation Guide on Financial Soundness Indicators*.

<sup>8</sup> The table provides a synopsis of an Islamic bank income statement as presented in the IFSB’s Detailed Financial Statements (DFS) in the revised IFSB *Compilation Guide on PSIFs*.

<sup>9</sup> Islamic banks also have noninterest paying (“nonremunerated”) deposit accounts, which are comparable to those provided by conventional banks. Unremunerated accounts are typically between 10 and 30 percent of total funding.

<sup>10</sup> Per the AAOIFI, returns to IAH can be presented in a separate quasi-equity section below bank liabilities, but before equity. The International Financial Reporting Standards (IFRS) treat such positions as “puttable financial instruments” that must be classified based on their substance either as a liability or as equity capital.

## Perspectives on Islamic Finance in the National Accounts

- Islamic banks manage funds received to produce returns through investments or financing of transactions for customers.
  - “Unrestricted” funds received by Islamic banks from IAH are commingled with other bank funds in the same way as are deposits in conventional banks.
  - “Restricted” funds are managed separately by the bank and segregated from funds received from other IAH. They have some characteristics of asset management accounts (that – due to recent changes in accounting standards) might or might not be treated off-balance sheet).
- The returns to Islamic banks on their financings and investments are not guaranteed, but depend on the success or failure of their ventures. Returns (and sometimes losses) are divided between the bank and the IAH based on the specific types of Islamic financial instruments used.
- Diverse financial instruments are used that earn revenues in different ways - financing of sales, leasing, fees, equity participation, or investment. Some instruments do not have conventional bank equivalents. Unlike conventional banking, there is no common interest rate (nor interest rate ladder) applicable to deposits that determines the depositors’ returns.
- Because Islamic banks do not receive or pay interest, the net interest section in the accounts of conventional banks is replaced by “Net financing and investment income”,<sup>11</sup> which is a rather complex calculation of (a) net revenues (revenues less associated costs<sup>12</sup>) earned on funds managed by the bank (which can be commingled with the banks’ own funds), and (b) the distribution of the net revenues between the bank and the IAH. In essence, it is a self-contained income statement covering the funds and returns of the bank *vis-à-vis* the IAH.

Funding accounts can be unrestricted or restricted.

- Unrestricted funds are commingled with funds of other investors and the bank in much the same way as conventional banks commingle depositors’ funds with their own.
- Restricted funds are managed separately based on agreements between the investor and the bank. The working assumption is that the assets are managed

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<sup>11</sup> The *PSIFI Compilation Guide 2011* uses the terminology “Revenue on jointly funded assets”, which emphasizes the commingling of funds between IAH and the bank. The revised *Compilation Guide* refers to this line as “Net Financing and Investment Income”.

<sup>12</sup> Two models exist for the expenses to be allocated against the bank income to produce net financing and investment income – one model includes only direct costs associated with returns on bank investments, whereas the other can include indirect costs.

## Perspectives on Islamic Finance in the National Accounts

off balance sheet<sup>13</sup> and only the bank's net income is reported in the income statement as "Bank share in restricted investment income."

- A "Profit Equalization Reserve" (PER) can be used to smooth returns paid to IAH. The PER is treated as income of the IAH, but held back by the bank in order to make future payments to IAH. In the Islamic bank income statement, it is treated as part of the distribution of financing and investment income.<sup>14</sup>
- The next section "Other Revenues" covers items such as fees, commissions, revenues for services provided, currency trading, holding gains/losses, etc..
- Total Gross Income is the sum of Revenue on Jointly Funded Assets and Other Revenues.
- Expenses are subtracted from Gross Income to calculate "Net Income before Taxes and Zakah". (Zakah are charitable contributions required as a religious duty.)
- Net income after taxes and zakah is calculated, which is divided between dividends to owners of the bank and retained earnings.
- At its discretion, an Islamic bank may create an Investment Risk Reserve (IRR) that sets aside some of the owners' profits to cover possible losses experienced by IAH.

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<sup>13</sup> AAOIFI accounting standards treat as off-balance-sheet any assets funded by restricted profit sharing investment accounts (RPSIA), which justifies only the reporting of the bank's share in the net income of the restricted account. However, this practice might not be universal and some banks following IFRS rules might decide that the assets should be on-balance-sheet.

Moreover, new AAOIFI rules could require consolidation of some mudarabah restricted PSIA's into the bank's balance sheet based on bank "control" of the funds, in which case, the treatment parallels that of the unrestricted accounts.

<sup>14</sup> In some jurisdictions PER and IRR are not permitted because they might be used as profit smoothing techniques that could disguise banks' true financial condition, especially during difficult periods.

Perspectives on Islamic Finance in the National Accounts

DFS Line #	Table 2 - Representative Income Statement of Islamic Banks*
<b>FS01</b>	<b>Gross financing and investment income</b>
FS01(i)	Income from financing <i>(less operational costs of financing)</i>
FS01(ii)	Income from investments <i>(less operational costs of investment)</i>
FS02(iii)	Less provisions for accrued income on nonperforming assets
	<b>Distribution of financing and investment income</b>
FS02(i)	Income distributed to unrestricted depositors/investors
FS02(ii)	Distribution to Profit Equalization Reserve
<b>FS03 = (FS01 – FS02)</b>	<b>Net financing and investment income available to bank</b>
	<b>Other bank income</b>
FS04	Bank share in restricted investment income
FS05	Fee-based income
FS06 + FS07	Other Income
<b>FS08</b>	<b>Total Gross Income</b>
<b>FS09</b>	<b>Expenses</b>
FS10	Personnel expenses
FS11	Other expenses
<b>FS12</b>	<b>Provisions</b>
<b>FS13</b>	<b>Net income before taxes and zakah</b>
FS16	Taxes
FS15	Zakah
<b>FS17</b>	<b>Net income after taxes and zakah</b>
FS20	Dividends
<b>FS21</b>	<b>Retained Earnings</b>

This table presents key aggregate lines from the Income statement from the IFSB Detailed Financial Statements (DFS), as indicated in the leftmost column. Several detailed DFS lines have been omitted in order to highlight key elements of the income statement.



**Balance sheet**

The balance sheet of an Islamic bank closely parallels conventional balance sheets with four notable changes.

DFS Line #	Table 3: Representative Balance Sheet for Islamic Banks
<b>FS22</b>	<b>Total assets (= FS23 + ... + FS31 = FS32)</b>
FS23	Cash in hand
FS24	Total Shari`ah-compliant financing (excluding interbank financing)
	<i>Of which: ijara and istisnaa financing</i>
FS25	Interbank financing
FS26	<i>Sukūk</i> holdings
FS27	Other Shari`ah-compliant securities
FS28	Investment funds, shares, and other equity
FS29	Shariah-compliant hedging instruments
FS30	Plant, property, and equipments
FS31	All other assets
<b>FS32</b>	<b>Total funding/liabilities and equities (= FS33 + ... + FS41)</b>
FS33	Nonremunerative funding (Current accounts)
FS34	Remunerative funding
	(i) Profit Sharing Investment Accounts (Mudarabah, Musharakah basis)
	(ii) Other Remunerative Funding
FS35	Other Interbank funding/liabilities
FS36	<i>Sukūk</i> issued
FS37	Other Shari`ah-compliant securities issued
FS38	Payables
FS39	All other liabilities
<b>FS40</b>	<b>Equity of Unrestricted Investment Account Holders (If AAOIFI)</b>
<b>FS41</b>	<b>Shareholders' equity</b>
<b>FS42</b>	<b>Balance sheet total (= FS32 = FS22)</b>

### *Nonfinancial assets*

Without a concept of interest earnings, Islamic financial instruments often generate income through sale or lease of underlying goods or services. In principle, an Islamic bank must have legal ownership of the underlying assets even if for only an instant – during which period the bank incurs all the risks and rewards of holding the asset.

In the IFSB's DFS balance sheet, nonfinancial assets held by Islamic banks under Islamic financial instruments for customers are considered to have unique roles and behavior from other nonfinancial assets typical for conventional banks. Therefore, they are separately enumerated in the DFS balance sheet, as an *of which* item "ijara and istisnaa financing" under FS24 Total Shari'ah-compliant financing (excluding interbank financing).

Discussions by the IFSB Task Force on the PSIFI indicators concluded that it is impractical to separately identify and value the nonfinancial assets linked to these financial instruments from the financial instruments themselves. Therefore, the DFS balance sheet only requests the value of the overarching financial instruments, with a presumption that the value of the underlying nonfinancial assets comprises most of the value of the financial instrument. Thus, the sum of the item "ijara and istisnaa financing" and another balance sheet item FS30 "Property, Plant, and Equipment" approximately sum to Nonfinancial assets as reported in the SNA framework.

The treatment of nonfinancial assets under Islamic financial contracts has potential implications for the SNA flow accounts.

Holding Gains and Losses – While under possession of the bank, the underlying assets could experience holding gains or losses, which should be recorded in the SNA revaluation account.<sup>15</sup>

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<sup>15</sup> The AAOIFI has been examining whether financial contracts with customers linked to delivery of goods should go through an IFRS 15 review before being treated as a financial instrument as opposed to being a contract for delivery of an underlying asset (which involves an additional set of contractual obligations). The IFRS Islamic Finance Consultative Group met in early 2018 in Dubai and concluded that for some instruments IFRS 15 (and IFRS 16 for leasing instruments) the appropriate standard for applying IFRS 15 is whether the bank exercises effective control over the underlying asset.

"It was generally agreed that ... whether the IFI obtains control of the underlying asset is a key consideration to decide whether the arrangement is also within the scope of IFRS 15 .... because an entity satisfies its performance obligation by transferring control of the underlying promised good (or service) to the customer."

The Group indicated that elements of determining control can include whether the bank bears asset risk (such as damage to the underlying) or price risk. However, the discussion also indicated that application of such principles is not straight-forward because of different national practices, different national definitions of financial instruments, and because the fundamental business of the bank is financial and not delivery of goods.

Thus, as it now stands, the IFRS clarified some aspects of treatment of underlying assets but results are not fully settled. The results of these reviews might have bearing on SNA treatment of the financial instruments and the underlying assets. The answers might prove complex because of differing national applications of the IFRS standards and different national fact patterns regarding the operation of the various Islamic financial instruments -

Regular income on the contract – A contract might specify the price for the underlying good creating a net profit for the bank. Under the IFRS 15 *Revenue from Contracts with Customers*, the gain or loss on nonfinancial assets would be recorded as income using a 5-step model as the conditions of the contract are met. Unfortunately, as a practical matter, it could be difficult to disentangle types of flows (trading gains, fees, holding gains) for SNA purposes.

*PER (Profit Equalization Reserve) Allocated to Shareholders*

Under a profit-sharing model, an Islamic bank can withhold part of the IAH's (depositors) net profits as a Profit Equalization Reserve (PER). Under SNA accrual rules, the net profits for IAH (including the component transferred in PER) should be treated as distributed with the PER component subsequently treated as a separate transaction that reinvests the funds into the reserve. The IAH has equity ownership in the PER held by the bank; to be treated in the SNA as a component of the bank's equity.

*Differentiation between nonremunerative and remunerative funding*

The funding of Islamic banks can be through deposit-like instruments that do not pay returns and guarantee full repayment to depositors, or through a variety of other instruments that can pay returns to funders, but which also have investment-like features that expose funders to variable returns and possible losses. The rights and obligations associated with these types of instruments differ and can create differing exposures and payments flows. Because of such differences, the DFS separately enumerates the two types of funding.

*Quasi-equity: Equity of Unrestricted Investment Account Holders (If AAOIFI)*

Per AAOIFI, returns to IAH can be presented in a separate quasi-equity section shown below bank liabilities, but before equity. In the DFS, this line is called "*Equity of Unrestricted Investment Account Holders (If AAOIFI)*"

In contrast, the IFRS treats such positions as "puttable financial instruments" that must be classified based on their substance either as a liability or as equity, which is the recommended treatment for the SNA. Whenever a country allocates quasi-equity for statistical purposes as either a liability or as equity, it should be clearly noted in metadata along with the rationale used for the allocation. This is informative for users of the statistics, and also will affect prudential ratios such as the degree of leverage.

**B. FISIM for Islamic Banks**

The concept of FISIM for Islamic Banks parallels that of conventional banks. FISIM (Financial Intermediation Services Indirectly Measured) is a component of the national accounts measure of the production of banks. Banks are viewed as intervening between parties with surplus funds and those needing funding, providing services to both sides. FISIM is a method to measure the total

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this could be an area of continuing uncertainty regarding treatment that might ultimately only lead to metadata statements that describe a range of diverse national practices.

size of services provided that are not specifically charged and allocate to appropriate beneficiaries.

The discussion is lengthy and is presented in two distinct parts.

*B1 – Parallel FISIM treatment of Islamic and Conventional Banks* discusses how the SNA 2008 concept of FISIM applies to Islamic banks. This is a textbook-like discussion on how to do it.

*B2 – One FISIM Reference Rate (RR) or Two?* Discusses an issue now under consideration by the UN Statistical Division of whether the FISIM “reference rate” for Islamic banks should be different from the rate for conventional banks. Four options are covered, which might lead to very different conclusions than reached in *B1*.

### ***B1 – Parallel FISIM Treatment of Islamic and Conventional Banks***

In a perfect market, with an economy-wide prevailing rate of return, those with surplus funds could deal directly with borrowers. Surplus units would be able to invest funds at the economy’s prevailing rate of return for investments; conversely, those needing funds could borrow funds at the same rate.

However, banks can offer services to both sides that they cannot do themselves. The services provided are the production of the banking sector.

Both surplus units and borrowing units pay for the services provided by banks in various ways. Some services are purchased directly through fees or sales of services, but total production includes payments for services provided that are embedded in interest rates and thus are not in the form of fees.

FISIM focuses on the implicit nonfee payments for bank services. For conventional banks, these payments are viewed as embodied in interest flows. However, FISIM as a measure of production is not limited to interest and thus services provided by conventional or Islamic banks that are not explicitly charged also are included.

In a conventional bank, the borrower pays an interest rate greater than the prevailing market rate of return, with the difference representing the borrower’s implicit payment for services provided by the bank. For depositors, receipts of interest less than the prevailing market rate of return (foregone interest) are implicit payments for services provided by the bank.

For an Islamic bank, the rationale is equivalent, but Gross financing and investment income takes the place of interest receipts, and distributions of profits to depositors/investors takes 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 various ventures and investments made by the bank.

Thus, the FISIM core concept as expressed in the 2008 SNA applies to both conventional and Islamic banks.

In 2008 SNA, FISIM is calculated only on loan and deposit-like instruments handled by banks and similar financial institutions. For Islamic banks, the equivalent terms are “financing” and “funding”. It cannot be assumed that the amount of financing offered directly corresponds to an equivalent amount of funding, and therefore the FISIM formula is applied independently to each side of the ledger, then summed to obtain the total production of the banks.

### *Conventional banks*

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”. Formally, the reference rate of return should contain no service element and reflect the risk and maturity characteristics of deposits and loans

$$\text{Implicit services to borrowers} = (rL - rr) \times \text{Loans}$$

$$\begin{aligned} rL &= \text{interest rate charged on loans} \\ rr &= \text{reference rate} \end{aligned}$$

Similarly, on the deposit side, production is measured as interest foregone; that is, interest distributed to depositors less than the reference rate.

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

$$\begin{aligned} rr &= \text{reference rate} \\ rD &= \text{interest rate paid on deposits} \end{aligned}$$

FISIM is the sum of implicit services provided to borrowers and depositors.

$$\begin{aligned} \text{FISIM} &= \text{Implicit services to borrowers} + \text{Implicit services to depositors} \\ &= (rL - rr) \times \text{Loans} + (rr - rD) \times \text{Deposits} \end{aligned}$$

### *Islamic banks*

A parallel formula can be constructed for Islamic banks. “Returns on financings” substitutes for interest rate charged on loans, and Distribution of profits to depositor/investors substitutes for interest paid to depositors. The market rate of return,  $rr$ , is the same.<sup>16</sup>

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<sup>16</sup> At the Beirut workshop, several participants questioned whether  $rr$  for Islamic banks should be the same as for conventional banks. *In this paper*, it is assumed that  $rr$  represents a general market rate of return that reflects no service element and is available to all investors and borrowers, whether conventional or Islamic. However, this issue is under active review by the UN and experiments by several countries have shown that use of separate reference

$$\text{Implicit services embedded in financings} = (r_{\text{Fin}} - rr) \times \text{Financing}$$

$$\text{Implicit services to IAH} = (rr - r_{\text{Fund}}) \times \text{Funding}$$

rr = reference rate

rFin = return on financings

rFund = profit distributions on fundings

Once total FISIM is estimated, the purchases of the services by each sector must be calculated, based on the amount of loans and deposits by each sector.<sup>17</sup> The distribution can change GDP and intermediate costs of each sector. For example, an interest payment by a corporation to a bank is an intermediate cost to the corporation, but a payment for implicit services by a nonresident is a final purchase that directly increases GDP.

The application of the formula to Islamic banks is apt to be more complex than for conventional banks because of the diversity of instruments<sup>18</sup> used, but this burden might be mitigated because in Islamic banking the bank and the units providing funding often co-invest in financing ventures and thus there must be documentation of the profits earned and the distributions paid.

### Estimates of FISIM for Islamic banks

This section reviews methods to compile estimates of FISIM-like production of Islamic banks. As a practical matter, a cost benefit analysis should be applied to weigh the importance of Islamic banking in an economy versus the costs to collect the needed data and compile estimates.

#### *Best option*

The best option is to apply statistical standards specific to Islamic finance that capture the unique characteristics of Islamic finance. For example, the upcoming IMF *Financial Soundness*

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rates for Islamic banks can significantly affect measures of FISIM and its growth rate. Thus, this issue is not considered resolved at this moment.

Also, if a concept of different rr is accepted, conceptual implications arise – do the differences reflect additional risk incurred by investors/depositors? Do they reflect increased costs for IFIs because of more complex governance structures? There are also important monetary policy implications if conventional and Islamic banks face different return profiles.

<sup>17</sup> Data on the distribution of loans and deposits by sector are available from the IMF monetary and financial statistics.

<sup>18</sup> In contrast to the direct perspective in 2008 SNA that FISIM applies only to loans and deposits in which there is an explicit reference of interest flow derived rates of return, Islamic finance uses a diverse range of instruments that can have return characteristics based on sales, leasing, and investment-type returns but which *de facto* are analogous to loans and deposits in terms of the economic function. Even in cases where Islamic financial instruments can be unambiguously defined as loans or deposits, the actual rate of return might involve different calculations for each type of instrument.

*Indicators Compilation Guide Annex 7.4 “Islamic Deposit Takers and Financial Soundness Indicators”* that provides guidance on compilation of FSIs for Islamic banks includes a listing of Islamic financial instruments and their SNA classification. The classifications were based on consultations during the past two years with interested organizations. This option uses an instrument-by-instrument classification as loans or deposits to calculate FISIM in order to make separate calculations on the financing and funding sides.

This option is new and can only be expected to be introduced over time. It requires detailed information on instruments and their volume -- data which are not yet routinely available and new reporting systems might need to be developed. Also, at this stage Islamic financial instruments are not standardized between countries and different names and definitions can apply – further work to standardize instruments is needed. Various efforts are underway that can lead to greater standardization of Islamic finance<sup>19</sup> and there is recognition that greater international standardization is critical to support continued growth of Islamic finance, but the standardization process still has a long road ahead.

### *Proxy using IFSB DFS framework*

Another possible approach to estimating FISIM for an Islamic bank uses the IFSB’s DFS framework to construct a simple proxy for conventional bank interest receipts on loans less interest payments on deposits.<sup>20</sup> Although closely analogous to the FISIM concept above as a component of national accounts measures, a more accessible concept (and term) can be applied that provides a more readily understandable concept of interest-like production provided by Islamic banking – “Islamic Financial Intermediation Services” (IsFIS).

The IsFIS concept is equivalent to the sum of income generated on Islamic loan-like instruments) less the deposit-like distributions to Investment Account Holders (IAH).

The IsFIS approach is analogous to the method to estimate FISIM used in 1993 SNA Chapter 6<sup>21</sup> but is not fully equivalent to the methodology described in 2008 SNA. However, it has multiple

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<sup>19</sup> The IFSB, IMF, UN and other bodies have initiatives that can promote greater standardization. Also, regional organizations such as the GCC have incentives to promote greater standardization in order to promote financial integration between their member countries. However, an unified approach is not underway and the process likely to be continuation of the recent trend in which international and regional organizations develop standards in their own competencies (such as, IFSB DFS framework, IFSB and IMF adoption of Core Principles for Regulation of Islamic Financial Institutions, IMF definitions of instruments for use in FSIs, UN work on SNA treatment of Islamic finance in the SNA, AAOIFI harmonization with IFRS whenever relevant, or development of Data Standards Definitions – DSDs – for XBRL or SDMX purposes) with gradual country-by-country adoption of the various agency standards.

<sup>20</sup> The DFS is currently the only available cross-country framework covering aggregate Islamic bank income statements.

<sup>21</sup> 1993 SNA ¶6.125 states “the total value of FISIM is measured . . . as the total property income receivable by financial intermediaries minus their total interest payable.” ¶6.128 states “the reference rate represents the pure cost of borrowing funds – that is, a rate from which the risk premium has been eliminated, . . . and does not include any intermediation services. . . . the interbank lending rate would be a suitable choice when available; alternatively the central bank lending rate could be used.”

advantages; (1) relies on the aggregate income statement of Islamic banks developed only during the past three years in the IFSB Detailed Financial Statements (DFS), (2) can be easily compiled when the DFS are available, (3) provides an accessible method for comparison of the production of conventional versus Islamic banks based on comparisons of their aggregate income statements<sup>22</sup>, and (4) provides an approximate method of compilation in situations where the specific data needed for the more detailed SNA FISIM methodology are unavailable or where statistical resources are constrained.

The approach recognizes that for many customers of Islamic banks the bank serves as a straight-forward depository institution in which funds are placed in common deposit accounts and might or might not pay returns depending on the type account (i.e. remunerative, or nonremunerative current accounts or safe-keeping accounts). The bank subsequently provide financing to its borrowers, which includes an implicit service element. The Beirut workshop revealed that something similar to this approach was used in most of the countries participating.

Under this approach, IsFIS equals the difference between financing income and distribution of financing income to IAH. In Table 4 from the DFS income statement, IsFIS equals line 2 excluding provisions on accruals for nonperforming financing (8a) less the sum of lines 10 and 11.

Table 4 Summary – Islamic Financial Intermediation Services (IsFIS) shows only the lines used in compiling IsFIS.

<b>Table 4 – Islamic bank income distributable to IAH</b>		
1	<b>FS01</b>	<b>Gross financing and investment income</b>
2	FS01(i)	Income from financing ( <i>less operational costs of financing</i> )
3	FS01(i.i)	Sales-based
4	FS01(i.ii)	Lease-based
5	FS01(i.iii)	Equity-based
6	FS01(i.iv)	Other
7	FS01(ii)	Income from investments ( <i>less operational costs of investments</i> )
8	<i>less</i> FS02(iii)	<i>less</i> Provisions for accrued income on nonperforming assets
8a	<i>FS02(iii.fin)</i>	<i>o/w:provisions on financings</i>
8a	<i>FS02(iii.inv)</i>	<i>o/w: provisions on investments</i>
9 = 1 - 8	<b>FS01 - FS02(iii)</b>	<b>Income available to IAH and bank</b>
10	FS02(i)	Income distributable to IAH
11	FS02(ii)	Transfer to Profit Equalization Reserve (PER)

<sup>22</sup> The DFS framework broadly follows the framework used in Table 5.1 of the upcoming revised IMF *FSI Compilation Guide* that presents the aggregate deposit-taking sector (conventional and Islamic) used in the FSI analysis. Table 5.1 data will have wide country coverage. The DFS to Table 5.1 linkage will be analytically useful; for example, the Islamic bank component can be readily compared to the full economy data such as sector total net interest income (line 3 of Table 5.1).



Perspectives on Islamic Finance in the National Accounts

12 = 9 -10 - 11	<b>FS03 = FS01 – FS02</b>	<b>Net Financing and Investment Income of bank</b>
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<b>Table 4 Summary – Islamic Financial Intermediation Services (IsFIS)</b>		
2	FS01(i)	Income from financing ( <i>less operational costs of financing</i> )
8a	<i>less</i> FS02(iii.fin )	<i>less</i> Provisions for accrued income on nonperforming financing
10	FS02(i)	Income distributable to IAH
11	FS02(ii)	Transfer to Profit Equalization Reserve (PER)

Notes:

Line 1 represents the gross income received on financings and investments, broadly equivalent to interest earnings of conventional banks.

Lines 2 through 7 represent the sources of this income by major type of Islamic financial instrument. These items are net of direct costs to banks on the financing and investment operations, but do not include an equivalent to interest expense.

Line 8 equals provisions for accrued income on nonperforming assets since such assets should be on a nonaccrual basis. When available, provisions for nonperforming financing and provisions for nonperforming investments should be shown separately as *of which* items.

Line 9 is the gross income (Line 1) less the Line 8 provisions. It equals the total income available for distribution to depositors/IAH and the bank. It equals the sum of lines 10 through 12.

The amount considered distributed to IAH can be considered the equivalent to interest expense to depositors of a conventional bank. It equals the sum of line 10 (Income distributable to IAH) and line 11 (Transfer to Profit Equalization Reserve).<sup>23</sup>

Line 10 represents the actual payments to the IAH, equivalent to interest payments to conventional depositors.

<sup>23</sup> Line 11 represents *current earning of the IAH withheld from immediate payment* by placing them in a reserve used to smooth future payments to IAH if future revenues fall. On the SNA accrual basis, the current transfers of earnings into the PER are treated as income payments followed by reinvestment into the PER, creating a financial claim of IAH on the bank. A question to be resolved is whether the SNA should treat the reinvested PER (that is, funds deemed as paid to the IAH then immediately reinvested) as capital investment by the IAH or as a liability to IAH.

In this approach, total IsFIS equals the total financing and investment income of the bank (line 1) less distributions to IAH (lines 10 + 11). It is not an exact measure, but could be a suitable approximation for countries with limited resources for making more precise calculations – moreover, it is a measure that can be estimated directly from the IFSB DFS income statement now being increasingly compiled in a number of countries.

The distribution of IsFIS by economic sector is based on the sectoral distribution of financing provided by the bank and funding of the bank, parallel to the calculation for conventional banks. There is no direct information from this calculation about the reference rate (rr) to be used in the calculation, and thus an economy-wide rate would need to be applied. Absent any more specific information, the midpoint between the average rate of return on financings and average rate of payments on funding might be used<sup>24</sup>, which was found to be a common practice in the countries at the Beirut workshop.<sup>25</sup>

### ***B2 – One FISIM Reference Rate (RR) or Two?***

*This section discusses 4 options on treatment of rates of return calculations used in the SNA concept FISIM and the rationales for each. It focuses on the rationales for possible use of different reference rates for conventional and Islamic banks.*

The UN project on treatment of Islamic finance in the SNA has addressed a question to national compilers regarding the calculation of FISIM.

#### ***Is further work needed to assess the use of single versus separate reference rates in the calculation of FISIM in economies with conventional and Islamic finance?***

A key issue in the investigation is whether there a unique rate of return (rr – the reference rate) that applies to both conventional and Islamic institutions, or do conventional and Islamic institutions have different rrs.

The answer affects the national accounts estimation of production of banking institutions. FISIM (Financial Intermediation Services Indirectly Measured) uses an assumed market rate of return (rr) that is equally available to parties with funds to lend and to parties wishing to borrow funds. (In SNA 2008, rr is referred to as the ‘reference rate’ which is a risk-free, default-free, interest rate, such as a central government bond that has no effective default risk.)

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<sup>24</sup> Alternative reference rates, as suggested in 1993 SNA, could be the interbank lending rate or central bank lending rate.

<sup>25</sup> Calculation of a reference rate, and rates of return for use in calculating the current value of streams of future returns or for estimating impairment over the life of a financial instrument will be among the most challenging issues in integrating Islamic banking into the SNA framework. For example, it has been suggested that use of interest rate derived measures should not be used as a discounting rate for estimating impairment losses. Among suggestions are to divorce rates from “time value of money” concepts, but rather use implicit growth measures drawn from the real economy.

Banks receive deposits in exchange for payments of interest at rates less than  $rr$ , in which the difference reflects an implicit payment by depositors in return for services provided by the bank.

Banks lend funds in exchange for receipt of interest at rates greater than  $rr$ , in which the difference reflects an implicit payment by borrowers for services provided by the bank.

The question the UN asked compilers is whether a single  $rr$  applies to both conventional and Islamic banks (which is the standard used in SNA 2008), or whether conventional and Islamic banks face different  $rr$ 's.

A number of the responses received by the UN preferred using a separate  $rr$  for Islamic banks. Also, some responses indicated that estimated FISIM is significantly different if a separate  $rr$  is used. That is, it matters if FISIM for Islamic banks uses a separate  $rr$  and some countries would prefer doing so.

There are four options how this could work out;

1. Only one unique  $rr$  is recognized, which is the existing treatment in SNA 2008.
2. One unique  $rr$  is recognized, but there should be explicit recognition that the risk profile for Islamic banks differs because of participation of investment account holders (IAH) in investment profit or loss.<sup>26</sup> This section derives results from a variation for Islamic banks on a default adjustment model developed in the U.S. national accounts.
3. Different  $rr$ 's are recognized for conventional and Islamic banks. This section reviews whether the unique characteristics of Islamic finance do in fact have a cumulative effect sufficient to create a separate reference rate.
4. FISIM doesn't really apply to Islamic banks. Does the interest-rate based FISIM concept apply to Islamic finance?

### ***Option 1 - Only one unique $rr$ is recognized***

This is the existing treatment in SNA 2008.

The idea of a common  $rr$  for all banks logically follows because (1) there is likely only one default risk-free rate available in an economy – usually a rate for central bank or treasury

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<sup>26</sup> For example, under 'profit-sharing investment accounts' (PSIA) gains or losses on banks' financings funded by PSIA are shared between the bank and the investment account holder (IAH), based on the types of Islamic instrument used for the financing and agreements between the bank and IAH regarding shares of proceeds.

Such participation is often treated as a fundamental characteristic of Islamic banks, for example in Turkey where they are described as "participation banks."

securities<sup>27</sup>, (2) production of every bank is estimated in the same way, and (3) how can depositors and borrowers face different underlying rate of return opportunities depending on the type of bank they frequent? Thus, per SNA 2008 there should be only a single underlying rate of return in the economy.

**Option 2 - One rr is recognized, but with explicit recognition of different risk profiles for Islamic banks**

Multiple differences in the risk profiles of Islamic banks and conventional banks are cited elsewhere in this paper. Such differences are the reason that the AAOIFI recommends different income statements and balance sheets for Islamic banks and the IFSB prepares a different set of financial soundness indicators for Islamic banks. Option 2 suggests that the differences also should be incorporated into measures of bank production.

Formally, the difference can expressed as a variation of the FISIM model adopted in 2013 by the U.S. Bureau of Economic Analysis.<sup>28</sup> The BEA model focuses on the loan side of the portfolio

$$R^{\text{loan}} = R^{\text{reference}} + S^{\text{loan}} \text{ (implicit services sold to borrowers)}$$

The BEA adjusts to formula to incorporate a “default margin” to reflect that banks implicitly hike their lending rates to reflect default odds (credit worthiness) of different borrowers. That is,  $R^{\text{loan}}$  includes a default margin (D) unrelated to services offered by the bank that is spuriously included in S. The BEA excludes the default margin using a smoothed average of actual loan charge offs.

$$R^{\text{loan}} - D = R^{\text{reference}} + S^{\text{loan}}$$

Estimated bank services S (on the lending side) are reduced<sup>29 30</sup>

$$R^{\text{loan}} - D - R^{\text{reference}} = S^{\text{loan}}$$

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<sup>27</sup> Abstracting from situations in countries where a foreign currency effectively “cocirculates” alongside the national currency. For example, in a cocirculation economy, banks might accept deposits and lend in national currency assets at one rate, or transact in dollars or euros at a rate effectively set in Washington or Frankfurt.

<sup>28</sup> Hood, Kyle. “Measuring the Services of Commercial Banks in the National Income and Product Accounts” *Survey of Current Business*, February 2013. pp. 8-19.

<sup>29</sup> Empirical results from introduction of the default adjustment are substantial, especially in economic crisis periods. *Without default adjustment*, during the GFC period BEA found a 45 percent increase from 2007 to 2011 in bank services purchased by borrowers; *With default adjustment*, service purchases increased only 1 percent over the same period. (ibid. p.13). The default impact will likely be even larger during the current Covid19 crisis period.

<sup>30</sup> The reduction in total purchases of services by borrowers noted in the above footnote, “does not directly affect measures of saving by sector ...because... deductions in interest counted as a payment by borrowers for services are offset by increases in the amount of pure interest paid from borrowers to banks.” (p. 15) That is, borrowers’ default experience is ideally captured in credit-risk based increases in borrowing costs.

*Variation of the model for Islamic banks*

The important variation of this model for Islamic banks is that Investment Account Holders (IAH) can share in losses. That is, based on prior agreement between the bank and IAH and the types of Islamic financial instruments used, D can be divided between the two parties;

$$D = D^{IB} + D^{IAH}$$

Where  $D^{IB}$  is the portion of default incurred by the Islamic bank, and  $D^{IAH}$  is the portion incurred by IAH.

This means that on the funding side of the bank's account  $S^{IAH}$  (bank services purchased by IAH) are affected.

$$R^{\text{deposit}} - D^{IAH} - R^{\text{reference}} = S^{IAH}$$

such that

$$S^{\text{TOTAL}} = S^{IB} + S^{IAH}$$

Thus in summary, under Option 2, estimated FISIM should be adjusted on both sides of the account to reflect the distribution of default experience between the IAH and the bank.

If compilers wish, the model can be extended to also cover the market risk to IAH based on their exposure to varying investment returns on the Islamic banks' financings. That is, the return to IAH is a function of *ex post* financing results of the bank rather than than being based on  $R^{\text{loan}}$ . Specifics calculations to show the share of market risk to IAH is shown in the Option 4 discussion below.

**Option 3 - Different rr's are recognized for conventional and Islamic banks**

As noted above, several respondents to the UN survey stated they prefer use of different rates as supported by empirical work in their countries.

This option implies that Islamic finance has some fundamentally different characteristics from conventional finance that can justify different statistical treatments. Precedence already exists to apply different standards to Islamic banks;

The Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) has a set of accounting standards designed to reflect differences from IFRS conventional accounting standards.

The Islamic Financial Standards Board (IFRB) has a set of prudential indicators (Prudential and Structural Indicators for Islamic Financial Institutions – PSIFIs) that differ from the IMF's Financial Soundness Indicators (FSIs).

The IFSB also compiles aggregate financial accounting statements (sector balance sheets and income statements) of Islamic banks that differ from the IFRS-based financial accounting statements used by the IMF in its FSI program.

Accepting this possibility has some important implications. Using two different measures of  $rr$  will affect statistical output. It matters not just that the numbers will differ, but whether the data generated provide better confidence that the economic characteristics of the economy are better conveyed without distortion from applying the general SNA standard in situations where the SNA standard might not fully apply.

An economic rationale is needed to justify use of different  $rr$ 's.

In its response to the UN survey, the IMF stated that in principle a single rate should be used, unless ‘there is a strong evidence that the risk-free rates are different for the conventional and Islamic systems (e.g. different discount windows and or and lending facilities offered by the central bank)’. (Email from [Storchani@imf.org](mailto:Storchani@imf.org) to [SNA@un.org](mailto:SNA@un.org) 1/8/20)

Jordan’s response indicated that they draw upon the financial statements of the individual institutions to specify an Islamic reference price for Islamic returns separate from the reference interest rate. ([Mahmoud.Abudalou@dos.gov.jo](mailto:Mahmoud.Abudalou@dos.gov.jo) to [SNA@un.org](mailto:SNA@un.org) 12/22/19) The response uses the term “reference price for Islamic returns” in lieu of the term “reference interest rate”. *I recommend that Jordan’s term “reference price for Islamic returns” be adopted if the UN reaches agreement that a separate  $rr$  is needed for Islamic banks.*

Morocco argued that more research is needed in light of empirical evidence from Malaysia, Indonesia, and Palestine that the rate of return for Islamic banks differs from that of conventional banks. ([b.farghsaoui@hcp.ma](mailto:b.farghsaoui@hcp.ma) to [SNA@un.org](mailto:SNA@un.org) 12/25/19)

As an additional argument, elsewhere I describe characteristics of Islamic finance that might form a possible rationale for a separate  $rr$  for Islamic banking.<sup>31</sup>

I argue that among the special features for Islamic finance the joint impact of (1) prohibition on interest and (2) restrictions to engage only in Shariah-compliant activities and transactions will tend to internalize Islamic banking activity within a specific subsector of the general economy. That is, there could be “partial bifurcation”<sup>32</sup> of mixed conventional/Islamic financial systems such that the Islamic activity will be limited *to some extent* to an Islamic finance subsector comprised of entities that seek to deposit in Islamic banks and choose to obtain Shariah-compliant financing. Moreover, the banks themselves will be constrained to use only SC instruments and to transact primarily with other Islamic financial institutions.

Among economic consequences of these influences, the Islamic banking subsector will tend to have banks with different financial structures from conventional banks, more limited access to liquidity, smaller pools of funders and borrowers, which all could make the subsector more subject to economic shocks due to its smaller size and internalized

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<sup>31</sup> Russell Krueger. “*Islamic finance and GCC Economic Integration*” ERF Working Paper No. 1381. December 2019. [erf.org.eg/publications/islamic-finance-and-gcc-economic-integration/](http://erf.org.eg/publications/islamic-finance-and-gcc-economic-integration/)

<sup>32</sup> The bifurcation is not complete - some transactions between the Islamic and conventional bank subsectors will always occur, but to the extent bifurcation exists there can be discernible economic consequences. The degree of bifurcation in any specific country is an empirical issue.

transmission of financial shocks between a limited number of Islamic financial institutions.<sup>33</sup>

Within this subsector, factors that could affect rr are greater accounting and governance costs for Islamic finance, inability to access larger and more liquid interest rate-based markets, or less diverse funding and financing opportunities. As a result, Islamic banks might not face general market rates of return but are limited to returns for specific types of Islamic financial instruments. The extent of possible differences in each country remains to be empirically investigated.

### ***Option 4- FISIM doesn't really apply to Islamic banks***

In contrast to the FISIM calculation which is based on the central role of interest in estimating the production of banks, interest is not accepted as a part of Islamic finance. Islamic finance uses financial instruments that do not receive nor pay interest but define contracts that (1) detail various types of funding of the bank, (2) indicate the manner in which the bank can use the funds to provide financing or make investments, and (3) divide proceeds and losses from the banks' financing between depositors and the bank. This process can derive estimates of bank production directly without reference to interest and the FISIM method, and thus does not require use of rr.

An example of this process was provided by Jordan in its response to the UN questionnaire in which they stated "It is clear that there is a difference in transactions between Islamic financial institutions and commercial banks."

To more concisely paraphrase their argument, 'the principle of dealing in Islamic banks is based on Islamic law that prohibits interest on money, and Islamic financial dealing is based on a contract between the institution and the customer. For example, in a mudarabah contract, account holders (IAH) permit the bank to invest their money. Investors' funds are collected in a pool recorded on the liabilities side of the financial statements in the name of the IAH. A joint investment (either unrestricted or restricted) is made, with no fixed rate of return on these accounts. After the end of the fiscal year, the returns are distributed based on the share of profits from the clients' funds, and these profits are declared in the financial statements (the share of the owners of unrestricted and restricted investment accounts).'

In an example from a Jordanian bank, the distribution of returns on joint investments is divided first into returns on accounts denominated in the Jordanian dinar and accounts in foreign currencies (translated into dinar equivalents). Within each category, the distribution of returns on unrestricted investment accounts is shown below;

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<sup>33</sup> To the extent that bifurcation exists, there are important monetary policy considerations including different policy instruments, regulations, and market institutions. It could also be more challenging to develop institutions that can foster a fully integrated financial sector and support economic development and equitable distribution of economic opportunity.

## Perspectives on Islamic Finance in the National Accounts

<b>Jordan: Distribution of Bank Proceeds between Bank and Investment Account Holders (IAH)</b>	
<b>Item</b>	<b>Explanation</b>
Total	Total Returns
Share into Investment Risk Fund (IRF)	Set at 10% of returns
Share of bank as Mudarib	Payment to bank for expertise and services
Share of bank as a Rab Mal	Share to bank on its invested funds
Share to Unrestricted Investment Accounts	Share to depositors on their invested funds

The Share into Investment Risk Fund (IRF) is set aside to cover losses to IAHs' investments. It is a *de facto* self-financed depository insurance scheme. The IRF is set by Jordanian law at 10% of returns.<sup>34</sup>

The Share of bank as Mudarib is the amount paid to the bank in exchange for its expertise and services investing the deposits. In Jordan, the mudarib's share varied between 45-55 percent of total returns. This is a true bank service that should be recognized as bank production in the national accounts.

Share of bank as a Rab Mal is the amount paid to the bank based on any funds it itself contributes to joint investments.

Share to Unrestricted Investment Accounts is the residual distribution to IAHs

The method described above gives a direct way to estimate production of bank services without use of rr. For those Islamic financial instruments that can be classified within the SNA as deposits, loans, and securities, similar calculations can be made as shown above.

Importantly, this method is feasible. In principle, Islamic banks must undertake detailed accounting of how proceeds should be divided between the bank and the IAH.<sup>35</sup> In some developing and emerging economies the framework for making the estimates is not yet fully in place – wherever the raw material is not yet available the fallback is to use a FISIM-like measure as described under Options 1 through 3.

It is proposed that Option 4 can be described as an alternative concept "Islamic financial intermediation services" (IsFIS) rather than using the interest-based FISIM concept. It would be specific to the types of Islamic financial instruments used in each country that could be considered 'interest like'. No rr is needed in IsFIS. The distinct term "IsFIS" distinguishes the Islamic finance concept from the existing term FISIM.

In contrast to a conventional bank in which receipts and payments of interest provide a handy measure of economic flows suitable to make indirect measures of production, the returns and

<sup>34</sup> This treatment differs from more general AAOIFI advice that recommends that the IRF share be calculated after deducting the share of the bank as Mudarib provider of banking services. That is, AAOIFI (*and this paper*) treat IRF as part of the proceeds to investors. In Jordan's case, the Mudarib share equals about 45-55 percent of gross proceeds, which if the AAOIFI standard were applied would produce an IRF of around 5 percent.

<sup>35</sup> Such accounting can be costly but is needed to deal with the potential complexity of Islamic financial instruments (in contrast to conventional banks that have fungible receipts and payments of interest). The accounting and governance structures needed to ensure proper allocation of proceeds increases costs of Islamic banking relative to conventional banking (by about 10 percent as a rule of thumb).



distributions of Islamic banks must be done on an instrument-by-instrument basis then summed to aggregate totals. The process is fundamentally different – and because of its detailed nature can provide accurate information on rates of return as a derived element, unlike rr.

The compiled results for IsFIS can be expected to differ from the implicit results from the FISIM calculation, which in many countries is based on forcing Islamic financial instruments into IFRS interest-rate based equivalents. Differences in statistical results can be expected, but there is insufficient information at present regarding whether this process results in significant distortions.

If option 4 is adopted, the SNA concept of interest could be broadened into “Interest and Islamic Financial Intermediation Services”, recognizing (1) the differences between interest-based instruments and the Islamic ‘interest-like’ instruments, (2) that a number of compilers have already responded that they prefer a separate calculation for Islamic banks, and (3) that some compilers could object to defining a non-interest based concept within Islamic finance into the definition of interest.

### *Empirical verification*

At this point, there are limited empirical underpinnings to resolve questions raised in the above discussion. For decades the IMF’s monetary statistics and the SNA national accounts measures treated the financial sector without separate information on the Islamic finance component. This was natural because the Islamic sector has only recently grown to significant size, and to their credit the IMF and UN have begun to address statistical treatments. The UN deliberations regarding rr are part of this process, as is the expanded discussion of Islamic deposit takers in the IMF’s 2019 *Compilation Guide on Financial Soundness Indicators*. But these efforts are still early with much additional country coverage and methodology work still needed. *This work can benefit by compiling a specific Islamic finance subsector peer group within each of the major statistical frameworks used by these agencies.*

In mid-2020, the lead in empirical work rests with the IFSB and its program to compile data specifically for the Islamic banking sector – soundness indicators, balance sheets, and income statements. But the IFSB work extends back only the past half decade, with more country coverage still needed along with extension of the work to cover insurance and Islamic capital markets, and with only limited research so far on the behavior of the sector.

An important opportunity to advance empirical understanding rests with a new joint UN/IMF working group looking at treatment of Islamic finance in the SNA and in the balance of payments accounts.

As more empirical information becomes available, statistical decisions can be more soundly based and directed studies can be made to understand how monetary policy, economic development, and financial market innovations are affected.

### **C. Profits distributions to IAH** <sup>36</sup>

This section discusses financial payments of Islamic banks to IAH associated with some of the financial instruments used. Information on types of Islamic financial instruments is provided as guidance on how they might be used in the instrument-by-instrument approach described above. The remuneration situation is complex and statistical calculations of rates of payment can be challenging, but it will be concluded that (1) remuneration on some instruments (especially instruments based on financing of sales) has parallels to interest payments by conventional banks that allows estimation of rate of return type calculations suitable for FISIM calculations, but (2) some instruments offer investment-like returns or generate explicit fee returns for banks that should be excluded from FISIM calculations.

This section concludes that a nuanced treatment is possible in which some types of Islamic bank payments to IAH could have parallel treatment to interest flows, but a broader concept than interest is needed, tentatively called “interest and similar investment returns”. The term “interest and similar investment returns” is intended to be a distinctly broader concept than “interest”, which is an unsatisfactory description of the returns to Islamic financial instruments.

#### *Background*

The rationale to exclude payments by Islamic banks as interest is a religious prohibition of interest based on a dictum that money is only a means of exchange that does not have value except when used productively in investment. Money should not be hoarded nor used to gain more money. In contrast, productive use of money benefits investors and society as a whole. Thus, use of money in a loan or deposit to earn more money with the passage of time is prohibited. By extension, any fixed obligatory payment of income on a deposit or loan is forbidden.

Moreover, if only productive investments are permitted, returns on investments take the form of profits rather interest. For such reasons, it can be argued that payments for investment account-like deposits at Islamic banks do not constitute interest.

In contrast, it is argued here that by applying economic definitions there are conditions in which the payments by Islamic banks on some funding accounts have parallel treatment to interest within an expanded concept of returns on deposits. Moreover, the specific characteristics of certain Islamic financial instruments result in payments flows very similar to interest payments on deposits – for analytical and statistical purposes it is useful to treat these flows as similar to

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<sup>36</sup> This section is largely based on a 2012 note coauthored with Faris Ghazali.

interest paid by conventional banks, that is treating them as “interest and similar investment returns.”

### *Bank funding instruments*

Because Islamic banks are prohibited from accepting interest paying deposits they raise funds through a variety of methods. Depositors/funders of Islamic banks participate in specific Islamic financial instruments that generate income in diverse ways – the remuneration paid to funders is affected by the interplay between the type of funding account chosen and the specific financing instruments used by the bank.

Choices for funders are to use (1) pure deposit accounts that are not permitted to pay any return, (2) Profit Sharing Investment Accounts (PSIA) that share income and losses between depositors and the bank, (3) participate in various sales-based, lease-based, or fee-based financing instruments that can provide fixed repayment flows in the future, or (4) participate in equity ventures. Some Islamic financial instruments have payment flows and characteristics similar to deposits and interest payments in conventional banks.

### True deposits

Amanah and wadiah deposits are safe-keeping or current-account deposits that may not remunerate the depositor. They are based on the principle of safekeeping in trust. The bank is obligated to repay the deposit and cannot promise to pay any profit return.<sup>37</sup> The bank treats the deposit as an obligation and thus has an unambiguous liability to repay principal for statistical purposes.

Because of guaranteed repayment, amanah deposits are often used for saving, operating accounts, and current accounts. Thus they are similar to non-compensated demand deposits placed at banks for safekeeping and for other banking services such as checking and accounting. Without question they provide FISIM-type services.

### Profit Sharing Investment Accounts” (PSIA)

PSIA commingle funds of investors/depositors (IAHs) with the Islamic bank’s own funds to earn income by making productive investments.<sup>38</sup> The income is shared between the IAH and IFI as agreed when the investment is made. The IAHs’ investments are not guaranteed and losses can

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<sup>37</sup> However, IFIs sometimes provide a token return for the savings, but cannot offer the payment up front, cannot cite an indicative return, and must grant the payment at its sole discretion.

<sup>38</sup> Sundararajan in 2006 calculated that Islamic banks raise over 60 percent of their funds through PSIAs. More recent information based on a 2013 survey found that PSIA-type deposits had slipped below 50 percent of funding because of greater use of sales-based fixed profit deposits. (IFSB 2015). The PSIFI data provide country-by-country information on funding by PSIA accounts, which show that the extent of PSIA funding varies widely by country, ranging from up to 3/4s of funding down to only about 1/4 of funding. The PSIFI data also reveal a trend toward greater use of other types of remunerated funding rather than PSIA.

result. The two most commonly used instruments for PSIA accounts are *mudarabah* and *musharakah*.

*Restricted PSIA*s segregate accounts of individual IAHs. The IFI provides asset management investment services, might co-invest as an independent partner, and receives fee income in exchange for its services and expertise and might receive investment income. The investor in the restricted PSIA receives returns based on the type of financial instrument used.

*Unrestricted PSIA*s commingle the IAHs' funds with each other and with the IFI's funds, in the same way as conventional banks handle deposits. Returns paid to IAHs come from the general earnings of the bank.

Islamic banks, like any financial institution, must offer competitive returns in order to attract funds. This applies both to the initial offer of a return in order to attract new funds, but also to actual payments experience over time that can provide confidence to future investors that the bank can produce adequate returns. Some observers hold that Islamic banks must offer at least the general market deposit interest rate plus a small premium because of the risk of loss with PSIA.

The initial offer rate for an unrestricted PSIA must meet multiple conditions – a competitive rate, inability to make promises of specific returns, and legal/ethical requirements to not misrepresent likely returns. This is done by citing an “*indicative rate*” that describes a rate that might be achieved but cannot be promised.<sup>39</sup>

The *income generated and eligible for distribution* to depositors is more complex. In a conventional bank, the overall rate of return of the enterprise can be calculated, with interest paid on deposits treated as an expense. In an Islamic bank, the returns to the IAH and the bank are a form of profits.

- The share earned by depositors needs to be calculated. A variety of financial instruments with different returns, obligations, and fees can be involved, each of which can affect the division of returns between IAHs and the IFI. In cases where funds are effectively fully commingled, a rate of profit might be attributed each month to all IAH outstanding.
- The distribution of income can be affected by several alternative methods to smooth the flow of payments back to depositors.
  - For competitive reasons, IFI owners can forgo part of their own share of profits in order to smooth returns to IAH. This is called “*Displaced commercial risk*” (*DCR*). This can be done directly out of profits (which has been found to be a common form of smoothing) or might be mitigated by drawing funds from special types of reserves (below) created for smoothing purposes.
  - The *Profit Equalization Reserve* (*PER*) sets aside profits for distribution to IAH in order to smooth the returns paid. Funds are set aside from investment profits prior to

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<sup>39</sup> This is sometimes called the expected or anticipated return.

calculating the bank's share of profits and the distribution between IAH and shareholders.<sup>40 41</sup> Because the PER is *allocated before deducting the IFI share*, it in effect has a superior status.

- The *Investment Risk Reserve (IRR)* is set up from the net income of IAH in order to avoid investment losses to IAH. Funding for the IRR is after deducting the IFI's profit share, and thus is solely owned by the IAH. It is typically used to cover losses to IAH capital and not to smooth profits.

Sundararajan (2006) found that the degree of profit sharing is actually quite limited – that is, the returns to depositors are quite stable, as if they emulated payments of interest. His evidence supporting this view included (1) lack of correlation between returns paid to IAH and overall IFI profits, and (2) a significant positive correlation between returns to IAH to the general market rate of return on deposits.

Thus, Islamic banks appear to extensively use the smoothing techniques available to even out the payments back to IAHs. Effectively, this results in most cases in a pattern of profit payments back to IAH similar to payments of interest on deposits by conventional banks.<sup>42</sup> It should be possible to empirically test how closely profits payments to IAH correlate with interest payments on conventional deposits.

### Other Types of Deposits

#### *Wakalah*

In *Wakalah*, the bank acts as an agent for investment of depositor's funds in exchange for a fee, usually in the 1½ to 2 percent range. Potential depositors are offered an indicative return, but if the actual return is lower the depositor will receive only the actual return. Conversely, if the actual return is higher, the bank pays only the indicative return and keeps any excess as an "incentive fee." Because of the possibility of the bank earning this incentive, it will often not charge a fee.

For potential depositors, there is a prospect of receiving an advertised return without paying fees because the bank presumably has incentives to earn more than the advertised return. There is also the possibility that depositors might receive returns less than advertised, but in this case the bank can voluntarily choose to make up the difference out of its own profits

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<sup>40</sup> IFSB (2010) paragraph 20.

<sup>41</sup> Funds for the PER are allocated based on estimated monthly income, or by topping up a desired level of the reserve from annual earnings.

<sup>42</sup> Given the apparent high correlation, there is a case for treating a substantial portion of income paid to IAH as equivalent to interest payments in calculations of financial soundness indicators and other measures of net bank income.

In this case of Wakalah, the returns actually paid to depositors have the essential characteristics parallel to interest paid by conventional banks. The return should be based on the actual payments including contributions from PER, IRR, etc.

### *Murabahah*

Murabahah is a sales contract in which an underlying commodity or service is sold against installment payments on a “cost-plus” basis that includes the cost of the underlying item plus a preagreed profit. Murabahah was originally designed as a trade instrument, but has been adapted to substitute a bank for the trading partner selling the underlying goods. Murabahah is the most common financing instrument, but is also used on the funding side. The installment payments include an “embedded profit” considered as a payment for services such as certifying, holding, transporting, delivering etc. the underlying item; that is, the embedded profit is not considered as a form on interest payment as a return for the monetary value of the underlying item. However, some national officials have concluded that because of competitive pressures returns on murabahah often parallel returns on interest rates.<sup>43</sup> Thus, for statistical purposes, the embedded profit has an implicit rate of return that can be treated similar to interest in conventional banks and is suitable for FISIM estimates.

### *Commodity Murabahah*

Commodity murabahah is a variation of the basic murabahah instrument in which IAH deposit funds at a bank for purchase and resale of commodities<sup>44</sup>, but with cash flows that fund the bank, with funds to be repaid to IAH in installments with an additional embedded profit for the IAH. In particular, the purchase and resale of a commodity is included in the transaction, but this is handled instantaneously which allows the IAH’s funds to be retained by the bank and used for the bank’s own purposes; that funding will be repaid to the IAH in installments that include embedded profit payments to the IAH.

The deferred payment of profit has an implicit rate of return similar to interest in conventional banks. The bank has use of the funds during the life of the contract, thus funding the bank. *Because it is a sale-based transaction, the deposit and the return can be promised up-front and guaranteed – that is, they constitute bank liabilities.*

Commodity murabahah are linked to an underlying commodity transaction, which precludes its use for current accounts, operating accounts, or savings accounts.<sup>45</sup> They thus are not suitable for small deposits and withdrawals, nor for partial withdrawals through ATMs or web-based transactions.

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<sup>43</sup> IFRS Islamic Finance Consultative Group. Summary of meeting 27 March 2018 in Dubai. ¶ 8.

<sup>44</sup> It is common for banks to use deposits received to purchase exchange-traded commodity contracts for metals (such as platinum) as the underlying item.

<sup>45</sup> Commodity murabahah are usually contracted for a specific period, such as a year. However, there is flexibility for the customer to withdraw the deposit early by rebating back to the IFI part of the full profit to term.

It is possible to convert the payment flows into a fixed rate equivalent. For example, if cash of 5000 placed at the bank is repaid to depositors after one year for 5200, the profit of 200 is equivalent to a 4-percent return. Because the deposit amount and profit are effectively guaranteed, it has the same liability-based payments flows as interest-paying deposits at conventional banks.

### Treatment in SNA and Monetary Statistics

#### *Restricted PSIA*

Restricted PSIA appear to be primarily investment vehicles, with returns linked to specific investment agreements between the IAH and Islamic bank. Restricted accounts are often used by sophisticated investors (such as Islamic insurance companies, mutual funds, or high net worth individuals) that understand and accept the inherent investment-type risks.

Until the recent past, per AAOIFI accounting standards, assets within restricted PSIA were treated off-balance sheet, and only the net bank share of the returns on the investment is reported on the bank income statement.<sup>46</sup> It is recommended that returns to restricted PSIA *not* consolidated into the bank's financial accounts should be treated as investment profits, and not parallel to interest.<sup>47</sup>

However, in 2015 AAOIFI Financial Accounting Statement 27 – Investment Accounts ruled that mudarabah accounts in RPSIA can be consolidated into the bank's financial accounts based on the bank's effective control of the accounts.<sup>48</sup> The profit returns on these RPSIA can be treated as parallel to interest, as can be done with profits on UPSIA as described below.

#### *Unrestricted PSIA and other deposits*

##### *New deposits*

For sales-based transactions, data on the actual rate of return for new deposits can be used. This rate is preagreed between the bank and IAH at the time of the contract.

For *new PSIA deposits*, the indicative rate offered can be used as a measure of the expected return on deposits parallel to treatment of interest by conventional banks. A change in

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<sup>46</sup> In cases where national accounting practices consolidate restricted PSIA into the bank's balance sheet, their accounting and statistical treatments are parallel to unrestricted PSIA.

<sup>47</sup> An unresolved question is whether RPSIA accounts should be treated as a collection of financial assets held by households or other macroeconomic sector (corporations, nonresidents, etc.) under the management of the Islamic bank, or whether they might be deemed to be institutional units classified as "Other investment funds". See discussion on investment funds in next section. National practices may differ on this question: Statistical coverage of these assets will differ depending on the treatment decided.

<sup>48</sup> Other types of financial instruments within RPSIA need not be consolidated into the bank's financial accounts.

terminology is recommended. In countries where relevant, a formal term “interest and other returns offered on new deposits” might be used in lieu of simply “interest”.<sup>49</sup>

### Existing deposits

For sales-based transactions, the actual rate of return paid on deposits can be used.

For *existing PSIA deposits*, a measure of actual payments is needed, calculated by actual payments divided by total deposits, or by weighting rates of payments by type of deposit by their outstanding amounts.

Referring back to Table 4, the payments stream should be measured by line 10 “Distributable returns to IAH” (which on an accrual basis are treated as distributed to IAH, subject to reinvestment in a separate transaction) *plus* line 11 “Transfer to Profit Equalization Reserve (PER)” which shows amounts out of current accrued income of IAH transferred into reserves.

In contrast, *on a cash basis* actual payments to IAH can be increased by drawing on PER or IRR reserves built up from earlier returns. The funds withdrawn were previously recorded in the SNA as part of current income, and thus withdrawals should be recorded as transactions in financial assets that make payment, which reduces the IAH claim on the bank.

### Terminology

The discussion above has identified several types of Islamic financial instruments that produce financial flows analogous to interest flows on bank deposits, but it is misleading to refer to the flows as interest for numerous reasons covered above. It is suggested to use the term “interest and similar investment returns” in the SNA and monetary statistics.

### Financing Instruments

Similar rationales can be applied to financing instruments used by Islamic banks.

The table below lists major types of financing instruments used by Islamic banks, drawn from the IFSB’s PSIFI survey, Indicator ST07 – Value of financing by type of Sharī’ah-compliant contract. Classification of returns on several common instruments follows.<sup>50</sup>

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<sup>49</sup> Rates offered for new deposits provide information on the current market conditions and incentives for depositing, including how monetary policy actions might affect banks’ funding decisions. The ECB interest rate statistics, for example, separately cover new accounts.

<sup>50</sup> The names of Islamic financial instruments can vary widely between countries, and specific features can often vary. Statistical compilers will need to review the practices in their own countries to determine best treatments.



## Perspectives on Islamic Finance in the National Accounts

	<b>Instrument</b>	<b>Type of income generated</b>
1	Murābahah	Sales contract - Embedded profit
2	Commodity Murābahah / Tawwaruq	Sales contract - Embedded profit
3	Salam	Sales contract - Embedded profit
4	Istisnā	Sales contract - Embedded profit
5	Bai al Ajel	Sales contract - Embedded profit
6	Ijārah / Ijārah Muntahia Bittamlīk	Leasing/Leasing with delivery
7	Muḍārabah	Profit/Loss sharing
8	Mushārahah	Partnership
9	Diminishing Mushārahah	Partnership
10	Wakālah	Fee
11	Qarḍ Hassan	Nonremunerated benevolent loan
12	Amanah	Nonremunerated deposit
13	Wadiah	Nonremunerated deposit
14	Sukuk	Investment security
15	Participation Term Certificate	Investment security

Among these instruments, items 1 through 5 are sales-based instruments in which predefined profits are embedded in installment payments. Item 6 is a leasing instrument with predefined profits built into the lease payments. For all these instruments, rates of return can be calculated that can be treated similar to interest returns.

Item 7 – Mudarabah – shares gains/losses between the bank and its customer. As noted above in the discussion of unrestricted PSIA, these are investment contracts that often provide smoothed profit returns to investors similar to interest earnings. It is an empirical question what type of return will be experienced in any particular country.

Items 8 and 9 – Musharakah and Diminishing Musharakah are true partnership instruments where investors are fully exposed to volatile investment-like returns.

Item 10 – Wakalah – is a fee-based instrument, in which the party providing funds to a bank pays a fee for the bank to manage the funds. A fee of 2 percent of managed funds is typical. The fee provides direct information on production of the bank. In cases where the bank reduces the applicable fee in exchange for a possible profit on excess return on the investment, the difference between the excess return to the bank less the actual wakalah fee charged the customer can be treated as FISIM.

Items 11 through 13 are types of unremunerated loans and deposits that carry a rate of return of 0%.

*Conclusion* - Many Islamic financial instruments have returns with explicit embedded profits, or that make smoothed payments that are functionally indistinguishable from interest payments by conventional banks. It is proposed that certain Islamic bank payments to IAH could have parallel treatment to interest flows, but should have a broader construct termed “*interest and similar investment returns*”, which is intended to be a related but distinctly broader concept than “*interest*”, which is an unsatisfactory description of the returns on Islamic financial instruments. Estimates of flows and rates on interest and similar investment returns can be commingled within the SNA and Monetary Statistics.<sup>51</sup> But given their special nature, separate *of which* information should be provided on applicable returns on Islamic financial instruments, with notes regarding their distinctive nature.

#### **D. Classification of Islamic finance institutional units**

This section looks at types of Islamic finance institutional units and their sectoral classification. The 2008 SNA rules remain broadly applicable; this section focusses on how the SNA framework could specifically apply to Islamic financial units.

##### *Islamic institutional units*

Institutional units (IUs) are the basic building blocks of the SNA system. IUs are entities capable in their own right of owning assets, incurring liabilities, making decisions on their own behalf, engaging in economic activities with other parties, and having financial accounts or for whom it is feasible to construct accounts. IU's can engage in a range of activities. Each IU has a primary activity which is its most important activity. IUs can also have one or more secondary activities. For example, an Islamic bank with primary activity in retail banking and secondary activities in insurance or selling IT and bookkeeping services will be classified as a bank based on the primary activity.

Common types of Islamic banking units include;

1. Islamic banks domiciled in a country. An Islamic banks can be organized as a standalone bank, subsidiary of a foreign bank, branch of a foreign bank, Islamic window of a conventional bank (described next), or microfinance operation. In principle, each of these should prepare a single consolidated report covering its entire domestic economic activity.
2. Islamic windows of a conventional bank. Conventional banks often organize their Islamic financial activities in a separate sub-unit – subsidiary, branch, division, office, etc.. Shariah-compliance reasons, different types of economic flows, customers' preferences, different regulatory and policy regimes, and different financial accounting standards motivate segregation of the conventional and Islamic banking activities as materially different entities.

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<sup>51</sup> In countries with significantly large Islamic financial sectors, a comparison of returns data for conventional banks and Islamic banks as separate peer groups would be informative. The possibility exists that the Islamic earnings could be negative, but *a priori* there does not seem to be a problem in displaying it in comparison with conventional interest data.

Windows that are registered as subsidiaries of domestic resident conventional banks should be treated as stand-alone Islamic banks unless it is not possible to deconsolidate them from the parent's account. Ideally, windows should be treated as virtual separate institutional units deconsolidated from their parent banks for various statistical purposes. For example, the IFSB's PSIFI program requests separate reporting of windows deconsolidated from the parent conventional bank.<sup>52</sup>

3. Islamic microfinance units. Because of their small size and limited record-keeping, treatment of individual microfinance operations as separate institutional units might be impractical, and thus consideration can be given to using surveys or statistical estimates to impute a "virtual" microfinance institutional subsector covering all operations in a country.
4. Various other financial institutions such as holding companies, ancillary corporations, or SPVs (structured entities) captive to a foreign Islamic bank (discussed below). Per 2008 SNA, which created several new financial institutions subsectors, such units might be separated from their parent and treated in their own right as financial institutional units.

### *Residency*

In the national accounts, Islamic financial institutional units should be classified as resident or nonresident using the 2008 SNA standards.<sup>53</sup>

The SNA "national" statistical framework covers transactions and positions of "residents" of a country; transactions or positions of other countries are "nonresident" and part of the "Rest of the World" (ROW) and external to domestic economic activity. The SNA defines the economic boundaries of countries (which can differ slightly from the political boundaries) to determine whether an economic activity is resident or nonresident.

The SNA-based "Domestic Consolidation" (DC) approach applies to all Islamic institutional units, whatever their legal organization. Transactions and financial positions of the domestic Islamic units with their foreign parents or with their own foreign subsidiaries or branches are treated as with nonresidents.

Islamic banks are residents on the country in which they are located, based on their "center of economic interest" which is where they operate and intend to carry out economic activity for a year or more. For financial institutions this is usually the country in which they register and are

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<sup>52</sup> If windows are deconsolidated, it is feasible to more accurately compile SNA accounts based on specific treatments for various types of Islamic financial instruments. However, it might be impractical to deconsolidate windows with a full set of financial accounts (such as the capital accounts).

<sup>53</sup> In contrast, for financial soundness analysis a cross border residency classification based on supervisory consolidations is sometimes used, as will be briefly discussed in a box at the end of this section.

supervised. At this time, most Islamic banks operate in and are residents of only a single country and thus follow the DC.

**Box – Cross-border consolidations for soundness indicators for Islamic banks**

For macroprudential indicators of the soundness or vulnerabilities of Islamic banks, a cross-border data consolidation is sometimes used. Prudential data are often drawn from supervisory reports that consolidate activity across countries based on the residency of the parent bank in a banking group. Countries compiling the Prudential and Structural Indicators for Islamic Financial Indicators (PSIFIs) promulgated by the IFSB use a variety of residency standards based on supervisory requirements.

Data consolidation based on international financial accounting standards and supervisory reports often use a cross-country (cross-border) consolidation basis. Per Basel bank supervisory rules, the parent bank of a multicountry banking group should prepare a single consolidated financial report covering itself and all its domestic *and* foreign subsidiaries and branches and other operations it might control. Also, per Basel II, “subconsolidated” financial reports can be required for each lower tier of subsidiaries, also on a cross-border basis.

In cases where information is sought on total Islamic financial activity, such as for PSIFIs, *a unique collection of resident Islamic banks and windows might be used that can include some nonresident operations within the consolidated accounts. This can be defined as an Islamic Bank, Cross-Border (IBCB) approach, which is a unique statistical consolidation.*

The first component uses a domestically-controlled, cross-border (DCCB) consolidation of Islamic banks headquartered or incorporated in a country including as relevant cross-border consolidation of lower level units. These data correspond to Basel requirements and are deemed to capture relevant information on the strengths and risks of a banking group, including risks arising in its foreign operations.

A second component includes subsidiaries of foreign banks using a foreign-controlled cross-border (FCCB) consolidation. These units are supervised by authorities of their parent banks’ home countries, but are also legally organized in and affect financial conditions in the host country (country in which they are domiciled) and thus are also monitored and supervised by host country authorities.

A third component covers branches of foreign banks in the country. Supervisors are increasingly imposing local capital and liquidity requirements on branches of foreign banks operating in their country and are collecting more data to allow them to monitor their activities within the country.

*Financial Subsectors*

Islamic banks are part of the financial sector, classified within the SNA subsector “other depository corporations”. Other Islamic financial institutions are classified in the other financial subsectors, as described below.

Financial corporations engage in financial activities and financial services for the market. Traditionally, financial activity was defined as engaging in financial intermediation, which involves raising funds on own account then investing or lending of funds in order to earn income. The 2008 SNA expanded the definition to include financial risk management and liquidity transformation. This expanded financial activity in three ways; lending of funds on own account (which includes money lenders in developing economies) is recognized as a financial intermediation service, Special purpose vehicles (SPVs) can be organized as financial entities classified as financial corporations, and ancillary (captive) financial corporations that provide financial services only to their parent corporation can be treated as financial entities classified based on the type of financial service provided.

The financial sector of 2008 SNA has 9 subdivisions. The expanded classification recognizes that various financial units have play different important roles that should be recognized and that financing is increasingly supplied by nonbank financial institutions.

<b>Financial Corporations Sector</b>
Depository Corporations
Central bank
Other Depository Corporations
Other Financial Corporations
Money Market Mutual Funds
Other Investment Funds
Other Financial Intermediaries
Insurance
Pension Funds
Captive Financial Institutions
Financial Auxiliaries

The financial corporations sector has a major subdivision into Depository Corporations and Other Financial Corporations. Depository Corporations are the main monetary institutions in a country, divided into two subsectors - the Central Bank and Other Depository Corporations (ODCs) which comprises banks and similar institutions.

### *Central bank*

The Central Bank is the official monetary institution of a country with functions such as issuing currency, holding international reserves, conducting international financial policy, conducting monetary policy, and regulating the national banking system. In some countries, central banking functions are split between several institutions, but are treated as a single institutional unit.

2008 SNA expanded the definition of the central bank to include supervisory organizations and financial supervisory authorities (including of Islamic financial units) as core central bank functions. The central bank could also operate financial infrastructure for Islamic financial units

(securities depositories, clearing operations, exchanges, etc.) – some of which could have significant financial assets.

### *Other Depository Corporations (ODCs).*

Banks (conventional and Islamic) are the core of the ODC subsector, which is central to a country's monetary and banking system. An ODC is a financial intermediary with deposit liabilities or close substitutes for deposits that are classified as part of the national definition of broad money.<sup>54</sup>

The Islamic banking subsector includes all Islamic banks and windows classified as ODCs under IMF definitions (which in effect treats unrestricted PSIA as equivalent to retail deposits at conventional banks). Islamic banks can be central to a country's monetary system, issue current account and safe keeping deposits, provide PSIA to the public that functionally compete with conventional deposits, and carry out basic banking services by acting as intermediaries to accept funds from the public and extend financing. Islamic banks might also be part of the official monetary policy system of a country and participate in interbank markets.

### *Investment Funds (Islamic Collective Investment Schemes – ICISs), divided into Money Market Mutual Funds (MMMMF) and Other Investment Funds*

Many types of investment funds exist: Money Market Mutual Funds (MMMMFs) are those with liabilities included within the national definition of broad money (for example, liabilities similar to transferrable and sight deposits at banks); All investment funds not classified as MMMFs are Other Investment Funds. The IFSB has concluded that the best name for an Islamic investment fund is “Islamic Collective Investment Scheme” (ICIS).

An investment fund receives and pools capital from investors who have equity shares in the common pool of assets, manages the funds to generate income (interest, trading profits, capital gains, etc.), is compensated as the manager through service fees or portions of profits or other gains), then distributes the income or losses to the investors based on their shares. Investment funds can be an important alternative credit channel to banks, and are often called “shadow banks”. Their investment strategies can parallel those of banks, some offer share accounts similar to regular bank deposit accounts, and in some countries they can participate in official payments or deposit insurance facilities. Although investment funds can perform many banking type functions, they are often more flexible than banks in investment strategy and might offer higher

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<sup>54</sup> Broad money, per the IMF's *Monetary and Financial Statistics Manual*, is a measure of cash and liabilities of depository corporations to the domestic public that have high liquidity and capital certainty and are empirically related to general domestic economic activity and prices. The definition of broad money has steadily expanded in recent decades to include cash, current account or transferrable deposits, circulating or negotiable instruments used as means of payment, savings deposits that can be withdrawn and used for payments and a wide range of financial instruments that have acquired characteristics of money. Islamic banks can effectively undertake all these functions, although some instruments do not have capital certainty

returns because they do not have as strict capital and other regulatory restrictions as conventional banks.<sup>55</sup>

Investment funds are collective arrangements that differ from fiduciary or custodial arrangements in which a manager acts as agent for an individual investor. Investment funds can be established as separate legal entities or on a contractual basis, but always have a set of accounts separate from entities that manage them. A firm might offer many different investment funds to attract different types of investors, but each fund is treated as a separate institutional unit because they will have different investors, pools of assets, investment strategies, liquidity, fee structures, and methods of distribution to investors.

Investment funds do not have the same financial structure as banks – the funds are owned by the pool of investors and are managed as a pool. Managers of the fund charge fees which can be fixed or variable. Returns can vary depending on type of assets held by fund – interest, dividends, commodity prices, capital gains, exchange rates, etc., but distributions to investors will often be in the form of dividends. Repayment of capital contributions and earning is not a capital certain liability, unlike the deposit and accrued interest liabilities of conventional banks.

The classification of investment funds as MMMFs or other investment funds is based on assets and financial flows characteristics of each fund. Data must be collected on each fund for this purpose.

### Money Market Mutual Funds (MMMMF)

MMMMFs are a specific type of investment fund with monetary characteristics that justify their classification as a separate subsector. A survey undertaken for the IFSB concluded that about one-third of known Islamic investment funds are money market funds, often established to provide a capital certain harbor for placement of Islamic funds.

A high degree of capital certainty is a key feature of MMMFs, based on a fund's strategy of investing in liquid instruments with nearly constant value. Funds without a high degree of capital certainty are not classified as MMMFs.<sup>56</sup>

MMMMFs are considered monetary institutions because they meet several characteristics.

- Provide fund shares similar to bank deposits that the public treats as deposit substitutes
- Offer “capital certainty” - protection of the asset value of the shares
- Offer interest-like returns similar to deposits (Islamic MMMFs typically provide unremunerated capital certain accounts similar to zero-interest current accounts at conventional banks)
- Some offer transferrable deposits usable for payments to third parties

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<sup>55</sup> NonMMMMF investment funds are not subject to Basel risk-weighted capital adequacy rules for banks, and thus are freer to invest in riskier projects.

<sup>56</sup> For example, in the Euro Area every investment fund is subject to statistical tests of their capital certainty – those with 10 percent or higher equity components are classified as other investment funds.

- Funds might be available immediately, such as with sight deposits

Islamic investment funds (which are constrained to invest solely in Shariah-compliant instruments) can be classified as MMMFs if (1) indicative returns (returns indicated by Islamic banks as likely but not guaranteed) are similar to conventional deposit rates, (2) they offer investors high liquidity, and (3) have smoothed distributions to investment account holders (IAH) with rates similar to transferrable deposits or money market instruments.

### Other Investment Funds

This subsector includes all Islamic investment funds other than MMMFs.

Other investment funds could be common in Islamic finance with its emphasis on investment in trading, commercial ventures, project development, and real estate, etc. Islamic investment funds must follow Shariah investment standards and could invest directly in Shariah-complaint ventures or purchase sukuk or other Islamic financial instruments.

Restricted PSIA can be classified as Other Investment Funds if they are organized as separate entities and not consolidated into the financial accounts of their managing Islamic bank.<sup>57</sup>

Shariah-compliant hedge funds should be recorded in this subsector. Hedge funds are a special type of investment fund limited to sophisticated investors and usually not subject to strict regulation because of that limitation. They invest in a wide range of assets, but tend to be speculative or are designed to “hedge” volatile price movements.

### *Other Financial Intermediaries (OFIs)*

This is a catch all category of types of financial intermediaries, including Islamic firms, not otherwise enumerated in other financial subsectors – enumerated firms include ODCs, insurance firms, pension funds, financial captives, and financial auxiliaries. Many different types of OFIs exist that provide a diverse range of financial instruments or services, some for specialized niche markets. 2008 SNA narrowed the definition of this subsector by reclassifying some units into new subsectors for MMMFs, Other Investment Funds, and Captive Financial Intermediaries (including money lenders).

In contrast to ODCs that receive some portion of their funding from deposits that are part of Broad Money, OFIs receive funding from long-term or specialized deposits not part of Broad Money, securities, equity investments or shares, or funds provided by parents.

Common types of OFIs are investment banks, finance companies, financial leasing companies, specialized financial intermediaries such as factors or export finance companies, securities underwriters and dealers, venture capital firms, pawn shops, e-money corporations, and many

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<sup>57</sup> Per AAOIFI, mudarabah accounts within RPSIA should be consolidated into their parent bank’s accounts if they are effectively controlled by the bank. The current extent of application of this rule is unknown, but it parallels recent IFRS rules for investment accounts and thus it can be expected to be increasingly applied.



more types. Centralized Clearing Houses that take intervening positions in over-the-counter derivatives transactions are explicitly defined as financial intermediaries classified as OFIs.

Among Islamic OFI categories are finance companies that provide murabahah or bai ajel installment sales, and investment banks or leasing companies that provide longer term construction, Istisna, or Ijara financing funded through sukuks or longer-term deposits. Haj funds that receive long-term deposits in order to finance future trips are OFIs.

### *Insurance<sup>58</sup> (Takaful and Retakaful)*

This subsector includes corporations, quasi-corporations, and mutual organizations that provide life, accident, health, fire, and other insurance services. Insurance companies take premium payments from policyholders and agree to make benefits payments when an insured event occurs. Islamic insurance (takaful), which is growing fairly rapidly in some countries, is included in this subsector.

Reinsurance companies (retakaful) and exchanges that insure the risks of other insurance companies are also included.

2008 SNA also includes Standardized Loan Guarantees as a form of nonlife insurance to cover expected defaults in a portfolio. It is unknown whether any standardized loan guarantee units exist in Islamic finance.

### *Pension Funds*

Pension funds provide benefits for retirement or disability. Pensions can be offered by separately organized firms or by employers. This subsector includes only units that are “autonomous” – separate from the unit that creates them. “Nonautonomous” funds are classified as part of the employer who created them. Social security pension plans are part of government.

The finances of pension funds parallel those of life insurance companies, receiving funds to build reserves to make payments for future claims. Per 2008 SNA, an enforceable pension liability exists even if it has not been funded. As enforceable contracts, pensions are assets of households and liabilities of the pension fund or employer offering the pension.

Islamic pension funds are classified in this subsector, with many apparently integrated into takaful companies. Currently, there are a relatively few Islamic pension funds, partly because of a limited pool of long-term Shariah-compliant investments, such as in sukuks or shares of companies engaged fully in Shariah-compliant activities. However, several countries are working to build markets for the types of assets that can support growth of Islamic pension funds.

### *Captive Financial Institutions and Money Lenders*

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<sup>58</sup> Prior to 2008 SNA, insurance and pension funds were combined into a single category, but pension funds were reclassified into a separate subsector because the structure of their accounts differs from insurance firms.

2008 SNA expands the definition of the financial sector to cover units that provide financial services as “captive” only to a single financial entity or closely related group of companies. Captives do not have market-based transactions with their parent – either their assets or liabilities are transacted only with their parent. Prior to 2008 SNA, financial arms of parent corporations were called ancillary corporations and consolidated into the parent corporation, including into nonfinancial corporations. In the new definition, financial arms that operate as separate entities – including in foreign countries – can be classified within the financial sector.

Units that could be treated as captives include; Trusts, estates, and brass plate companies; Holding companies; SPVs (structured entities) that raise funds in open markets for their parent; Money lenders; Pawn shops; Firms lending funds received from a sponsor such as government or nonprofit institution; and Sovereign Wealth Funds.

SPVs are of special interest in this group. 2008 SNA defines SPVs as financial entities without employees or nonfinancial assets owned by or affiliated with other units and which are often set up in different countries for tax or legal reasons. SPVs have been used to securitize assets off of a bank’s books, shift credit risk by bundling assets with derivatives or guarantees, or shift insurance or reinsurance obligations. A SPV potentially relevant for Islamic finance securitizes bank’s holdings of Shariah-compliant financing by issuing securities to fund purchase of the financings. Also, a type of Islamic financial unit that might fall into this classification are separate financing arms set up in offshore centers or International Finance Centers to issue sukuks in the name of their parent. SPVs have also been set up in conjunction with sovereign or official infrastructure sukuks, but they should be classified as separate financial captive units only if they are effectively separate from their parent.

Money lenders, which are important in many developing countries, could provide Shariah-compliant funds.

Holding companies are treated as captive financial institutions. 2008 SNA changed the treatment of holding companies to classify as captives companies that only hold financial assets and do not exercise management control over subsidiaries. Prior to that, holding companies were classified according to the main activities of the group they own. For bank holding companies, this change moves the SNA treatment away from the Basel supervisory consolidation that includes bank holding companies within the consolidation for capital adequacy purposes because the parent holding company parent bears entrepreneurial risk for the banking group. Whether the new SNA treatment is applied to any Islamic bank holding companies is unknown, but this structure might be suitable for cross-border holdings of Islamic financial units.

Sovereign Wealth Funds funded by governments, central banks, or extractive industries to hold and invest financial assets including Shariah compliant assets for future beneficiaries are separate entities that are treated as financial captives.

### *Financial Auxiliaries*

Financial auxiliaries are units that are not directly engaged in financial intermediation, but which provide closely related services. Many are financial infrastructure companies including

brokerages, exchanges, clearing houses, securities depositories, collateral agents, and asset management companies resolving financial crisis situations, etc.. Nonprofit institutions serving the financial sector are classified here.

Several countries (including some predominantly nonMoslem countries) are seeking to establish themselves as centers for Islamic finance, either as part of their general financial markets or in separately established International Financial Centers. Financial infrastructure specifically designed for Islamic financial instruments (exchanges, depositories, credit bureaus, etc.) set up in such centers should be classified here. However, units that act as intermediaries (such as Centralized Clearing Houses that take intervening positions in over-the-counter derivatives) are not financial auxiliaries and should be classified in other financial subsectors.

Head offices actively manage units under their ownership or control. Thus, head offices produce services that should be recognized in the SNA and allocated according to the principal activities of the group they control; thus they can be classified within either the nonfinancial or financial sectors. If most of subsidiaries are in the financial sector, 2008 SNA classifies the head office as a financial auxiliary. However, this note recommends that whenever feasible they should be classified within specific financial subsectors, most likely in banking or insurance. This structure might be suitable for head offices controlling cross-border Islamic financial units. Head offices could have substantial own financial assets, and metadata should note how they are classified.<sup>59</sup>

### **E. Islamic and Conventional Banking Peer Groups**

The analysis of the role of Islamic banking within an economy can be facilitated by construction of separate peer groups for Islamic banks and Conventional banks.

#### *Implicit comparison of peer groups*

With the recent development by the IFSB of macrostatistics on Islamic banking soundness indicators, income statements, and balance sheets, it has become possible to make broad comparisons of activity of the separate Islamic and conventional banking peer groups by comparing indicators for Islamic banks against indicators for the entire banking sector. For example, if Islamic banks are shown to have low holdings of government securities compared to the average overall sector holdings, it can be inferred that the conventional banks have higher rates of holding. Such comparisons are possible for many different indicators, which can provide valuable information about the structure of the banking sector, the relative performance of Islamic and conventional banks, and potential differences in policy responses of the two subsectors.

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<sup>59</sup> 2008 SNA distinguishes between head offices and holding companies, which are entities that own subsidiary units but do not exercise active control over the subsidiaries. Thus, holding companies are considered financial in nature and are classified as captive financial institutions. In practice, distinguishing between head offices and holding companies can be challenging, and the possibility exists that the entity could change activities over time. Key factors in the classification should be noted in metadata.

Constructing peer group income statements and balance sheets

Frameworks included in the revised IMF *FSI Compilation Guide* and the revised IFSB *PSIFI Compilation Guide* provide more a precise method to compile peer group income statements and balance sheets. These accounts can provide information useful for compiling the national accounts (and especially financial accounts – i.e. flow of funds – information) although they lack the full detail needed for the national accounts and are not compiled following 2008 SNA standards.

This method compiles separate peer groups by summing data for all Islamic banks into one group and all conventional banks into a second group, which allows the indicators and financial accounts for the two groups to be directly compared.<sup>60</sup> This allows a clean picture of activity and soundness conditions in both sectors and permits valid comparisons. For example, a direct comparison of Islamic and conventional banks would generate separate earnings ratios, which could provide indications of their relative abilities to withstand macroeconomic shocks, build capital, or support economic expansion. Or direct comparisons could be made to the responsiveness of each sector to monetary policy initiatives.

Table 5 below lays out the frameworks that can be used to compile the peer groups. The leftmost column includes mnemonic terms for each of the frameworks to facilitate the discussion below.

<b>Table 5 – Frameworks for Compiling Conventional and Islamic Banking Peer Groups</b>			
<b>Source</b>	<b>Description</b>	<b>Coverage</b>	<b>Purpose</b>
<i>FSI Guide</i> Chapter 5 Table 5.1 <b>“FSI framework”</b>	Income statement and balance sheet for Deposit Takers	All conventional and Islamic banking institutions,	Overarching framework for compilation of FSIs
<i>FSI Guide</i> Chapter 7 Annex 7.3 “Islamic Deposit Takers (IDTs) and FSIs” <b>“IDT framework”</b>	Accounts for Islamic Deposit Takers. Uses IFSB terminology within the <i>FSI Guide</i> Table 5.1 framework above	Islamic Deposit Takers only	Guidance on compilation of FSIs for IDTs
<i>PSIFI Guide</i> Chapter 5 Detailed Financial Statements (DFS) Tables 5.1 and 5.2 <b>“DFS framework”</b>	Income statement and balance sheet for Islamic banks	Islamic Deposit Takers only	Framework for compilation of PSIFIs.

<sup>60</sup> Also, imbalances in interbank positions within each peer group might provide information on transactions and positions between the two groups.

The frameworks were developed in the course of work by the IMF and IFSB to construct financial soundness indicators. As work progressed, needs were recognized for more detailed information on the structure of the sector's income statement and balance sheet to better understand how the indicators related to the overall financial accounts and the interaction of the banking sector with other macroeconomic sectors. Also, the IMF discovered that major improvements in the quality of indicators resulted from compiling FSIs using data drawn directly from balanced financial accounts.

An extended effort has been taken by the IFSB and IMF to bridge between the accounts above. The FSI framework was developed first and subsequently the DFS framework was designed to parallel the FSI framework to the extent possible, with adjustments as needed to reflect unique aspects of Islamic finance. In recent years, the IMF has increasingly focused on the role of Islamic finance and supported work on it in the revision of the *FSI Compilation Guide*, which included development of a new Annex on Islamic Deposit Takers that provides guidance to compilers on how to handle Islamic banking in compiling FSIs. That Annex explicitly attempted to bridge between the DFS framework and the FSI framework by using the DFS terminology and aggregates within the FSI framework.<sup>61</sup> Specifically, the Annex covers only Islamic banking institutions and uses DFS terminology whenever possible in order to facilitate understanding of how DFS items fit into the FSI framework and to guide FSI compilers in classification of Islamic financial instruments. The Annex covers the income statement and balance sheet for the Islamic banking sector but *uses the FSI framework structure*. The three frameworks permit construction of peer groups because each uses aggregated data (not consolidated data), so that full information on transactions and positions is preserved and the underlying data can be added or subtracted as desired.

The compilation of peer groups is done in several steps;

The FSI framework based data are compiled first, encompassing both conventional and Islamic banks, but with the Islamic component not separately identified. A majority of countries now compile the FSI framework accounts.

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<sup>61</sup> A 2017 IMF statement "*Ensuring Financial Stability in Countries with Islamic Banking*" describes the increased IMF need to better understand Islamic finance and how it can affect policy

"For analytical purposes, it is *recommended that countries with dual banking systems compile separate aggregate data for Islamic banks*, in addition to standard monetary statistics, to allow monitoring of specific indicators for the Islamic banking system such as growth in financing and sources of funding. Furthermore, guidance is also being developed for compilers of FSIs in countries with Islamic financial institutions in the context of updating the IMF's *FSI Compilation Guide*."

Next, data for Islamic banks should be put into the IDT framework. This can be done by either separately collecting data for Islamic banks and compiling the IDT framework directly, or by taking data from the DFS framework and slotting it into the IDT framework,<sup>62</sup>

Because the IDT framework data are compiled using the FSI framework format and because the data in both are additive in nature, the Islamic banking data compiled in accordance with the IDT framework can be subtracted from the FSI framework to generate data covering only conventional banks.

Once the separate peer groups are compiled, their data can be used for constructing parallel soundness indicators, national accounts, or other analysis as needed.

Conclusion – Compilation of the two peer groups is justified because the two peer groups are directly relevant for analysis of financial soundness conditions, provide abundant information on industry structure, are useful for supervisory purposes, contribute to economic and financial modeling, facilitate international comparisons, and can be used for international surveillance. Once the peer group data are available for a sample of larger countries, they are likely to be widely used. The frameworks themselves could become international standard templates for information on the banking sector.

Specific application of the frameworks for national accounts purposes is likely to follow. The national accounts compilers will need more detail, a specific national residency definition of the accounts, and more information on rates of return, among other needs. Although this work could be substantial, a clear roadmap should be available on steps to take.

### **F. Structural Indicators of Islamic Banking (PSIFIs)**

In sharp contrast to the decades long compilation of national accounts and monetary statistics data on conventional banks, systematic compilation of statistics on Islamic banking is only a few years old and is still evolving. Data were previously unavailable because Islamic banks were indistinguishably intermixed within data covering the entire banking sector.

The Islamic Financial Services Board (IFSB) headquartered in Kuala Lumpur, Malaysia beginning in 2014 began compilation of Prudential and Structural Indicators of Islamic Financial Institutions (PSIFIs)<sup>63</sup> that cover;

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<sup>62</sup> At present, national statisticians must handle the Islamic banks when preparing FSIs, so direct compilation of their data is possible. However, as the DFS framework becomes more widely used, bridging from it into the IDT framework could become more common.

<sup>63</sup> PSIFIs are published on the IFSB website ([ifsb.org](http://ifsb.org) and <http://psifi.ifsb.org>).

*Prudential indicators (PIFIs).* The PIFIs cover the strengths or vulnerabilities of Islamic banking *systems* (as opposed to individual banks). PIFIs are mostly supervisory ratios<sup>64</sup> that largely parallel the IMF's Financial Soundness Indicators (FSIs) but with customization to the specific instruments and methods used in Islamic finance. PIFIs and FSIs generally have a financial supervisory focus and apply some concepts (definition of capital, liquidity, statistical consolidations, residency, and more) that differ from those used in the SNA.

*Structural indicators (SIFIs),* SIFIs cover the size and structure of the Islamic banking sector, including the balance sheet, income statement, and types of financial instruments used by Islamic banks to fund themselves and extend financing. These data track the growth of Islamic banking and its evolution. These data often draw on features of the SNA.

Both PIFIs and SIFIs are compiled separately for Islamic banks and for Islamic windows of conventional banks (which are treated like deconsolidated institutional units from their parent bank). However, in some cases, the windows data are not available or are incomplete.

As seen below in Box 1 – Structural Indicators for Islamic Banks, structural data cover basic information about the size and structure of the Islamic banking sector. These data are sufficient to understand the development of the sector and its role within the banking system of a country. Also, by translating structural data into a common currency (U.S. dollar or SDR) data for countries can be added to estimate the global size and growth of Islamic banking.

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<sup>64</sup> For example, ratios such as nonperforming loans to Basel regulatory capital, liquid assets to short-term liabilities, return on assets, or large exposures to regulatory capital. Many of these macroprudential indicators parallel indicators used by banking supervisors to monitor the condition of individual banks.

<b>Box 1 – Structural Indicators for Islamic Banks (SIFI)</b>	
<b>Number of Islamic banks</b>	
	Number of domestic branch offices
	Number of ATMs
<b>Number of employees</b>	
<b>Total assets</b>	
	Total <i>Sharī`ah</i> -compliant financing (excluding interbank financing)
	<i>Sukūk</i> holdings
	Other <i>Sharī`ah</i> -compliant securities
	Interbank financing
	All other assets
<b>Total funding/liabilities and equities</b>	
	Profit-sharing investment accounts (PSIA)
	Other remunerative funding ( <i>Murābahah</i> , Commodity <i>Murābahah</i> etc.)
	Nonremunerative funding (current account, <i>Wadī`ah</i> )
	<i>Sukūk</i> issued
	Other <i>Sharī`ah</i> -compliant securities issued
	Interbank funding / liabilities
	All other liabilities
	Capital and reserves
<b>Total revenues</b>	
	Financing based
	Investment based ( <i>Sukūk</i> , other <i>Sharī`ah</i> -compliant securities etc.)
	Fee based
	Other
<b>Earnings before taxes and <i>Zakat</i></b>	
<b>Value (or percentage) of financing by type of <i>Sharī`ah</i>-compliant contract</b>	
<b>Assets held by domestic systemically important Islamic banks (D-SIBs)</b>	

Structural indicators are based on financial accounts data, such as balance sheets or income statements, like those used for compilation of national accounts statistics. As such, there is potential to compare the Islamic banking sector against the full national banking sector, or make direct comparisons by constructing separate peer groups for Islamic banks and conventional banks. Over time, numerous SIFIs are expected to be increasingly replaced by the DFS data.

Complicating such comparisons is that the IFSB data use a supervisory consolidation that can be cross country, in contrast to the domestic consolidation used by the SNA. However, at this point,



because most Islamic banks operate only within their headquarters country, they are *de facto* on the SNA domestic consolidation basis and thus direct comparisons (and aggregation to national totals) are feasible. There are exceptions and multicountry Islamic banking organizations will increase in the future, which might ultimately require a shift to formally adopt the SNA type consolidation, but in most countries with Islamic banking that step is not yet needed.

The IFSB has just begun to collect the DFS balance sheets and income statements for the Islamic banking systems, following the practice of the IMF's FSI program. The statements themselves will be diverse because countries follow different accounting standards (IFRS, national GAAP, AAOIFI, with each at different stages of adoption), which is an endemic problem in compiling data on Islamic banking. However, the detailed accounts within each country will provide a good presentation of the structure of the sector, and provide a basis for systematic extraction of information usable in the SNA.

Over time, it is hoped that the IMF monetary statistics and FSI data sets will compile separate peer group data for Islamic banks in light of their material differences from conventional banks and increased systemic importance in a number of countries.

### **E. Summing Up and Steps Ahead**

This note reviews some aspects of how to represent Islamic banking within the SNA. Islamic banking has grown rapidly during the past two decades and there is recognition that the the SNA should address its unique features, focussed in an effort by the UN Statistics Division. In the meantime, without specific compilation guidance, countries are for the most part treating Islamic banks as if they are conventional banks, creating dangers of biased results and lack of comparability between countries. Information about an important structural feature of the financial systems of many emerging and developing countries is not now being compiled.

This note has explored how several Islamic banking activities might be treated in the SNA, but recommendations here will not be the last word. The topics are complex and several actions might be undertaken to move forward, as suggested below.

- Information on national practices in compiling statistics on Islamic banks should be gathered. This can guide future research, reveal gaps, identify feasible approaches, and build a database of what is known about Islamic banking. This information will also support future consultations and institution building efforts of the IMF, World Bank, Islamic Development Bank, SESRIC, and regional organizations such as the GCC Statistical Office.
- To support development of high-quality, internationally comparable statistical systems, and support their oversight functions, the IMF, UN and its regional offices, Gulf Monetary Council, and Gulfstat can initiate statistical methodology work on Islamic banking and finance. Outreach and training to national compilers is an urgent need. The IFSB has a similar role to play in order to enhance the quality and comparability of its

structural indicators and promote compilation of the DFS income statements and balance sheets.

- More work is needed to standardize the names of Islamic financial instruments and define their economic flows. The IFSB has advanced this work in conjunction with its PSIFI data collection; the Malaysian Financial Reporting Standards use an instrument-by-instrument approach to construct financial reports that provides some useful guidance; and regional bodies (GCC or Arab Committee on Banking Supervision, etc.) should promote such standardization to facilitate their oversight. However, countries use different instruments (or similar instruments with different names) – this part of the process is likely to be lengthy and pains-taking.
- Continuing deliberations are needed on how to describe the returns on Islamic financial instruments because interest is not a permitted concept in Islamic finance and distortions in economic meaning can result from interpreting Islamic returns as interest when it is inappropriate. This paper suggests the term “*interest and similar investment returns*” can comprehend both conventional and Islamic practices; the IMF Annex 7.4 says “for FSI purposes, the term adopted to distinguish the returns on Islamic instruments from conventional interest is “financing and investment income.” How this issue will be resolved is unclear.
- Work is needed to build data transmission platforms (such as Excel, SDMX, or XBRL) for Islamic finance data and their integration into data storage and dissemination systems. Discussions have been held between the IFSB and IMF to use SDMX to receive and disseminate financial soundness data, but at the time of writing this work had not progressed. Part of such initiatives should be creation of Data Structure Definitions (DSD) that describe all the data series and their attributes, which potentially can result in more standard definitions of Islamic financial instruments. This work can importantly contribute to greater international comparability of information on Islamic finance, greater *de facto* standardization of terms and instruments, and increased public understanding what it is all about.
- Work should be forward-looking to consider development of frameworks for nonbank Islamic financial institutions and Islamic securities markets. The IFSB is again in the lead in such work, with recently launched data collections for Islamic insurance (takaful) and for Islamic Capital Markets - ICM (such as sukuk). This work will need to address blurry lines between banking, investment funds, and capital investment because of the participatory nature of funding of Islamic financial institutions. Also, coverage of securities markets implies greater country coverage than for banking, with a priority in the EU, UK, and financial centers such as Kuala Lumpur, Hong Kong, Luxembourg, Singapore, and Dubai, among others.

## Perspectives on Islamic Finance in the National Accounts

- Statistical coverage of financial inclusion (microfinance) deserves a special initiative, in light of its direct impact on hundreds of millions of people.
- Sovereign Wealth Funds are likely major holders of Islamic financial instruments and could also make direct investments. The public and international oversight of SWFs<sup>65</sup> should comprehend information on Islamic finance in light of the unique income and risk profiles involved, and in consideration of their role in structural development of the Islamic finance sector.

The international framework for monitoring securities activity can explicitly begin collecting information on Islamic financial instruments – at present, such issues are routinely collected within centralized securities data bases but without explicit identification of the Shariah-compliant issues. A comparatively easy step that securities data bases request and separately code information on whether issues are Shariah-compliant could greatly improve understanding of Islamic capital markets.

- The UN must continue work on its project on Islamic finance in the national accounts, of which the 2017 meeting in Beirut was a critical foundation step, and work has continued since. Further investigations stemming from the current discussions of treatment are bearing fruit and need to continue.
- Also, statistical work must be dovetailed with the rapidly increasing work at the IMF, BIS, and elsewhere on the role of Islamic finance in policy, surveillance, and financial stability. Much of this work relates to financial stability analysis and supervisory needs, or granular analysis of microdata and systemic importance of individual institutions, but there can be expected to be many interactions between statistical requirements in these areas and the macroeconomic statistical work for the national accounts.
- The International Association for Research on Income and Wealth (IARIW) – as the academic collaborator on SNA methodology research – should take under its wing this frontier methodology work.

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<sup>65</sup> The decision of SNA 2009 to treat SWFs as “financial captives” within the financial sector in effect shines a statistical searchlight on them that highlights their important role within financial systems. In effect, their priority in efforts to improve statistical frameworks has been elevated.

**References:**

Hood, Kyle. “Measuring the Services of Commercial Banks in the National Income and Product Accounts” *Survey of Current Business*, February 2013. pp. 8-19.

International Monetary Fund. Statistics Department. *Compilation Guide for Financial Soundness Indicators - FSIs*. 2019.

Islamic Financial Services Board. *Islamic Financial Services Industry Stability Report 2015*. 2016.

Islamic Financial Services Board. *Compilation Guide for Prudential and Structural Indicators for Islamic Financial Institutions – PSIFIs*. 2019

Krueger, Russell. “Islamic finance and GCC Economic Integration” ERF Working Paper No. 1381. December 2019. [erf.org.eg/publications/islamic-finance-and-gcc-economic-integration/](http://erf.org.eg/publications/islamic-finance-and-gcc-economic-integration/)

United Nations Statistical Office. *System of National Accounts 2008*.

Sundararajan, V. “Risk Measurement and Disclosure in Islamic Finance and the Implications of Profit Sharing Investment Accounts,” *Islamicbanker.com*. May 22, 2006