



Some Notes on Islamic Finance in the National Accounts

Russell C Krueger (International Monetary Fund – Retired)

Paper prepared for the 34th IARIW General Conference

Dresden, Germany, August 21-27, 2016

Session 7A: Accounting for Finance in the Economy and the SNA I

Time: Friday, August 26, 2016 [Morning]

Some Notes on Islamic Finance in the National Accounts

IARIW 2016, Dresden Germany

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, Asia, and Africa, where it provides banking services mostly to Moslems and to several governments and central banks in countries where Islamic finance has official or semi-official status.

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. The SNA has not provided guidance to national compilers on methods to compile national accounts statistics for Islamic banking and finance. This paper is an initial exploration of how Islamic finance should be handled in the SNA. This paper can only be a starting point toward what ultimately should be a systematic international review – review that could involve some difficult decision points.

Important differences exist between conventional and Islamic finance. Islamic finance must follow certain Moslem “Shariah” legal standards, hence it is often called “Shariah-compliant”, or “SC”. There are several different schools of Islamic finance, but certain general principles are;

Prohibition on payment of interest or other fixed returns on investments,

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 are not funded by conventional deposit accounts; they are funded mostly by accounts in which returns or losses are shared between the bank and the depositor/investor – these are called profit-sharing investment accounts (PSIA) and the depositors 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,

Use of specific types of specific Islamic instruments with 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 differ significantly from those of conventional banks. Separate sets of standards have developed for Islamic finance including accounting standards promulgated by the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) in Bahrain and bank supervision 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. This paper makes a first attempt 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) 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. Classification of Islamic finance institutional units
- E. Structural Indicators of Islamic Banking
- F. Summing Up

These provide some the elements of a comprehensive investigation of Islamic banking and other Islamic financial subsectors in the SNA – this paper is a first step that hopefully will help define a productive path for work ahead.

A. Structure of conventional and Islamic bank accounts

This section compares income statements and balance sheets of conventional and Islamic banks. 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 X) 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 on the borrower for repayment of the amount lent plus interest. By receiving funds from the depositor, the bank incurs a 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).¹ 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.

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

Table X – Representative Income Statement of Conventional Bank	
	Revenue
	Total Revenues
	Net interest income
	Interest income
	Interest expenses

¹ 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.

	Noninterest income
	Expense
	Total Expense
	Noninterest expense
	Provisions for loan loss ²
	Income
	Income before income tax (Operating income)
	Income tax
	Net Income
	Dividends
	Retained Earnings

Islamic bank: The income account of an Islamic bank (Table Y)³, differs in important ways from that of a conventional bank.

- Islamic banks primarily do not raise funds through “deposits” but through “funding” from depositors/investors (Investment Account Holders – IAH).⁴ Islamic banks have quasi-equity obligations to the IAH in contrast to the liability of conventional banks to repay depositors.⁵
- 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 deposits are in conventional banks.
 - “Restricted” funds are managed separately by the bank segregated from funds received from other IAH. They have some characteristics of asset management accounts (that 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

² In some bank statements, provisions for loan losses are within Net interest income. This is not recommended for statistical purposes because interest flows and provisions for loan losses are fundamentally different types of transactions. Depending on the model followed, Total Gross Income and the amounts distributed to IAH are affected.

³ The table provides a synopsis of an Islamic bank income statement based on the presentation in IFSB *Revised Compilation Guide on Prudential and Structural Islamic Financial Indicators (PSIFIs)*. 2011, pp. 37-38.

⁴ Islamic banks also have noninterest paying (“nonremunerative”) deposit accounts, which are comparable to those provided by conventional banks. However, in most cases, most funding comes from the investment type accounts.

⁵ 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.

divided between the bank and the IAH based on the specific type of Islamic financial instrument used.

- Diverse financial instruments are used that earn revenues in different ways - financing of sales, leasing, equity participation, or investment. Some instruments do not have conventional bank equivalents. Unlike conventional banking, there is no common interest rate 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 "Revenue on jointly funded assets".

Revenue on Jointly Funded Assets is a rather complex calculation of (a) net revenues (revenues less associated costs⁶) 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.

Jointly funded assets 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 off balance sheet⁷ 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.
 - 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.

⁶ Two models exist for the expenses to be allocated against the bank income to produce net income – one model includes only direct costs associated with returns on bank investments, whereas the other can include indirect costs.

⁷ AAOIFI accounting standards treat as off balance sheet any assets funded by restricted profit sharing investment accounts, 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 IFRS rules could require consolidation of some restricted PSIA's into the bank's balance sheet based on the bank "control" of the funds. In these cases, the treatment of the restricted accounts is parallel to that of the unrestricted accounts.

- 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 Return Reserve (IRR) that sets aside some of the owners’ profits to cover possible losses experienced by IAH.

Table Y - Representative Income Statement of Islamic Bank	
	Revenue from Jointly Funded Assets
	By type of income ⁸
	Financing costs
	Other costs
	Transfer to Profit Equalization Reserve (PER)
	Income available to unrestricted depositors/investors and <i>bank</i>
	Bank share in restricted investment income
	Other Income
	Fee-based income
	Other Income
	Total Gross Income
	Expenses
	Salaries and other operating expenses
	Depreciation and other provisions
	Net income before taxes and zakah
	Taxes
	Zakah
	Net income after before taxes and zakah
	Dividends
	Retained Earnings

⁸ Islamic financial instruments do not earn interest, but earn returns based on various investment strategies – the instruments used can be classified based on whether they involve financing of sales, leases, equities, or investment.

Balance sheet

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

Nonfinancial assets

Without a concept of interest earnings, Islamic financial instruments often generate income through sale or lease of underlying goods or services. The 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.

These assets are reflected on the balance sheet as “Non-Financial Assets Related to Sales, Lease, and Equity Financing”. These assets are directly linked to financial contracts with customers and thus could be volatile and different in behavior from other nonfinancial assets, which should be shown separately on the balance sheet as “Other nonfinancial assets.” These two items sum to Nonfinancial assets as reported in the SNA framework, but it is recommended that an “*of which*” line be added for Non-Financial Assets Related to Sales, Lease and Equity Financing.

The treatment of nonfinancial assets under contract has potential implications for the SNA flow accounts.

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

Regular income on the contract – A contract might specify the price for the underlying good creating a net profit for the bank. Under the International Financial Reporting Standards – *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.

The AAOIFI recently launched a project to reexamine whether financial contracts with customers involving delivery of goods should go through an IFRS 15 review before being treated as a financial instrument – there is no current information on which way the decision might go and the implications for the bank income statement and balance sheet. This paper does not propose a solution for this situation until after this review is completed and more experience is gained.

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 part of a PER – Profit Equalization Reserve, which will be shown in equity as “PER Allocated to Shareholders.” Under SNA accrual rules, the net profits for IAH (including the component transferred in PER) should be treated as distributed; the PER component is subsequently treated as a separate transaction to reinvest 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.

B. FISIM for Islamic Banks⁹

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.

In a perfect market, 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 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 fully equivalent, but returns on investments take the place of interest receipts and distributions of profits to depositor/investors take the place of payments of interest to depositors. Unlike conventional banks, the receipts and payments are not guaranteed, but depend on the results of the various ventures and investments made by the bank.

Thus, the FISIM core concept as expressed in the 2008 SNA (below) 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 financings and fundings. It cannot be assumed that the amount of financing offered directly corresponds to an

⁹ A former student from Turkey raised the question of how FISIM of Islamic banks should be compiled.

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.

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

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

$$rL = \text{interest rate charged on loans}$$

$$rr = \text{reference rate}$$

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

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

$$rr = \text{reference rate}$$

$$rD = \text{interest rate paid on deposits}$$

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

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.

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

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

$$rr = \text{reference rate}$$

$$rFin = \text{return on financings}$$

$$rFund = \text{profit distributions on fundings}$$

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.¹⁰ 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.

Applying the formula to Islamic banks

¹⁰ Data on the distribution of loans and deposits by sector are available from the IMF monetary and financial statistics.

The application of the formula to Islamic banks is apt to be more complex than for conventional banks because of the diversity of instruments used, but this might be mitigated because in Islamic banking the bank and the unit providing funds typically co-invest in the profit making venture and thus there must be documentation on the profits earned and the distributions paid.

Two strategies can be employed. A broad approach that parallels the calculations for conventional banks, and an instrument-by-instrument approach.

Broad approach

A broad approach recognizes that for many customers of Islamic banks the bank serves as a straight-forward depository institution in which funds of many customers are placed in common deposit account and may or may not pay returns depending on the type account (i.e. return generating, or non-return generating current accounts or for safe-keeping).

Under the broad approach, total FISIM equals the difference between revenue on jointly-funded assets and the payments to IAH (sum of funds transferred to the PER and distributions available to IAH from jointly funded accounts). In table Z below from the Islamic bank income statement, FISIM equals lines 1 less the sum of lines 7 and 9.

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

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

Lines 2 through 6 represent costs to banks to operate, but do not include an equivalent to interest expense.

Income payable to depositors/IAH (equivalent to interest expense of conventional banks) equals the sum of lines 7 (Transfer to Profit Equalization Reserve) and 9 (Income distributable to IAH).

Line 7 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 an

income payment followed by reinvestment into the PER, creating a financial claim of IAH on the bank.

Line 9 represents the actual payments to the IAH.

The distribution of FISIM 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.¹¹

Instrument-by-instrument approach

This approach recognizes that there is no simple interest-rate type calculation to estimate income earned by the bank's customers – the type of returns paid to bank customers and the distribution of returns between the bank and customers can vary greatly depending on the type of Islamic financial instrument used. In lieu of interest, Islamic financial instruments earn returns based on various investment strategies – financing of sales, leases, equities, or investment. Moreover, the distribution of returns between the bank and the customers varies by instrument.

This approach can be more precise in identifying service-like payments on Islamic financial instruments versus returns on investment vehicles for which the bank takes a management fee. It also allows construction of more accurate rate of return information.

Islamic banks must track the returns for depositors and investors in order to remunerate their funders. How much of this detail is available to supervisors or statisticians is unknown and could vary greatly by country – it might not be a feasible approach in some countries.

The next section “profit distributions on deposits” discusses financial flows associated with some of the financial instruments used to fund banks. More detailed information on types of Islamic financial instruments is provided as guidance on how they might be used in the instrument-by-instrument approach. 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, but (2) some instruments offer investment-like returns or generate explicit fee returns for banks.

¹¹ 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.

C. Profits distributions on deposits at Islamic banks¹²

This section reviews various types of Islamic financial instruments used to generate and distribute profits payments to depositors/investors at Islamic banks. An important question for the SNA and monetary statistics is the extent to which payouts on deposits at Islamic banks can be treated parallel to interest in conventional banks. This note concludes that a nuanced treatment is possible in which some types of Islamic bank payments to IAH could have parallel treatment, but changes in terminology are needed.

Background

The rationale to exclude payments by IFIs 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 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, this note argues that by applying economic definitions there are conditions in which the payments by IFIs on deposits should 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 interest paid by conventional banks.

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 or lease-based financing instruments that can provide fixed repayment flows in the future, or (4) participate in equity ventures. Among Islamic financial instruments, Amanah deposits, Wakalah, and commodity murabahah, for example, have payment flows and characteristics similar to deposits and interest payments in

¹² This section is largely based on a 2012 note coauthored with Faris Ghazali.

conventional banks. The instruments discussed below are representative, and do not cover all types of instruments.

True deposits

Amanah deposits (Wadiah in Malaysia) 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.¹³ The bank treats the deposit as an obligation, and thus has an unambiguous liability 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 constitute FISIM-type services provided by the bank.

Profit Sharing Investment Accounts” (PSIA)

PSIA commingle funds of investors/depositors (IAHs) with the IFI’s own funds to earn income by making productive investments.¹⁴ 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 result.

- *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. 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 IFI (shareholders’ equity) and cannot be explicitly linked to individual investors.

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 which can provide confidence to future investors that the IFI can produce adequate returns. It is generally held 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

¹³However, 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.

¹⁴Sundararajan (2006) calculated that Islamic banks raise over 60 percent of their funds through PSIA. More recent information based on a 2013 survey found that PSIA type deposits had slipped below 50 percent of funds because of greater use of sales-based fixed profit deposits. (IFSB 2015). The IFSB recently introduced compilation of Prudential and Structural Indicators for Islamic Financial Institutions (PSIFIs) that can provide country-by-country information on funding by PSIA accounts – which is found to be the prevailing funding mode in some countries.

likely returns. This is done by citing an “*indicative rate*” that describes a rate that might be achieved but cannot be promised.¹⁵

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 IFI, the returns to the IAH and the IFI are a form of profits, calculated as a residual.

- 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.
- 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 the most 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 calculating the bank’s share of profits and the distribution between IAH and shareholders.^{16 17} Because the *PER* is *allocated before deducting the IFI share*, in effect it has a superior status.
 - The *Investment Return 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 it is solely owned by the PSIA. 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, IFIs appear to extensively use the smoothing techniques available to even out the payments back to depositors. Effectively, this results in most cases in a pattern of profit

¹⁵ This is sometimes called the expected or anticipated return.

¹⁶ IFSB (2010) paragraph 20.

¹⁷ Funds for the *PER* are allocated based on estimated monthly income, or by topping up a desired level of the reserve from annual earnings.

payments back to IAH similar to payments of interest on deposits by conventional banks.¹⁸ 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 IFI pays only the indicative return and keeps any excess as an "incentive fee." Because of the possibility of the IFI 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 IFI 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 IFI might make up the difference out of its own profits

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.

Commodity Murabahah

A commodity murabahah is based on the use of funds deposited at an IFI for purchase and resale of commodities, but with cash flows that allow the funds deposited to provide financing for the bank. In particular, the purchase and resale of a commodity is included in the transaction, but this is handled instantaneously which allows the depositors' funds to be used as a form of financing of the bank.

Two major types are described below – in most countries the Tawarruq concept is used; in Malaysia, a similar less complex arrangement called Inah produces the same results. In these instruments, the deposit is used to purchase a commodity on a cash basis, followed by the repurchase of the commodity on a deferred payment basis at an agreed price equal to the deposit plus a profit on the transaction. The deferred payment of profit has an implicit rate of return that can be thought of as 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 upfront and guaranteed – that is, they constitute bank liabilities.* As noted above (IFSB 2016), use of sales based fixed profit deposits has become more popular and exceeds the amount of PSIA in some countries.

¹⁸ 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.

Commodity murabahah are linked to an underlying commodity transaction, which precludes its use for current accounts, operating accounts, or savings accounts.¹⁹ They thus are not suitable for small deposits and withdrawals, nor for partial withdrawals through ATMs or web-based transactions.

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 six months for 5200, the profit of 200 over six months 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.

- *Tawarruq* is an arrangement involving at least three parties; Depositor A, Bank B, and commodity traders C and X.

In a formal description of the transactions, depositor A sells a commodity (worth 5000) to bank B on a deferred payment basis, for example 5200 to be received in 6 months. After receiving the commodity, B will sell it to trader C for 5000 cash, which provides funding for the bank. B can use the funds to generate income, but has an obligation to repay 5200 to A.

In practice, depositor A neither holds the commodities nor has access to a commodity broker²⁰ so he deposits funds (5000) at the bank and appoints the bank to buy the commodity on his behalf. The bank does not take physical possession through a direct purchase and resale transaction with the commodity traders, but pays a brokerage fee to C in order to gain nominal title to the commodity (via e-certificate or constructive possession) and to resell that title. Thus, the bank receives 5000 now from the depositor that can be used for general investment purposes, pays small fees to the commodity brokers, then pays 5200 to the depositor in 6 months – this emulates the cash flows between depositors and conventional banks plus the small intervention of commodity brokerage fees.

- *Inah* involves only two parties. The depositor purchases a commodity from the bank²¹ at a cash price then resells the commodity on a deferred payment basis at an agreed price equal to the deposit plus the profit on the transaction. As a sale-based transaction, the repayment of the deposit and the profit return can be promised upfront and guaranteed.

Treatment in SNA and Monetary Statistics

¹⁹ 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.

²⁰ Perhaps another commodity broker, X, from whom A can purchase the commodities directly.

²¹The bank might own the commodity directly; However, it is possible that the IFI could obtain the commodity from a broker in exchange for a fee, but this appears to be legally a separate transaction not integral to the *Inah* instrument.

Restricted PSIA

Restricted PSIA appear to be primarily investment vehicles, with returns linked to specific investment agreements between the IAH and IFI. Per AAOIFI accounting standards, the assets within restricted PSIA are treated off-balance sheet, and only the net bank share of the returns on the investment is reported on the bank income statement.²² Moreover, restricted accounts are often used by sophisticated investors (such as Islamic insurance companies or mutual funds) that understand and accept the inherent risks. It is recommended that returns to restricted PSIA should not be treated as interest, but as investment profits.

Unrestricted PSIA and other deposits (Amanah, Wakalah, Commodity Murabahah)

New deposits

For Tawarruq and Inah, as sales based transactions, data on the actual rate of return for new deposits can be used.

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. Both are measures of the expected return on the deposit.

A change in 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”.²³

Existing deposits

For Tawarruq and Inah, as 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 Z, the payments stream should be measured by line 9 “Distributable returns to IAH” (which on an accrual basis are treated as distributed to IAH, subject to reinvestment in a separate transaction) *plus* line 7 “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

²² In cases where national accounting practices incorporate consolidated restricted PSIA into the bank’s balance sheet, their accounting and statistical treatment parallel to unrestricted PSIA should be possible.

²³ Rates offered for new deposits provide information on the current market conditions and incentives for depositing, including how monetary policy actions might be affecting banks’ funding decisions. The ECB interest rate statistics for example separately cover new accounts.

as transaction 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 returns on deposits” in the SNA and monetary statistics.

Conclusion

Many Islamic banks make smoothed payments that are functionally indistinguishable from interest payments by conventional banks. Estimates of interest flows and rates of interest can be used alongside or commingled with the interest rate statistics used in the SNA and Monetary Statistics.²⁴ But given the non-liability nature of the payments, it is recommended that separate information be provided on payments of Islamic banks to their IAH, with notes regarding their distinctive nature.

To conclude, factually and in principle, from a statistical perspective, profits payments to *unrestricted* profit sharing investment accounts and some types of deposits at Islamic Financial Institutions have characteristics similar to interest payments on deposits at conventional banks. These payments thus can be reported alongside the interest rate data in MFS and in FSIs as relevant.

In contrast, it is recommended that returns on deposits in *restricted* profit sharing investment accounts be treated as investment profits and not as interest-like returns.

D. Classification of Islamic finance institutional units

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

Islamic institutional units

Institutional units are the basic building blocks of the SNA system. They 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 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.

²⁴ In countries with significantly large Islamic financial sectors, a comparison of data for conventional banks and IFIs 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.

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 of its 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.. Customers’ preferences, Shariah-compliance reasons, and different financial accounting standards motivate segregation of the conventional and Islamic banking activities, ideally with windows treated as virtual separate institutional units independent of their parent banks. For example, the IFSB’s PSIFI program requests separate reporting of windows deconsolidated from the parent conventional bank.²⁵
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 unit 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 SNA 2008, 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 SNA 2008 standards.²⁶

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 covers 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.

²⁵ 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).

²⁶ 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.

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

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 Islamic Financial Services Board 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.

year or more. For financial institutions this is usually the country in which they register and are supervised. At this time, most Islamic banks operate in and are residents of only a single 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 SNA 2008 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.

Financial Corporations Sector
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.

SNA 2008 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.²⁷ The 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 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

²⁷ 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.

returns because they do not have capital and other regulatory restrictions of conventional banks.²⁸

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, which is 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. For example, in the Euro Area, every investment fund is subject to statistical tests of their capital certainty and those with 10 percent or higher equity components are not classified as MMMFs but as other investment funds.

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 provide unremunerated capital certain accounts similar to zero-interest current accounts at conventional banks)
- Some offer transferrable deposits usable for payments to third parties

²⁸ NonMMMMF investment funds are not subject to Basel risk-weighted capital adequacy rules for banks, and thus are freer to invest in riskier projects.

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

Islamic investment funds 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) similar to transferrable deposits or money market instruments.

Other Investment Funds

This subsector includes all 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 sukuks 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.²⁹

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. Shariah-compliant hedge funds should be recorded in this subsector.

Other Financial Intermediaries (OFIs)

This is a catch all category of types of financial intermediaries, including Islamic firms, not otherwise enumerated – enumerated firms include ODCs, insurance firms, pension funds, and financial auxiliaries. Many different types exist that provide a diverse range of financial instruments or services, some for specialized niche markets. SNA 2008 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, and 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, special purpose vehicles, pawn shops, e-money corporations, and many more types. Centralized Clearing Houses that take intervening positions in over-the-counter derivatives transactions are explicitly defined as financial intermediaries classified as OFIs.

²⁹ Per IFRS, RPSIA should be consolidated into their parent bank’s accounts if they are controlled by the bank *and* the parent bank benefits from or is at risk from variable income due to its management of the account. The extent of application of this rule is unknown.

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.

Holding companies. SNA 2008 changed the treatment of holding companies to classify as OFIs 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.

In contrast to holding companies, 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 can be classified within any of the financial subsectors. This structure might be suitable for cross-border holdings of Islamic financial units.

Per SNA2 008, a head office over a mix of financial corporations should be classified as a financial auxiliary, but this note recommends that whenever feasible they should be classified within specific financial subsectors, most importantly for banking or insurance. Head offices could have substantial own financial assets, and metadata should note how they are classified.

*Insurance*³⁰

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 and exchanges that insure the risks of other insurance companies are also included. Islamic reinsurance (retakaful) is included in this subsector.

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

Pension Funds

³⁰ Prior to SNA 2008, 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.

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 SNA 2008, 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. Currently, there are a relatively few Islamic funds, partly because of a limited pool of long-term Shariah-compliant investments, such as in sukuk 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

SNA 2008 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. They do not have market-based transactions with their parent – either their assets or liabilities are transacted only with their parent. Prior to this, 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 as defined in SNA 2008; SPVs (structured entities) that raise funds in open markets for their parent; Money lenders; Pawn shops; and Firms lending funds received from a sponsor such as government or nonprofit institution.

SPVs are of special interest in this group. SNA 2008 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 sukuk in the name of their parent.

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

It is not yet concluded whether 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 can be 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 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.

E. 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)³¹ that cover;

Prudential indicators (PIFIs) of the strengths or vulnerabilities of Islamic banking *systems* (as opposed to individual banks). PIFIs are mostly supervisory ratios³² 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 that cover the size and structure of the Islamic banking sector, including the balance sheet, income statements, and types of financial instruments used by Islamic

³¹ PSIFIs are published on the IFSB website (ifsb.org and <http://psifi.ifsb.org>).

³² 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.

banks to fund themselves and extend financing. These data will track the growth of Islamic banking and its evolution. These data often draw on features of the SNA.

Both PIFIs and SIFIs are separately compiled 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 in Box S – 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.

Box S – Structural Indicators for Islamic Banks

Number of Islamic banks

Number of domestic branch offices

Number of ATMs

Number of employees

Total assets

Total *Sharī`ah*-compliant financing (excluding interbank financing)

Sukūk holdings

Other *Sharī`ah*-compliant securities

Interbank financing

All other assets

Total funding/liabilities and equities

Profit-sharing investment accounts (PSIA)

Other remunerative funding (*Murābahah*, Commodity *Murābahah* etc.)

Nonremunerative funding (current account, *Wadī`ah*)

Sukūk issued

Other *Sharī`ah*-compliant securities issued

Interbank funding / liabilities

All other liabilities

Capital and reserves

Total revenues

Financing based

Investment based (*Sukūk*, other *Sharī`ah*-compliant securities etc.)

Fee based

Other

Earnings before taxes and *Zakat*

Value (or percentage) of financing by type of *Sharī`ah*-compliant contract

In addition, the PIFI ratios provide some supplementary data about the structure of Islamic banks and their funding and financing patterns. The data include; Net income, Operating costs, *Sharī`ah*-compliant financing by ISIC code, Nonperforming financing, Nonperforming financing by ISIC code, Provisions for nonperforming financing, Foreign exchange funding and financing, Returns by type of *Sharī`ah*-compliant financing, and Income distributed to Investment Account Holders.

The 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.

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.

In due time, the IFSB is likely to promote collection of full 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.

F. Summing Up

This note provides a first look at how to represent Islamic banking within the SNA. Islamic banking has grown rapidly during the past two decades and it is time to address how the SNA should address its unique features. Without 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. And information about an important feature of the financial systems of many emerging and developing countries is never developed.

This note has explored how several Islamic banking activities might be treated in the SNA, but there is no illusion that the recommendations will 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, and regional organizations.
- To support development of high-quality, internationally comparable statistical systems, and support their oversight functions, the IMF and Gulf Monetary Council can initiate statistical methodology work on Islamic banking and finance. The IFSB has a similar role to play in order to enhance the quality and comparability of its structural indicators.

- More work is needed than could be provided in this introductory note on SNA treatment of flows associated with the diverse types of Islamic financial instruments. This work might begin with the Malaysian Financial Reporting Standards that use an instrument-by-instrument approach to construct financial reports; however, other countries use different instruments (or similar instruments with different names) – this part of the process is likely to be lengthy and pains-taking.
- Work should be forward-looking to consider development of frameworks for nonbank Islamic financial institutions and Islamic securities markets. Among nonbank institutions, Insurance (takaful) is a priority, and because of the participatory nature of funding of Islamic financial institutions the line between banking and investment funds is blurry. Coverage of securities markets should be a priority in the EU and financial centers such as Kuala Lumpur, Hong Kong, Singapore, and Dubai, among others.
- And, not least of all, the IARIW should take under its wing this frontier methodology work, perhaps in a regional conference.

Bibliography

Islamic Financial Services Board. (2010) Guidance Note on the Practice of Smoothing the Profits Payout to Investment Account Holders. December 2010.

Islamic Financial Services Board. (2011) *Revised Compilation Guide on Prudential and Structural Islamic Financial Indicators (PSIFIs)*.

Islamic Financial Services Board (2016) Islamic Financial Services Industry Stability Report 2015.

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