

MONETARY OPERATIONS AND ISLAMIC BANKING IN THE GCC: CHALLENGES AND OPTIONS

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Abstract

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The assessment provides evidence of market segmentation across Islamic and conventional banks in the Gulf Cooperation Council (GCC), leading to excess liquidity, and an uneven playing field for Islamic banks that might affect their growth. Liquidity management has been a long-standing concern in the global Islamic finance industry as there is a general lack of Shari'ah compliant instruments that can serve as high-quality short-term liquid assets. The degree of segmentation and bank behavior varies across countries depending on Shari'ah permissibility and the availability of Shari'ah-compliant instruments. A partial response would be to support efforts to build Islamic liquid interbank and money markets, which are crucial for monetary policy transmission through the Islamic financial system. This can be achieved, to a large extent, by deepening Islamic government securities and developing Shari'ah-compliant money market instruments.

Keywords: Islamic Banking, GCC, Monetary Operations

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1. INTRODUCTION

This study assesses the monetary policy operational framework for Islamic banking in the Gulf Cooperation Council (GCC) countries, where Islamic bank assets have become a significant part of total assets in the banking systems. The paper also identifies challenges and outlines options available to achieve a more effective monetary transmission mechanism.

Shari'ah-compliant assets represent a significant portion of total banking assets of the GCC. While in the Middle East and North Africa (MENA) region Islamic banking assets represent 14 % of total banking assets, in the GCC the market share of Islamic banking has crossed the 25 % threshold,

which suggests that Islamic banks have become systemically important in these countries. GCC Islamic banking assets reached \$490 billion at end-June 2013, with Saudi Arabia dominating the region with a 49 % share, followed by the United Arab Emirates (19 %), Kuwait (16 %), Qatar (11 %), and Bahrain (5 %), while this segment is still nascent in Oman, (Islamic Financial Services Board (IFSB), (2015)). Islamic banking has acquired systemic proportions in Kuwait, Saudi Arabia and the United Arab Emirates in line with IFSB's definition of systemic, at least 15% of banking system assets. Retail Islamic banking in Bahrain has reached systemic proportions with a 27 % asset share in retail banking, and a 13 % asset share in total retail and wholesale banking. Oman's entry in Islamic banking was in late

2012. The Central Bank of Oman developed a comprehensive set of regulations for Islamic banking from the following: (1) the existing conventional banking framework based on Omani Banking Law and Basel II guidelines (where these do not contradict Shari'ah); (2) Shari'ah governance and accounting standards of AAOIFI; (3) Islamic Financial Services Board (IFSB) guidelines on capital adequacy and risk management; and (4) leading practices on Shari'ah governance from around the world. At end-August 2015, the combined assets of Islamic banks and windows in Oman represented 6 % of total banking system assets.

The growing importance of Islamic banking assets in the GCC banking system has evolved in a context of pegged exchange rate regimes, which have provided a nominal anchor for these economies and have been successful in anchoring inflationary expectations at low levels. Exchange rates are pegged to the US dollar in all GCC countries except Kuwait. In Kuwait, a dollar peg was in place from 2003 to May 2007, while a basket peg with undisclosed weights was in place before and after this period. As the peg to the U.S. dollar restricts the independence of monetary policy, macroeconomic management mostly relies on fiscal policy, prudential regulation, and various controls to achieve the desired balance between price stability and growth. In particular, the GCC monetary authorities conduct monetary policy and manage short-term liquidity conditions through the issuance of short-term central bank instruments, Treasury-bills (T-bills), and standing facilities, while using reserve requirements, long-term government bonds, and macroprudential instruments to manage structural liquidity conditions (Espinoza and Prasad, (2012)).

The unique challenge of implementing market-based monetary policy operations in Islamic banking systems arises from the complexity of designing instruments that satisfy Islamic principles, notably the banning of interest rates. The overall consequence has been that Islamic banks hold excess liquidity in cash.

These issues are explored further in the following sections. Section II assesses the performance of conventional and Islamic banks in the GCC during and after the global financial crisis (2008–14). Section III documents cross-country experiences with monetary operations under Islamic finance.¹ Section IV discusses the GCC experience with Shari'ah compliant monetary instruments. Section V discusses the regulatory aspects of liquidity management. Section VI provides some conclusions.

2. PERFORMANCE OF CONVENTIONAL AND ISLAMIC BANKS IN THE GCC

Most existing studies predating the 2008–09 global financial crisis indicate that there are no significant differences between Islamic and conventional banks in terms of business orientation and efficiency (Beck, Demirguc-Kunt, and Merrouche, (2013)) and Abedifar, Molyneux, and Tarazi, (2012)). More recent studies, including the analysis in this paper, covering the global financial crisis period tend to stress that

during the financial crisis, Islamic banks often had more difficulties than conventional banks in maintaining their profitability. Hasan and Dridi (2010) find that Islamic bank profits decreased more than they did in conventional banks in 2009, and attribute the difference to poor risk management practices of Islamic banks. Similarly, Rashwan (2012) finds that Islamic banks were more efficient and profitable than conventional banks before the crisis (2007–09), but less so during the crisis. Even in more developed jurisdictions like Malaysia and Bahrain, Islamic bank performance was affected more adversely relative to conventional banks during the crisis period. In part, the underperformance was linked to limited access to markets, marketable securities, and instruments for liquidity management; potential overexposure to the real estate sector (in Bahrain); and, in general, lack of opportunity for diversification of loan portfolios.

GCC Islamic banks are continuing to capture market share and outgrow their conventional peers. With total Islamic banking assets of US\$564 billion as of H1 2014, the GCC region accounted for 38.2 % of global Islamic banking assets (Islamic Financial Services Board (IFSB), (2015)). The Saudi Islamic banking sector now constitutes 51 % of total domestic banking assets. This share was 38 % in Kuwait, 25 % in Qatar and 17 % in the United Arab Emirates. Their assets recorded a compound growth rate of 17.4 % compared to 8.1 % for conventional banks between 2008–12, while their net lending and customer deposits grew by 18.2 % and 19.9 %, respectively, compared with 8.1 % and 10 %, respectively, for conventional banks (Standard & Poor's Rating Services, (2014)). The strongest growth was in Qatar where loans by Islamic banks grew by 32 %, followed by Saudi Arabia (22.3 %), the United Arab Emirates (14.5 %), Bahrain (13 %), and Kuwait (10.5 %).

Despite significant progress in Islamic banking infrastructure, access to market financing—particularly to securities and other placement opportunities—remain limited for Islamic banks, when compared with their conventional counterparts. This is creating market segmentation vis-à-vis conventional banks in an environment where banking consolidation is used to strengthen Islamic bank competitiveness in some countries. These findings are consistent with the results of other studies.

The analysis for the purpose of this study was carried out using annual banking data from Bank Scope for the GCC countries spanning 2008–14. It was based on 65 banks, 38 conventional and 27 Islamic (Table A1 of Appendix 1). The sample did not distinguish between the banks' business models (wholesale versus retail). Omani banks were excluded from the sample given the short span of data availability for Islamic banks. It has information on a limited number of financial indicators and does not include metrics on cash holdings and short-long funding structure, among others.

Results indicate that conventional banks, on average, performed better after the 2008 crisis than their Islamic counterparts (Tables 1 and A2 of Appendix 1). With few exceptions, Islamic banks in most GCC markets seemed to have lower access to

¹ Based on "A Note on Strengthening Liquidity Management of Institutions Offering Islamic Financial Services: the Development of Money Markets," March 2008. The note was prepared by Dr.

Sundararajan and the Islamic Money Market Task Force, referred to as Technical Note 2008 from here on.

securities. While, on average, Islamic banks recorded slightly lower nonperforming loan (NPL) ratios in terms of gross loans than in conventional banks, the gap in NPLs has contracted since 2012. Islamic banks recorded, on average, lower profitability than their conventional counterparts. The difference in profitability is explained, in part, by higher holdings of liquid assets and property investments by Islamic banks. This difference in asset allocations partially reflects limited investment opportunities available to this banking segment. The results hold within the

broad caveats of data deficiencies, including limited publicly available bank financial statements and lack of information to control for the Islamic transactions carried out by conventional banks through Islamic windows. Al-Hassan, Khamis, and Oulidi, (2010) report similar findings and note that before the 2008 crisis profitability was higher for Islamic than for conventional banks. Profitability differences before and after the crisis capture different credit exposures, with Islamic banks typically more exposed to the real estate sector.

Table 1. GCC Countries: Conventional and Islamic Banks, Average 2008-14 ^a
(% of assets unless otherwise indicated)

	<i>Conventional Banks</i>	<i>Islamic Banks</i>
Deposits	64.1	62.3
Securities ^b	18.4	14.6
Liquid Assets	19.8	23.0
Non-Performing Loans ^c	5.2	4.2
Return on Assets	1.6	1.3
Return on Equity ^d	10.2	6.7

Source: BankScope and IMF staff calculations, see also Table A2

Notes:

- a) Oman's banks not included;
- b) for Saudi Arabia total security holdings are significantly higher for conventional banks;
- c) % of gross loans;
- d) % of equity.

For the GCC overall, holdings of securities (in terms of assets) were higher (18.4 %) for conventional banks compared to Islamic banks (14.6 %), a difference even more noticeable for the portfolio in securities held for sale. Qatar's efforts to develop its domestic money market, including by issuing Shari'ah-compliant treasury bills and treasury bonds, explain the unusually high securities holdings for Qatari banks. In Qatar issuances of treasury bonds, aimed at conventional and Islamic banks, started in 1999 with an important increase in volumes issued as of 2004; issuances of treasury bills started in 2011 with the objective of developing domestic debt markets. For Saudi Arabia and the United Arab Emirates, total security holdings are significantly higher for conventional banks. Conventional banks held fewer liquid assets (19.8 % of total assets) during the sample period compared to Islamic banks (23.0 % of total assets).

On average, NPLs in terms of gross loans, were higher for conventional than for Islamic banks over 2008-14, with convergence toward the end of the observation period. Country-specific factors, particularly in Bahrain and the United Arab Emirates, seemed to be driving the NPLs trends in this sample of GCC banks (Figure 1).

Average NPLs were 5.2 % for conventional banks and 4.2 % for Islamic banks. NPLs for conventional banks more than doubled from 2.6 % (2008) to 6.0 % (2012), peaking at 6.5-6.4 % in 2010-2011. For Islamic banks, NPLs increased from 2.5 % (2008) to 4.7 % (2013), with a peak of 6.3 % in 2012.

NPLs for conventional banks jumped after the crisis, reaching above 6.4 % by 2011, while NPLs for Islamic banks increased gradually, peaking in 2012. These trends are consistent with previous studies that have documented how Islamic banks were less affected than conventional banks by the initial impact

of the global crisis. However, the studies also documented that the second-round effects of the crisis were larger for Islamic banks, resulting in higher NPLs and larger declines in their profitability, Al-Hassan and others (2010) and Hasan and others (2010).

NPLs in Bahrain, Kuwait, and the United Arab Emirates deteriorated significantly during the period, for both conventional and Islamic banks. NPLs in Bahrain increased by 7.5 percentage points for conventional banks and 8.2 percentage points for Islamic banks between 2008 and 2013; in the United Arab Emirates, NPLs deteriorated by 6.7 percentage points for conventional banks and 4.6 percentage points for Islamic banks in the same time period. In Qatar, after a spike in 2010, NPLs of Islamic banks fell by a lower rate than for conventional banks, while in Saudi Arabia, NPLs for both bank types were similar in terms of magnitude and trends. In Kuwait, there did not seem to be a larger second-round effect for NPLs in Islamic banks.

On average, liquid assets as a share of total assets were slightly higher for Islamic banks than conventional banks over 2008-14, with convergence towards the end of the observation period. Country-specific factors, particularly in Kuwait, Qatar, and Saudi Arabia, seemed to be driving the trends in this sample of GCC banks (Figure 2).

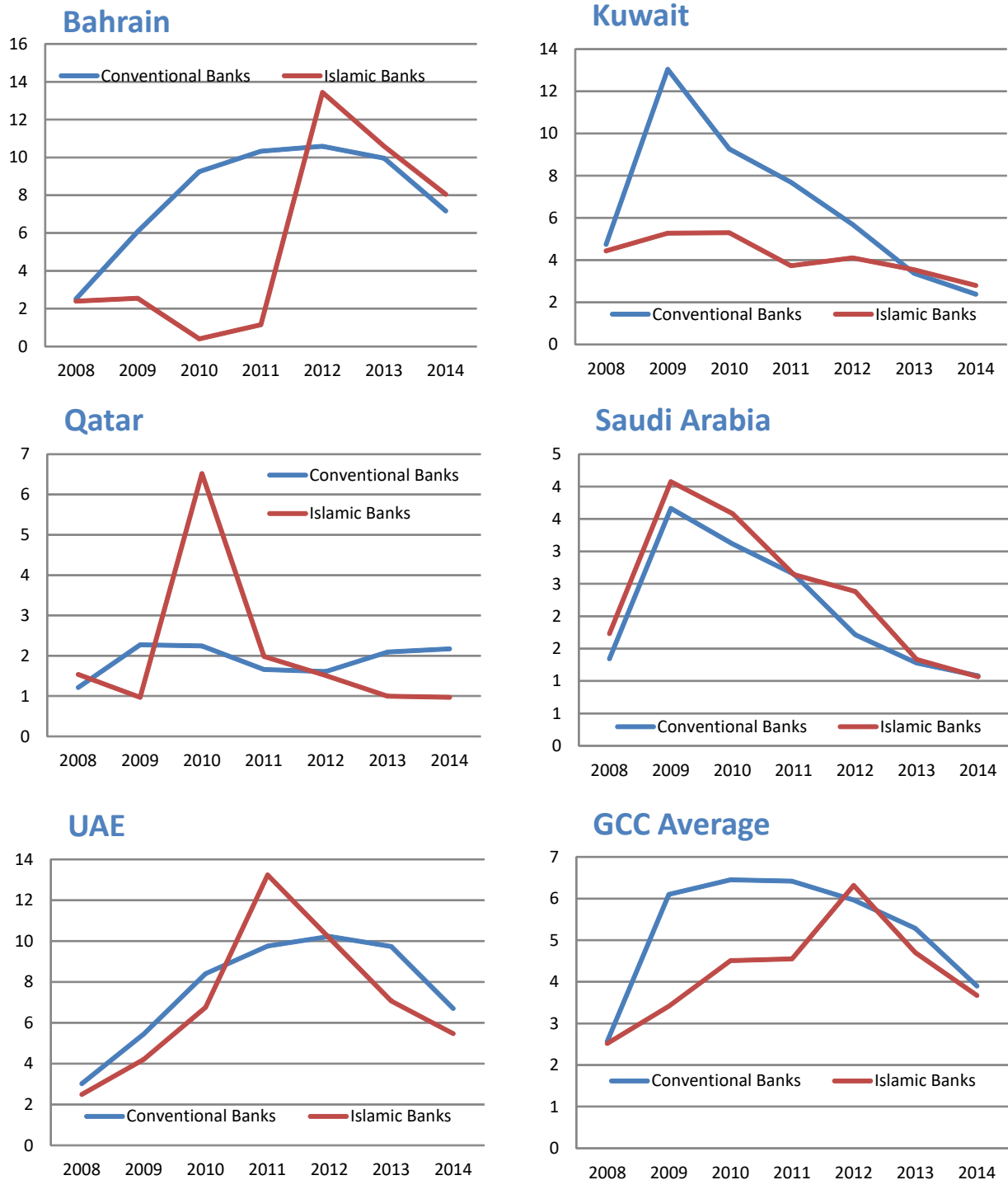
Liquid asset holding ratios of Islamic banks seemed to have jumped in 2009 and again in 2011, after which they continued to decline and converge toward the ratio of conventional banks.

Liquid asset ratios in Islamic banks in both Qatar and Saudi Arabia increased rapidly after 2008, surpassing the conventional banks. In Qatar, there appeared to be rapid convergence starting in 2010 and at a somewhat more limited pace in Saudi Arabia. Similar trends were observed in Kuwait, but with

some delay and with limited convergence. In the United Arab Emirates, there was no observable difference in liquid asset holdings between Islamic

and conventional banks, while in Bahrain it appears that conventional banks had more liquid assets holdings throughout this period.

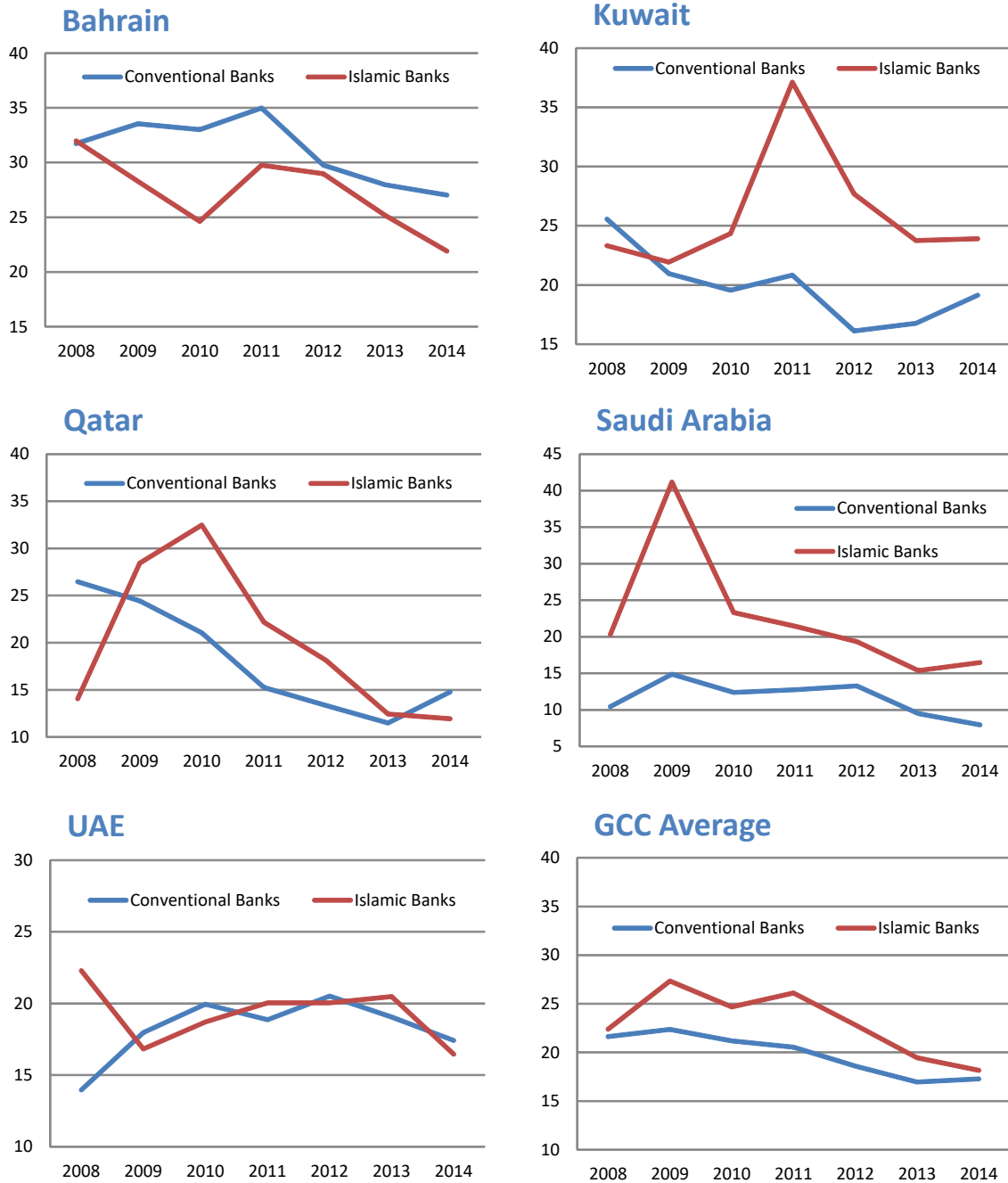
Figure 1. Non-Performing Loan Ratio, 2008-14*, (% of gross loans)



Source: Author's calculations using Bank Scope data

Note: GCC Average excludes Oman

Figure 2. Liquid Asset Ratio, 2008-14*, (% of total assets)



Source: Author's calculations using Bank Scope data

Note: GCC average excludes Oman.

Islamic banks' reliance on deposits has increased recently (Tables 1 and 2).² For Islamic banks, the average deposits to assets ratio was 62.3 %

during 2008-14, but not very different from the higher conventional banks ratio of about 64.1 %. A buildup was particularly noticeable in 2013-2014.

² The key funding components of an Islamic bank (in addition to equity) are noninterest-bearing deposits, various forms of profit/risk-sharing investment deposits, and Sukuk. Profit-sharing investment deposits are of two types, restricted—where the bank acts in fiduciary capacity with the investor choosing the nature of investment to be made, and

unrestricted—with no identified asset allocation. Although contractually investors are expected to absorb losses, banks are under pressure to offer competitive returns and repay in full on the due date to ensure that these assets continue to be funded. These deposits usually have maturities of 12 months.

Table 2. GCC Countries: Asset Funding Composition for Conventional and Islamic Banks, 2006 – 2012 1/
(% of Assets unless otherwise indicated)

	2006	2007	2008	2009	2010	2011	2012	Average
Islamic Banks								
Core deposits	68.0	68.4	69.4	67.6	68.5	70.0	72.0	69.1
Non-core deposits	8.0	8.3	9.2	8.4	9.9	9.1	7.7	8.7
Other borrowing	1.5	1.7	1.6	1.8	2.3	2.1	2.6	1.9
Other liabilities	5.5	4.8	4.5	5.3	3.9	3.9	3.8	4.5
Total Equity	16.9	16.8	15.3	16.8	15.5	14.9	13.9	15.7
Conventional Banks								
Core deposits	66.2	62.1	64.8	65.4	66.7	66.7	68.5	65.8
Non-core deposits	12.7	16.8	13.9	12	10.1	10.6	8.9	12.1
Other borrowing	6.1	6.6	6.3	6.8	6.3	5.8	5.9	6.3
Other liabilities	3.2	3.4	3.9	3.3	3.6	3.5	3.4	3.5
Total Equity	11.8	11.1	11	12.5	13.3	13.5	13.4	12.4

Source: Table 4 from Gulf Islamic Banks. Islamic Finance Outlook, 2014 Edition. January 2014, Page 32. Standard & Poor's Rating Services

Islamic banks were less profitable, particularly after the crisis than their conventional counterparts (Figure 3). Various measures of profitability were generally lower for Islamic banks than for conventional banks during 2008-2014. The average return on assets for Islamic banks was 1.3 % versus 1.6 % for conventional banks; the return on equity was lower for Islamic banks at 6.7 %, compared to 10.2 % for conventional banks (Table A2).

Islamic banks are less leveraged, that is, they have a smaller pool of income-generating assets per unit of equity, suggesting they have room for further expanding risk-weighted assets; additionally, their portfolio concentration—particularly in real estate—requires higher provisions, which, combined with higher operating expenses and a lack of yielding liquid assets, translates into a lower return on assets.

Profitability fell more rapidly for Islamic banks through the crisis period, stabilizing somewhat by end-2013. Aggregate trends for the GCC mask country-specific dynamics (Figure 3). In Saudi Arabia, for instance, the return on equity fell for Islamic banks after the crisis (2008) but recovered afterward to surpass the profitability of conventional banks. In Bahrain, the return on equity for Islamic banks shows an incipient recovery at the end of the sample period but was still substantially lower than for conventional banks. Finally, in Kuwait and Qatar, after the contraction in 2009, the return on equity in conventional and Islamic banks appeared to be converging.

3. MONETARY OPERATIONS: ISLAMIC FINANCE - CROSS-COUNTRY EXPERIENCES

The difficulty in defining rates of return on general funding instruments has limited the development of money and interbank markets, constrained the efficiency of central bank liquid facilities, and consequently, limited the scope of monetary management. The liability portfolio of Islamic banks is substantially liquid in practice, and the absence of money markets for short-term liquidity management can impose significant costs on Islamic banks. The

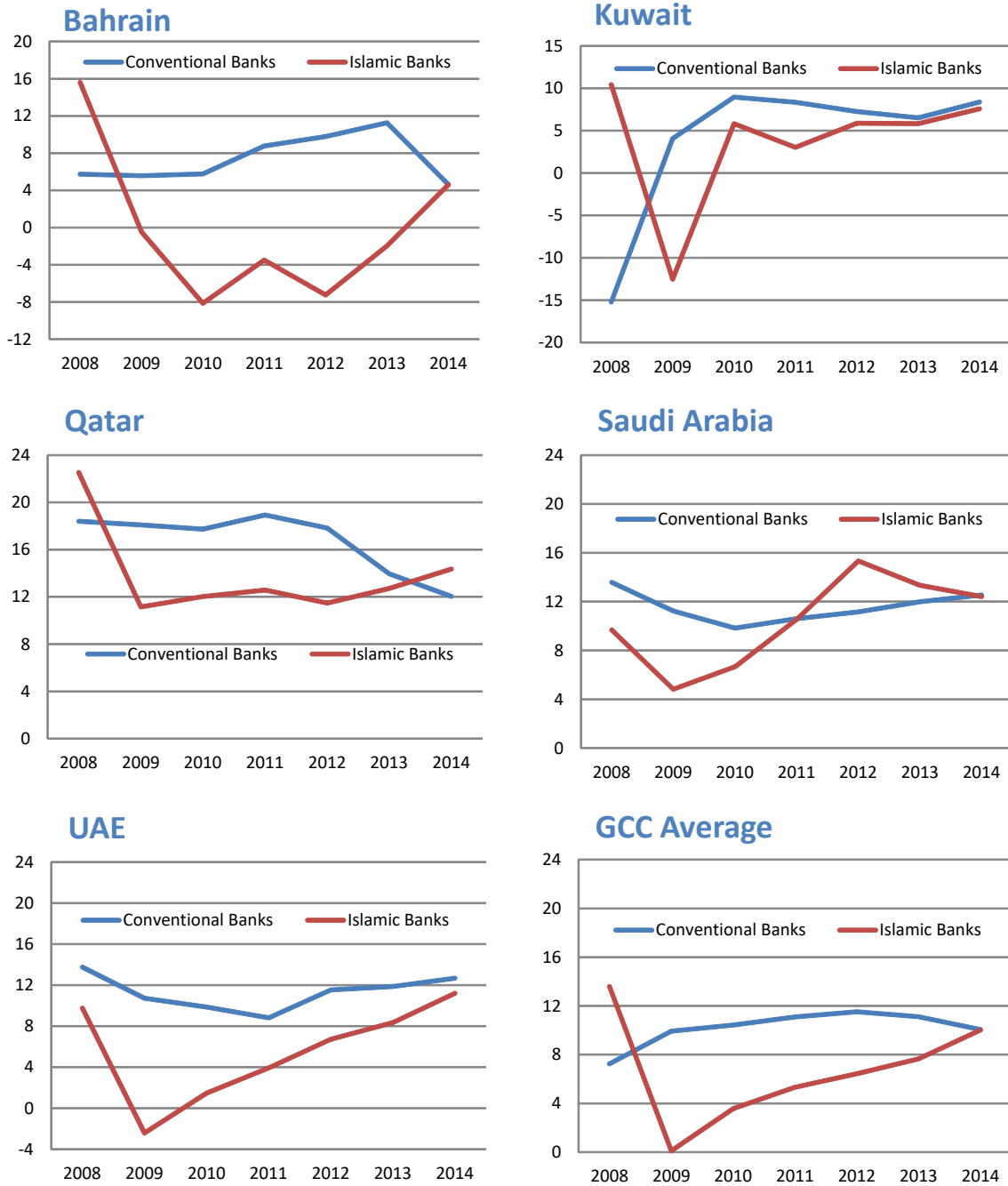
high proportion of callable deposits and unrestricted, short maturity Investment Accounts based on unrestricted *Murabahah* contract (term deposits) predisposes, in the absence of adequate available liquidity, the system to large holdings of very liquid assets.

Liquidity management has been a long-standing concern in the global Islamic finance industry, as there is a general lack of tradable Shari'ah-compliant instruments that can serve as high-quality short-term liquid assets. Despite central banks in many jurisdictions making advances in introducing new financial products that are compatible with the principles of Islamic finance, there is scope to expand the type of instruments to improve the efficiency of monetary operations.

As pointed out in El Hamiani Khatat (2015), the multiple and complex ways of structuring Islamic government securities and money markets instruments can result in fragmented markets, especially at the early stage of development. This impairs the formation of a stock of fungible High-Quality Liquid Assets (HQLA) that can be more easily priced, traded, and used as collateral for liquidity management purposes. Going forward, the authors are of the view that Islamic financial systems' development strategies should rationalize the number of different instruments created with similar functions. Once key Islamic money and government Sukuk markets have been developed, other instruments can be gradually introduced.

Some jurisdictions have taken a systematic approach to enhancing money market development. The Malaysian Islamic Money Market has been a pioneer since 1994. The Bahrain Monetary Authority established the Liquidity Management Center (LMC) in 2002 with the goal of allowing Islamic banks to handle their liquidity and surplus fund investment needs. In the market's view, Bahrain and Malaysia have become credible Islamic financial centers (Appendix 2 and Sole, (2007)). The central banks of the United Arab Emirates and Malaysia have issued standardized contracts for collateralized *Murabahah* transactions. Sudan has issued *Musharakah* and *Mudarabah* papers.

Figure 3. Return on Equity, 2008-14*, (%)



Source: Author's calculations using Bank Scope data

Note: GCC average excludes Oman.

At the international level, the International Islamic Financial Market (IIFM) has issued master agreements for treasury placements under Murabahah and Wakalah transactions, as well as issued concept paper on collateralization and tripartite agreement for Islamic securities as an alternative to conventional repurchase transactions. Some progress has been achieved on standardizing money market instruments. For example, the Association of Islamic Banking Institutions in

Malaysia has introduced standardized interbank master agreements for Murabahah and Wakalah transactions, separately for corporate and interbank transactions.

Notwithstanding some progress, limited money market activity is a key impediment to monetary operations. Earlier studies suggested the lower average daily volume of interbank money market transactions in selected jurisdictions among Islamic Financial Services Industries (IFSIs), between IFSIs and

conventional banks, and between IFSIs and central banks compared to trades in conventional money markets. There were large differences in the rates of return between Islamic money markets and conventional money markets, indicative of market segmentation in terms of the instruments used and their tradability and liquidity (IFSB Technical Note 2008).

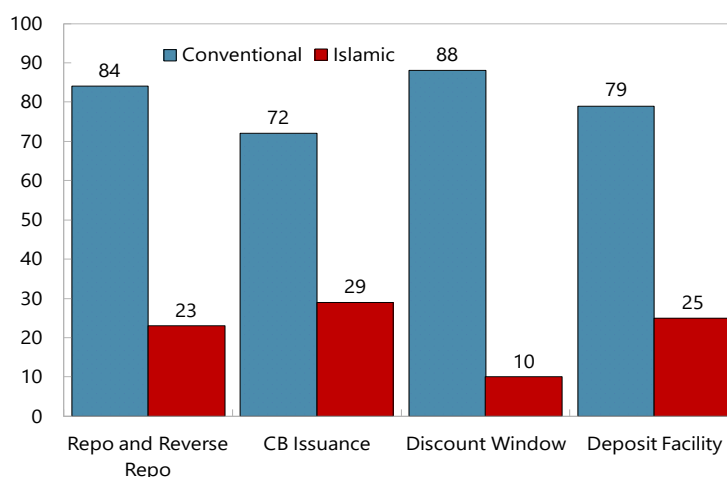
In most countries, efficient money and interbank markets for Shari'ah-compliant instruments have not yet been developed, partly because of the limited availability of the necessary instruments. Initiatives for promoting money market transactions among the IFSIs have been ongoing, including the placement or acceptance of funds with their counterparts on a *Murabahah* basis, on a commodity *Murabahah* basis, or on the basis of compensating balances.

As the IMF survey conducted in 2011 revealed, Shari'ah-compliant central bank facilities are also limited, reflecting the difficulty in designing market-based instruments for monetary control and

government financing that satisfy the Islamic prohibition on ex-ante interest payments. The IFSB assessment (2013) also corroborated this view. Most central banks do not provide deposit or credit facilities for IFSIs that are Shari'ah-compliant (Figure 4).

While several Shari'ah-compliant interbank and capital market instruments have been developed in recent years, the absence of liquidity and the secondary market for these securities remain two of the largest challenges that need to be addressed for collateralized and uncollateralized transactions. Currently, the main obstacles preventing secondary market trading are a lack of adequate supply of Shari'ah-compliant securities (Sukuk), difficulty in their valuation, and legal uncertainty surrounding Shari'ah compliance of their tradability. The challenge is to create noncontroversial tradable Sukuk structures (that do not create differences in opinion among scholars regarding their acceptability and tradability) and to develop markets characterized by effective instrument valuation.

Figure 4. Tools for Monetary Operations of Central Banks
(% of central banks and monetary authorities having the facility)



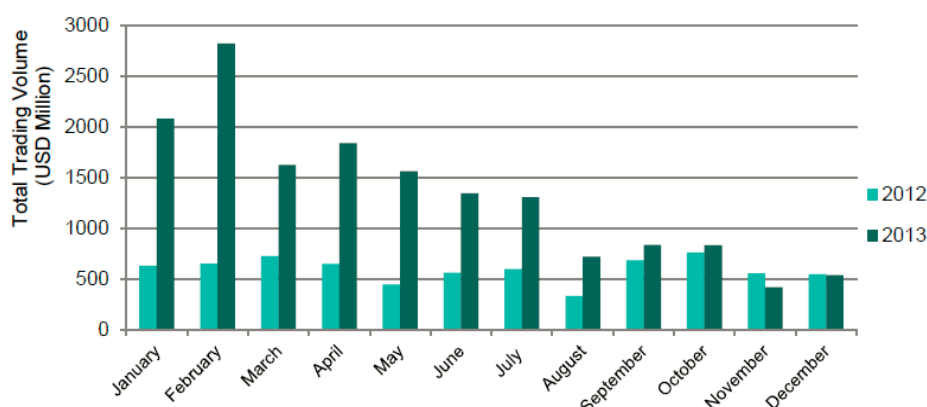
Source: IFSB 2013

In particular, the critical challenge of insufficient supply of assets that can be securitized through Shari'ah compliant contracts is being progressively addressed through the development of regular Sukuk issuance programs, and through the integration of Islamic finance into the public debt and public expenditure frameworks in an increasing number of countries, albeit at a slow pace. In fact, Sukuk has become one of the underlying instruments for central banks to offer standing facilities and conduct open market operations in a Shari'ah compliant manner. However, it is noteworthy that monetary policy cannot rely only on government Sukuk issuances.

A recent Standard & Poor's study of liquidity trends of U.S.-denominated investment grade Sukuk indicates that new issuances are substantially more liquid than outstanding ones and that secondary market liquidity is better for Sukuk with very large par values (more than US\$1 billion). Figure 5 shows that the average volume traded is higher in 2013 than in 2012.

4. GCC EXPERIENCE WITH SHARI'AH-COMPLIANT MONETARY INSTRUMENTS

GCC countries have made some efforts to issue Shari'ah-compliant financial instruments to meet the liquidity and investment needs of banks, and address the segmentation between conventional and Islamic banking markets. In countries that have been active in developing Shari'ah compliant instruments, there is evidence that IFSI are holding fewer amounts of cash reserves. For example, in Bahrain Islamic banks held larger cash balances (as a share of assets) than conventional banks, particularly before the financial global crisis. In 2008, average cash holdings made up 7.1 % of assets for Islamic banks, and 2.4 % for conventional banks. By 2013, average cash holding had converged to 6.1 % and 5.8 % for Islamic and conventional banks, respectively.

Figure 5. Total Trading Volume of the Dow Jones Sukuk Index constituents

Source: S&P Dow Jones Indices and MarketAxess Data as of Dec 31, 2013.

Notes: The number of the constituents considered in the index liquidity was limited to the availability of liquidity data. Charts and graphs are provided for illustrative purposes. Past performance is no guarantee of future results. The index liquidity depicts the volume in 2012 for the portfolio as of December 2011 and the volume in 2013 for the portfolio as of December 2012. Note that it did not capture the new issues' trading volume within 2012.

Bahrain. In 2001, the sovereign introduced the long-term *Ijara* Sukuk and short-term *Al-salam* Sukuk to enable investment opportunities for banks and to facilitate monetary policy activity by the central bank. The *Al-salam* Sukuk is used to engage Islamic banks in monetary operations. Under the *Al-salam* Sukuk contract, the government agrees to sell forward to Islamic banks a commodity, typically aluminum in the case of Bahrain, against a spot payment. Simultaneously, the Islamic banks designate the Bahraini government as their agent to sell the commodity to a third party upon delivery. The price of the future sale determines the return of the Sukuk, while the initial spot payment from the Islamic banks to the central bank constitutes the liquidity withdrawal. Sole, (2007).

In 2015, the Central Bank of Bahrain (CBB) launched a new Shari'ah compliant *Wakalah* liquidity management instrument. This instrument, which was approved by the Shari'ah Board of the CBB, is aimed at absorbing excess liquidity of the local Islamic retail banks and placing it with the central bank. The instrument has been developed, based on a standard contract of the International Islamic Financial Market (IIFM). The *Wakalah* is an investment opportunity for retail Islamic banks who wish to deposit excess liquidity with the CBB. Retail Islamic banks need to sign a *Wakalah* agreement which appoints the CBB as an agent (*Wakil*) to invest cash on behalf of the bank (*Muwakkil*). Accordingly, the *Wakil* will invest these funds in the investment portfolio allocated in advance and contains Islamic Sukuks. The duration of the *Wakalah* is one week and is available for Islamic retail banks every Tuesday.

Kuwait. An alternative approach has been followed in Kuwait, where the central bank has recently designed a type of monetary operation based on *Tawarruq* to manage the system's liquidity. The *Tawarruq* is a commodity-based instrument that

allows its originator to obtain immediate financing. The central bank approaches the Islamic bank and asks it to purchase some commodity on their behalf. The bank, in turn, contacts a commodity broker and agrees on a specific price. The Islamic bank gets into a debt agreement with the broker (but does not pay the commodity broker), and the central bank agrees to pay the Islamic bank the cost of purchasing the commodity plus a margin (as on *Murabahah* contracts). The central bank requests the Islamic bank to sell the commodity—typically at the price agreed with the commodity broker and to the original broker, who then cancels the debt to the Islamic bank. The Islamic bank makes a payment to the central bank, out of its own treasury, equal to the value of the spot sale of the commodity. This payment constitutes the liquidity withdrawal, while the cost of monetary operations is determined by the future installment payment over the spot payment, Sole, (2007).

Qatar. In 2010, the Ministry of Finance issued securities (bonds and *Ijarah Sukuk*) for the purpose of liquidity management and followed it up with another issuance in 2011. The Qatar Central Bank has been issuing short-term Treasury Bills based on a calendar of issuance to Islamic banks.

United Arab Emirates. The central bank has issued standardized contracts for collateralized *Murabahah* transactions.

Saudi Arabia. While SAMA does not distinguish between conventional and Islamic banks in its monetary operations, it permits banks to use *Murabaha* as collateral for repo transactions.

Regulatory Aspects of Liquidity Risk Management³

Islamic banks, like conventional banks, are expected under Basel III to increase their amount of high-quality liquid assets (HQLAs) holdings to meet the liquidity coverage ratio (LCR). But Islamic security markets are nascent, shallow and less developed than

³ This section follows from, "New Regulatory Standards Squeeze Islamic Banks On Two Fronts", Reuters, September 2, 2014.

conventional securities markets, so Shari'ah-compliant HQLAs are in short supply—squeezing Islamic banks. The Basel Committee on Banking Supervision (2013) noted that even in jurisdictions that have a sufficient supply of HQLA, an insurmountable impediment to banks to meet the LCR requirement may still exist.

Basel III requires banks to hold enough HQLAs to cover net cash outflows for a 30-day period under a high-stress scenario. Outflows are calculated by applying different weights (run-off rates) to funding sources, including profit-sharing investment accounts (PSIAs).

Run-off rates for PSIAs. The riskier the funding source, the larger the amount of HQLAs needed to cover it. Much will depend on the weights or "run-off rates" which national regulators around the world, who will implement Basel III in their own jurisdictions, choose to assign to PSIAs. Regulators have yet to give an indication of the likely weights; they are keen to develop their Islamic banking sectors, so they are unlikely to assign punitive weights. But they may not be able to treat PSIAs on the same footing as conventional bank deposits. For instance, PSIAs held by Islamic banks tend to have relatively short maturities. The treatment of PSIAs will also depend on factors specific to the Islamic banking industry in each country, such as how it behaved in past stress situations and the track record of Islamic banks in passing losses on to deposit holders under their contracts. Ultimately, it is the regulator in each country that will decide what will be the treatment of PSIAs, and here the recently issued Islamic Financial Services Board (IFSB) guidance note will be of significant value to help regulators decide how to treat PSIAs.

Malaysia's central bank has issued some guidance on PSIAs, classifying them into two types: general PSIAs, broadly equivalent to conventional retail deposits, and specific or restricted PSIAs deemed similar to managed investment accounts. It has given Islamic banks a two-year transition period to differentiate between those types. Although the central bank has already spelled out ratios and weights for Basel III capital adequacy rules, it has not yet announced run-off rates or HQLA requirements for PSIAs.

Basel III states that national regulators around the world could assign run-off rates of 3 % to 5 % to stable, conventional bank deposits, and as much as 10 % to less stable deposits. Most Islamic banks may end up being assigned numbers within that range; given the size of the deposits at stake, a variation of several percentage points could make a big difference to how much HQLAs the banks are forced to hold.

Compliance with the Liquidity Coverage Ratio may increase pressure on central banks and governments around the Islamic world to address some longstanding problems in Islamic finance: the supply of HQLAs, the absence of secondary markets, and the availability of deposit insurance.

Limited supply of HQLAs. With the exception of Malaysia, Bahrain, and Qatar, few central banks actively issue instruments which qualify as HQLAs. Government-issued Sukuks qualify, but most sovereign Sukuks are either not listed on developed markets or are not actively traded, making it difficult for Islamic banks to obtain them. A key issue is the absence of secondary markets that provide a proven

record of being a reliable source of liquidity at all times. Conventional banks, by contrast, have access to huge markets in high-quality government debt such as U.S. Treasuries and German Bunds. The Malaysia-based International Islamic Liquidity Management Corp. (IILM), backed by nine central banks and monetary agencies as well as the Islamic Development Bank (IDB), has also tried to fill the gap with the issuance of three-month and six-month Sukuk. However, there are concerns that such tools could be insufficient in times of market stress.

The IILM has built a track record of regular issuance since 2013, but it has limits. The IILM's short-term Sukuk program is backed by sovereign assets of its shareholders and is rated as A-1 by Standard & Poor's, which falls under the upper-medium investment grade rating for short-term instruments. The program is the first money market instrument globally to be backed by sovereign assets while being distributed through a diverse primary-dealer network of nine banks across different regions. To date, the IILM has issued a total of 11 tranches amounting to US\$6.7 billion, of which three remain outstanding as of December 5, 2014. The total value of the three outstanding Sukuk is US\$1.85 billion (IFSB, 2015).

However, IILM Sukuk are not explicitly backed by member central banks and there is no clear indication by IILM whether these would be taken back and cashed in through repo-style transactions. Based on this and other considerations, it appears that IILM Sukuk are likely to be treated as corporate rather than sovereigns (unless there is a clear policy by individual central banks to 'cash-in' IILM Sukuk at the request of Sukuk holders) (Al-Hashel 2015).

Deposit insurance. For bank deposits to be deemed stable, they need to be protected by an insurance scheme, but Shari'ah-compliant schemes are rare, partly because government support for domestic banks is considered implicit in many Gulf countries. Bahrain introduced Islamic deposit insurance in 1993. In May 2014, Qatar announced it would develop an Islamic deposit insurance scheme. In June, Bangladesh announced Islamic deposits would be covered under an existing scheme managed by its central bank.

CONCLUSION

The study assessed the performance of conventional and Islamic banks in the Gulf Cooperation Council (GCC) during and after the global financial crisis. Drawing on these findings and others the study provides evidence of market segmentation across conventional and Islamic banks in the GCC. This has likely led to excess liquidity and an uneven playing field for Islamic banks that may affect their growth prospects in the future.

Liquidity management has been a long-standing concern in the global Islamic finance industry as there is a general lack of Shari'ah compliant instruments that can serve as high-quality short-term liquid assets. The degree of segmentation varies across countries depending on Shari'ah permissibility and availability of Shari'ah-compliant instruments.

The inadequate availability of Shari'ah-compliant financial instruments seems to have forced Islamic banks to hold a significant amount of cash reserves, limiting the flexibility of the central bank's

monetary operations with Islamic Financial Services Industries (IFSIs). Therefore, a key challenge is to broaden the range of Shari'ah-compliant instruments and build liquid markets.

The reliance of IFSIs—mainly on interbank arrangements with other IFSIs—together with the limited use of special arrangement between IFSIs and conventional banks, confirms that the interbank money market is generally segmented in many jurisdictions, including the GCC. A partial response would be to support efforts to build Islamic liquid interbank and money markets, which could help to facilitate monetary transmission including through the Islamic financial system. Developing Shari'ah-compliant money market instruments could help. Additionally, the development of market microstructures to enhance secondary market trade, and focusing on ways to design Shari'ah-compliant alternatives to foreign exchange hedging and risk management arrangements, are needed.

Active efforts are needed to develop Shari'ah-compliant instruments to improve the efficiency of monetary operations. A strong commitment by central banks in this direction would help to level the playing field by accommodating IFSIs, having them supported by central bank Shari'ah-compliant lender of last resort (S-LOLR) facilities that accommodate both IFSIs and conventional banks, and by allowing more consistent and uniform signaling of the cost of central bank financing.

Efforts should continue to develop the sovereign Sukuk market, which will facilitate developing the Islamic interbank market—essential for managing liquidity, deepening financial markets, and supporting monetary policy.

Finally, modification of existing legal frameworks to accommodate the specificities of Islamic finance is crucial for developing Islamic money markets, including banking and securities laws.

REFERENCES

1. Abedifar, P., Molyneux, P., and Tarazi, A. (2012). Risk in Islamic Banking. Working Paper. Bangor Business School at Bangor University, Wales, UK. <https://doi.org/10.2139/ssrn.1663406>
2. Abdul-Majid, M., Saal, D.S. and Battisti, G. (2010). Efficiency in Islamic and Conventional Banking: An International Comparison. *Journal of Productivity Analysis*, 34(1), 25–43. <https://doi.org/10.1007/s11123-009-0165-3>
3. Al-Hashel, M. (2015). Basel III HQLA Requirements and Considerations in the Implementation of HQLA Supervisory Practice, IILM RoundTable on Liquidity Management "Short-term Financial Instruments", Washington, D.C.
4. Al-Hassan, A., Khamis, M., & Oulidi, N. (2010). The GCC Banking Sector: Topography and Analysis, IMF Working Paper, WP/10/87. International Monetary Fund, Washington, D.C.
5. Bader, M. K. I., Mohamad, S., Ariff, M., & Hassan, T. (2008). Cost, Revenue, and Profit efficiency of Islamic versus Conventional Banks: International evidence Using Data Envelopment Analysis. *Islamic Economic Studies*, 15(2), 23–76.
6. Bank for International Settlements. (2013). Basel III: The Liquidity Coverage Ratio and the liquidity risk monitoring tools, Switzerland.
7. Basu, R., Prasad, A., & Rodriguez, S. (2015). Monetary Operations and Islamic Banking in the (GCC): Challenges and Options, IMF Working Paper 15/234. International Monetary Fund, Washington, D.C.
8. Beck, T., Demircuc-Kunt, A., & Merrouche, O. (2013) Islamic vs. conventional banking: Business model, efficiency and stability. *Journal of Banking & Finance*, 37(2), 433–447. <https://doi.org/10.1016/j.jbankfin.2012.09.016>
9. Ernst & Young. (2011–12), (2013–14). World Islamic Banking Competitiveness Reports.
10. El Hamiani Khatat, M. (2016). Monetary Policy in the Presence of Islamic Banking. IMF Working Paper IMF Working Paper 16/72. International Monetary Fund, Washington, D.C. <https://doi.org/10.5089/9781475523942.001>
11. Espinoza, R., and A. Prasad. (2012). Monetary Policy Transmission in the GCC Countries, IMF Working Paper, 12/132 . International Monetary Fund, Washington, D.C.
12. European Central Bank. (2013). Islamic Finance in Europe. Occasional Paper Series, No. 146, June.
13. Hasan, M., & Dridi, J. (2010). The Effects of the Global Crisis on Islamic and Conventional Banks: A Comparative Study. IMF Working Paper WP/10/201. International Monetary Fund, Washington, D.C.
14. Islamic Financial Services Board. (2008). Technical Note on Issues in Strengthening Liquidity Management of Institutions Offering Islamic Financial Services: The Development of Islamic Money Markets.
15. International Monetary Fund. (2013). Qatar: Selected Issues, Financial Deepening and Local Currency Debt Market Development in Qatar. By Zsofia Arvai, IMF Country Report No. 13/15.
16. Islamic Financial Services Board (IFSB). (2015). Islamic Financial Services Industry Financial Stability Report.
17. Islamic Financial Services Board (IFSB). (2014). Islamic Financial Services Industry Stability Report.
18. Islamic Financial Services Board (IFSB). (2013). Islamic Financial Services Industry Stability Report.
19. Islamic Finance. Writings of V. Sundararajan. (2011). Edited by Jaseem Ahmed and Harinder Kohli.

20. Mohamad, S., Hassan, T., & Bader, M. K. I. (2008). Efficiency of Conventional versus Islamic Banks: International Evidence using the Stochastic Frontier Approach (SFA). *Journal of Islamic Economics, Banking and Finance*, 4, 107-130.
21. Rashwan, M. H. (2012). How did listed Islamic and Traditional Banks Performed: pre and post the 2008 financial crisis? *Journal of Applied Finance & Banking*, 2(2), 149-175.
22. Reuters. (2014). New Regulatory Standards Squeeze Islamic Banks On Two Fronts, September 2.
23. Sole, J. (2007). Introducing Islamic Banks into Conventional Banking Systems, IMF Working Paper 07/175. International Monetary Fund, Washington, D.C.
24. Standard & Poor's Rating Services (2014). Islamic Finance Outlook, 2014 Edition.
25. Sundararajan, V. (2011). Islamic Finance: Writings of V. Sundararajan, ed. J. Ahmed and H. Kohli (London: Sage).
26. Sundararajan, V., Marston, D., & Shabsigh, G. (1998). Monetary Operations and Government Debt Management under Islamic Banking. IMF Working Paper 98/144. International Monetary Fund, Washington, D.C.
27. Weill, L. (2011). Do Islamic Banks Have Greater Market Power?. *Comparative economic Studies*, 53(2), 291-306. <https://doi.org/10.1057/ces.2011.1>

APPENDIX 1. Summary Tables
Table A1. Conventional and Islamic Banks included in Sample

<i>Country</i>	<i>Conventional Banks</i>	<i>Islamic Banks</i>
Bahrain	Ahli United Bank BSC BBK BSC. BMI Bank BSC Future Bank BSC Gulf International Bank BSC National Bank of Bahrain	Al Baraka Islamic Bank AlSalam Bank-Bahrain Bahrain Islamic Bank Khaleeji Commercial Bank Kuwait Finance House Ithmaar Bank
Kuwait	Al Ahli Bank of Kuwait KSC Burgan Bank SAK Commercial Bank of Kuwait SAK Gulf Bank KSC National Bank of Kuwait SAK	Boubyan Bank Kuwait Finance House Kuwait International Bank Ahli United Bank Warba
Qatar	Ahli Bank QSC Al Khalij Commercial Bank Commercial Bank of Qatar QSC Doha Bank International Bank of Qatar QSC Qatar National Bank	Masraf Al Rayan Qatar International Islamic Bank Qatar Islamic Bank Barwa Bank
Saudi Arabia	Arab National Bank Bank Al-Jazira Banque Saudi Fransi National Commercial Bank Riyadh Bank Samba Financial Group Saudi British Bank Saudi Hollandi Bank Saudi Investment Bank	Al Rajhi Bank AIBilad Al Inma Bank Al Jazira
UAE	Abu Dhabi Commercial Bank Arab Bank for Investment & Foreign Trade-Al Masraf Bank of Sharjah Commercial Bank International PSC Commercial Bank of Dubai PSC EmiratesNBD PJSC First Gulf Bank Mashreqbank PSC National Bank of Abu Dhabi National Bank of Fujairah National Bank of Umm Al-Qaiwain Union National Bank	Abu Dhabi Islamic Bank Al Hilal Bank Ajman Bank Dubai Islamic Bank Emirates Islamic Bank Sharjah Islamic Bank Dubai Bank Noor Bank

Table A2. GCC Countries: Conventional and Islamic Banks Balance Sheets, Selected Items

<i>Conventional Banks</i>								
	<i>Percent of Assets</i>							
<i>Deposits</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Average</i>
Bahrain	50.9	50.3	52.3	60.5	60.9	63.9	65.0	57.7
Kuwait	62.4	59.1	61.9	62.0	62.7	63.0	59.4	61.5
Qatar	56.5	58.8	61.9	61.0	62.7	65.3	62.3	61.2
Saudi Arabia	73.1	75.1	74.9	75.7	75.1	75.9	76.4	75.2
U AE	61.8	62.9	65.4	65.1	66.0	66.7	67.4	65.0
Simple Average	60.9	61.2	63.3	64.9	65.5	66.9	66.1	64.1
	<i>Percent of Assets</i>							
<i>Total Securities</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Average</i>
Bahrain	12.6	15.4	20.7	21.7	24.3	28.5	27.4	21.5
Kuwait	13.0	16.3	19.4	19.6	18.6	18.2	17.0	17.4
Qatar	8.9	13.2	17.8	21.1	22.2	22.3	16.7	17.5
Saudi Arabia	28.3	25.6	27.9	27.1	25.6	26.1	27.8	26.9
U AE	7.9	7.4	7.8	9.2	9.0	9.4	10.7	8.8
Simple Average	14.1	15.6	18.7	19.7	20.0	20.9	19.9	18.4
	<i>Percent of Assets</i>							
<i>Liquid Assets</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Average</i>
Bahrain	31.7	33.6	33.0	35.0	29.8	28.0	27.0	31.1
Kuwait	25.6	21.0	19.6	20.8	16.1	16.8	19.1	19.8
Qatar	26.5	24.4	21.1	15.2	13.3	11.5	14.8	18.1
Saudi Arabia	10.4	14.9	12.4	12.7	13.3	9.5	8.0	11.6
UAE	14.0	18.0	19.9	18.9	20.5	19.1	17.4	18.2
Simple Average	21.6	22.4	21.2	20.5	18.6	17.0	17.3	19.8
	<i>Percent of Gross Loan</i>							
<i>Non-Performing Loans</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Average</i>
Bahrain	2.5	6.1	9.2	10.3	10.6	10.0	7.2	8.0
Kuwait	4.7	13.0	9.3	7.7	5.7	3.4	2.4	6.6
Qatar	1.2	2.3	2.2	1.7	1.6	2.1	2.2	1.9
Saudi Arabia	1.3	3.7	3.1	2.6	1.7	1.3	1.1	2.1
UAE	3.0	5.4	8.4	9.8	10.2	9.7	6.7	7.6
Simple Average	2.6	6.1	6.5	6.4	6.0	5.3	3.9	5.2

Table A2. (continued)

	<i>Percent of Assets</i>							
<i>Return on Assets</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Average</i>
Bahrain	1.3	1.0	1.2	1.2	1.3	2.0	1.6	1.4
Kuwait	0.0	0.7	1.2	1.2	1.0	0.9	1.1	0.9
Qatar	2.3	1.9	2.4	2.5	2.2	2.0	1.9	2.2
Saudi Arabia	2.0	1.6	1.7	2.0	2.0	2.0	2.1	1.9
UAE	1.9	1.7	1.6	1.3	1.9	2.0	2.1	1.8
Simple Average	1.5	1.4	1.6	1.6	1.7	1.8	1.7	1.6
	<i>Percent of Equity</i>							
<i>Return on Equity</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Average</i>
Bahrain	5.7	5.6	5.8	8.8	9.8	11.3	4.6	7.4
Kuwait	-15.2	4.1	9.0	8.3	7.2	6.5	8.4	4.0
Qatar	18.4	18.1	17.7	18.9	17.8	13.9	12.0	17.3
Saudi Arabia	13.6	11.2	9.8	10.6	11.2	12.0	12.5	11.6
UAE	13.8	10.7	9.9	8.8	11.5	11.9	12.7	11.3
Simple Average	7.2	9.9	10.4	11.1	11.5	11.1	10.0	10.2
<i>Islamic Banks</i>								
	<i>Percent of Assets</i>							
<i>Deposits</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Average</i>
Bahrain	55.6	48.9	49.9	42.1	43.8	57.7	63.4	51.6
Kuwait	62.3	65.4	63.7	49.8	60.0	62.9	54.3	61.3
Qatar	57.2	49.0	53.8	46.5	65.0	58.2	55.3	58.3
Saudi Arabia	54.2	58.3	67.9	73.0	75.6	77.7	70.0	69.3
UAE	70.0	70.2	70.4	68.8	72.1	71.6	73.3	70.9
Simple Average	59.9	58.3	61.1	56.0	63.3	67.6	70.0	62.3
	<i>Percent of Assets</i>							
<i>Total Securities</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Average</i>
Bahrain	20.7	20.8	21.3	24.0	24.3	21.6	20.3	21.9
Kuwait	15.4	12.8	8.8	9.5	7.8	8.2	7.2	10.0
Qatar	9.5	7.9	14.4	24.3	22.2	22.4	19.6	17.2
Saudi Arabia	31.7	7.6	11.6	11.1	10.5	12.2	11.8	13.8
UAE	11.1	11.1	13.6	9.1	8.6	7.7	8.4	9.9
Simple Average	17.7	12.0	14.0	15.6	14.7	14.4	13.5	14.6
	<i>Percent of Assets</i>							
<i>Liquid Assets</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Average</i>
Bahrain	32.0	28.3	24.6	29.8	29.0	25.2	21.9	27.2
Kuwait	23.3	21.9	24.3	37.1	27.7	23.8	23.9	26.0
Qatar	14.1	28.5	32.5	22.2	18.1	12.4	11.9	20.0
Saudi Arabia	20.3	41.3	23.3	21.4	19.3	15.4	16.5	22.5
UAE	22.3	16.3	18.7	20.0	20.0	20.5	16.5	19.3
Simple Average	22.4	27.3	24.7	26.1	22.8	19.4	18.1	23.0
	<i>Percent of Gross Loans</i>							
<i>Non-Performing Loans</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Average</i>
Bahrain	2.4	2.5	0.4	1.2	13.4	10.6	8.1	5.5
Kuwait	4.4	5.3	5.3	3.7	4.1	3.5	2.8	4.2
Qatar	1.5	1.0	6.5	2.0	1.5	1.0	1.0	2.1
Saudi Arabia	1.7	4.1	3.6	2.6	2.4	1.3	1.1	2.4
UAE	2.5	4.2	6.8	13.2	10.1	7.1	5.5	7.1
Simple Average	2.5	3.4	4.6	4.6	6.3	4.7	3.7	4.2
	<i>Percent of Assets</i>							
<i>Return on Assets</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Average</i>
Bahrain	4.7	0.2	-1.1	-0.3	-0.6	-0.4	0.6	0.4
Kuwait	1.5	-1.6	0.7	-0.1	0.6	0.6	0.9	0.4
Qatar	6.5	2.8	2.7	2.6	2.1	2.1	2.2	3.0
Saudi Arabia	2.6	1.2	1.1	1.8	2.3	2.0	1.3	1.8
UAE	1.1	-0.4	0.2	0.6	0.9	1.1	1.4	0.7
Simple Average	3.3	0.4	0.7	0.9	1.1	1.1	1.4	1.3
	<i>Percent of Equity</i>							
<i>Return on Equity</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>Average</i>
Bahrain	15.6	-0.5	-3.5	-3.5	-7.2	-2.0	4.6	-0.2
Kuwait	10.4	-12.5	5.8	3.0	5.9	5.8	7.6	3.7
Qatar	22.5	11.1	12.0	12.6	11.5	12.7	14.4	13.8
Saudi Arabia	9.7	4.8	6.7	10.5	15.3	13.3	12.4	10.4
UAE	9.7	-2.4	1.5	3.9	6.7	8.3	11.2	5.6
Simple Average	13.6	0.1	3.6	5.3	6.4	7.7	10.0	6.7

Sources: Bankscope and IMF Staff Calculations.

APPENDIX 2

Box 1. The Market's View: Bahrain and Malaysia's Success in Becoming Credible Islamic Financial Reference Centers

Bahrain and Malaysia successfully established themselves as Islamic banking reference centers. There are many benefits of customized regulatory framework as in Bahrain (with two separate, independent regulatory frameworks: one for conventional and another for Islamic banks), and Malaysia (with a similar regulatory framework adopted for areas that are applicable to Islamic banks and conventional banks, but separate regulations and guidelines are issued for areas that are specific to Islamic banks).

Malaysia has had strong, visible support from the government on legislative and regulatory aspects as a result of the 2013 Islamic Financial Services Act. Regulators recognized the profit and loss sharing concept of Islamic banking. Conventional banks are allowed by the central bank to establish Islamic windows. Various incentives (legal and tax) are provided by government; for example, up to 100 % foreign equity ownership for Islamic banks. Major talent initiatives were launched to meet the sector's additional workforce needs during the current decade. Malaysia actively supports new jurisdictions that are opening for Islamic finance.

Bahrain is home to four global standard-setting institutions: the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI), the International Islamic Financial Market (IIFM), the Islamic International Rating Agency (IIRA), and the General Council for Islamic Banks and Financial Institutions (CIBAFI). The country has a strong regulatory track record in guiding the Islamic banking industry through boom and bust periods.

Source: Ernst & Young, World Islamic Banking Competitiveness Reports 2011-12, 2013-14.

Box 2. Cross-Country Experience in Other Islamic Banking Jurisdictions

Malaysia has made noteworthy innovations regarding government securities (a general government funding scheme). In 1983, the Malaysian government pioneered the issuance of Islamic sovereign certificates—known as Government Investment Issues (GIIs)—an instrument that the government has continued to issue. The specified government assets are sold to investors at an agreed cash price that is decided on an auction basis, with an agreement to buy back the assets at the nominal value at maturity. The difference between the buying price and the selling price is the profit for the participating institutions through which all interested parties place their orders. GII is used in parallel with conventional interest-bearing government securities which are the main instruments of domestic financing of fiscal deficits. These instruments are used by the Islamic banks to invest their short-term excess liquidity. GIIs are actively traded in Islamic interbank markets in Malaysia. In principle, the use of this instrument is limited by the availability of assets for sale, may not be accepted by all Shari'ah boards, and is limited to trading among IFSIs primarily, thereby limiting the liquidity of the market for GIIs. Malaysia also issues Shari'ah-compliant REPOs based on the sale and buyback agreements. These involve one contract to sell a security outright at an agreed price, with a second contract for a forward purchase of the security at a specified price and on a future date. They require an active secondary market for a long-dated security, in which outright spot and forward transactions can be executed, or a strong counterparty or central bank that can quote firm buy and sell prices.

Iran. The government and central bank issues participation paper (PP) on a *Musharakah* basis (with yields in principle linked to government's profit from its share in profitable state-owned enterprises or projects under construction or the central bank's profits, excluding the cost of monetary operations, respectively), with a guarantee on yields and principal. The instrument is traded only at par, is not suited for more flexible monetary operations, but is instead useful for liquidity absorption. When issued by the government it is aimed at financing the budget deficit and is limited to the availability of assets held by the government. The central bank and government profit- and loss-sharing asset-based, tradable *Musharakah* certificates are also issued in **Sudan** for the purposes of open market operations (OMOs) and the government's deficit financing.

Sudan, Malaysia, and Brunei. The central bank and government issue *Ijara* certificates which represent part ownership of assets leased by the central bank (or the government). They acquire the asset and then sell it to an SPV, which issues securities. In Sudan, the contract between an SPV and an investor is based on a restricted *Mudarabah* basis. Short-term Sukuk *Al-ijarah* are also issued by Brunei in addition to *Ijara*. These instruments are used by central banks for OMOs and are listed on the exchange, but can only be repurchased by the central bank. Supply is limited to the availability of assets for sale and lease-back.¹

The reliance on central banks for liquidity management is low since most short-term financing from central banks has not been adapted to comply with Shari'ah rules and principles. Some governments do not issue Islamic paper. One option in such cases is for the central bank to securitize some assets (for example, the central bank's building), as in the **Sudanese Shijabs**. The potential issuance size of this security would be somewhat capped by the value of the central bank's assets, thus effectively limiting the amount of liquidity that it can drain from the market.

¹ Based on an IFSB technical note, "Strengthening Liquidity Management of Institutions Offering Islamic Financial Services" (The Development of Islamic Money Markets, March 2008). Prepared by Dr. Sundararajan and the Islamic Money Market Task Force, (referred to as the 2008 Task Force)