The Impact of Financial Services Globalisation on Islamic and Conventional Bank Performance in GCC and MENA Countries

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Abstract

Empirical researches have shown that Islamic banks were more efficient than the conventional banks before, during and after global financial crises and were more resilient to negative profitability and speculation commonly identified with conventional banks despite that the former have grown as a result of globalisation of financial markets, product innovation, and delimitation of financial regulations, among others. However, the analyses of globalisation or internationalisation of financial services have concentrated only on the cross-border flow of portfolio investment in country stock markets, ignoring foreign direct investment and movement of financial services professionals. Using panel regressions to analyse the impact of financial services globalisation, the paper finds that net capital account used to measure the phenomenon has no significant impact on Islamic banks’ performance measured in terms of return on equity, return on asset and profit before tax. This may be due to the oft-cited limited patronage for Islamic banking in general. The policy implication suggests the need for an increased drive to popularise Islamic banking products in non-Islamic countries and for Islamic banks to more actively engage in cross-border trade of Islamic banking services, as well as foreign direct investment in subsidiary banks outside their traditional locations.

Keywords: Financial services, globalisation, Islamic banks, GCC and MENA

1. Introduction

Globalisation is often considered in the literature as a multi-definitional and multi-dimensional concept, which encompasses the spread of global norms and values, such as democracy and human rights and proliferation of global agreement and treaties. Economically, it is a process of economic integration that broadens and deepens the linkages of world economic through trade, finance and investment to create a world market of goods, services and capital. According to Oyejide et al (2003), globalisation as a process increases interaction of the world’s economies through the expanding flows of goods, services, labour, capital, ideas and technology. Islamic Banks (IBs) or conventional banks (CBs) are expected to first and foremost act as financial intermediaries which pool funds from surplus units to distribute, in accordance with certain regulations, to deficit units under different risk conditions. Banks therefore function well in cash management, insurance, brokerage, credit and payments, as basically financial intermediaries (Rose 2012). Islamic banks perform these functions based on the principles of Shari’ah, which places certain restrictions on the type of returns IBs can collect and the type of business in which they can invest. Despite these restrictions, Islamic banking has seen tremendous growth since its first establishment in Egypt in 1963, and has been accepted worldwide as one of the fastest rising areas in finance and banking (Global Finance, 2012)\textsuperscript{1}. To this end, many conventional banks have integrated IBs by opening Islamic banking windows (Siddiq 2008) such that Islamic banking assets with commercial banks worldwide grew to $1.3 trillion in 2011, representing an average annual growth of 19\% during four years. Thus, Islamic finance industry is no longer a small niche market segment and has become a substantial and integral part of the global financial system.

\textsuperscript{1} The first Islamic bank, Mit Ghamar, in Egypt closed down in 1967
One of the factors responsible for the current widespread acceptance of Islamic banking and finance is the insulation of IBs from the 2008/2009 global financial crisis whereby it was empirically established that IBs were not only more efficient than the CBs during the crisis (e.g. Rachwan 2012, Merchant 2012) but also they were more resilient to negative profitability and speculation commonly identified with CBs. Assessing the impact of internationally contagious financial crisis on IBs relative to CBs constitutes one of the ways through which scholars have focused on internationalisation of banking services and its implications.

Other reasons for IBs growth, according to Bilal and Abbas (2015) are globalisation of financial markets, product innovation, delimitation of financial regulations, new technological improvements, development of new Islamic states, and the increased presence of Islamic institutions in northern hemisphere. Islamic banks have grown to about 275 in number in about 75 countries though the total IB assets of over $1 trillion remain quite insignificant in total banking assets.

It is instructive to note that the integration of world economies through increased foreign direct and portfolio investment in financial services contributes to the aspect of globalisation of financial services with which this paper is focused. Conceptually therefore, globalisation or internationalisation of financial services constitutes the process of integration of financial service sectors of world economies through the expansion of cross-border financial services, increased consumption abroad of financial services, rising foreign direct investment in financial services companies and temporary movement of financial services professionals across country borders either as independent suppliers, or executives linked to foreign direct investments in financial services. Globalisation of financial services is often viewed more narrowly than the above definition, concentrating more on only the cross-border flow of financial services, in particular, portfolio investment in country stock markets across the globe. Thus, capital account openness and foreign direct investment or financial integration indicators in financial services companies, which are important measures of financial services globalisation, are ignored.

International capital flows in the form of portfolio or foreign direct investment in financial services companies certainly have its pros and cons. Its benefits include, according to Bankole (2007), augmentation of domestic investment, skill acquisition, technology transfer, corporate governance enhancement, productivity growth and knowledge spill-over to domestic firms, among others. Its costs include financial instability and crisis, exchange rate fluctuations, volatility of interest rates and unrestrained import competition. This paper addresses itself to the impact of financial services globalisation on Islamic bank performance in GCC and MENA countries. Assessing the impact financial services globalisation on IBs is also motivated to the extent that IBs may have been involved with conventional banks. Indeed, many conventional banks have Islamic bank windows and it is not yet clear whether banks assets and liabilities are distinctively so treated especially when both types of banking are lumped in the same bank. Also, given that both CBs and IBs sometimes operate in the same economy, shocks to CBs may also affect IBs, which share the same macro-economy with CBs that are not totally insulated through macroeconomic environmental interactions which can be transmitted across borders.

The rest of the paper is organised as follows. Section 2 discusses the stylised facts about the countries’ banking system, macroeconomic conditions and the nature of financial services internationalisation. Section 3 discusses the literature review and theoretical framework. In section 4, the empirical analysis is presented and discussed. Section 5 concludes and offers recommendations.

2. Stylised Facts: Islamic Banking System, Macroeconomic Conditions and Financial Services Internationalisation

2.1 Basic Principles and Evolution of Islamic Banking

Islamic banking is guided by the Shari‘ah, under which a key principle is prohibition of riba (interest). Islamic banks do not engage in haram activities prohibited under the Shari‘ah, such as those involving pork, alcohol, pornography, gambling, etc. Shari‘ah-compliant banks do not give out loans for interest purposes, rather, they use other modes such as sale-lease and partnership-based instruments to make profit and also minimize gharar (ambiguity or uncertainty) in their contracts. Islamic banks must clearly state four elements in a sale and lease transaction: that is, price, quantity, quality and time of delivery. Hence, Islamic Shari‘ah principles embedded in Islamic banking and finance emphasise sharing and not profiteering, community/society wellbeing instead of private avarice, and the brotherhood of mankind and not societal fragmentation.
Since its inception more than three decades ago, the number of Islamic financial institutions worldwide has risen from one bank in 1975 to over 300 today in more than 75 countries. They are concentrated in the Middle East and South Asia, and are also in Europe and United States (El Qorchi, 2005). El Hawary et al (2004) asserted that estimates for worldwide Islamic finance range from $230 billion to $250 billion, with a projected annual growth rate in assets of 12 – 15%, and the market potential has been estimated at close to 10% of global gross domestic product (GDP). Islamic capital invested in global financial institutions is currently estimated at $1.3 trillion and over 105 Islamic equity funds globally are managing assets in excess of $3.5 billion (Association of Islamic Banking Institution, Malaysia April, 2004). Archer and Ahmed (2003) indicate that, 48% of Islamic banks were in Asian region, 20% in Africa, 15% in the Middle East, 12% in Gulf Cooperation Council (GCC) countries and 5% in Europe and America.

The advent of Islamic economics and the spread of Islamic banking and finance have had widespread impact on the academia with the earliest writing in the area dating back to the forties of twentieth century (Siddiqi, 1981) and the earliest practice can be traced to the early sixties (Ahmad, 1995). The 1960s witnessed the establishment of an interest-free bank in Kuwait, that of Tabung Haji in Malaysia, and saving-investment banks in MitGhamr in Egypt, that were based on sharing profits and avoided interest. Only Tabung Haji, (Tabung Haji, 1995) survived. The mid nineteen-seventies, precisely 1975 witnessed the emergence of Dubai Islamic bank, taking deposits in current as well as investment accounts and engaging in profit-making activities directly as well through working partners.

The Islamic Development Bank (IDB), which started operation in 1975, was designed to serve Muslim countries and communities by arranging finance for trade and development on non-interest basis. By late 1970s, there were some more banks in Egypt, Jordan, Kuwait and the Gulf. Islamic banks expanded around the globe in the 1980s reaching over 300 in over 50 countries in 2008. The Middle East and Asia are two main markets where Islamic banks have thrived where Bahrain, Kuwait, Qatar, Saudi Arabia and the United Arab Emirates (UAE) have been active especially in the Middle East. Other countries with thriving Islamic banking system are Egypt, Lebanon, Oman and the Syrian Arab Republic. Malaysia has a fully developed Islamic financial system (consisting of banking, Takaful, or insurance, capital market and money market components) in Asia, leading Brunei, Darussalam, Indonesia, Pakistan, the Philippines and Thailand due to the natural demand from the Muslim population within those countries. Islamic banks have also gained entry in western financial markets and grown sizeably since the first Islamic Finance House was set up in Luxembourg in the late 1970s. Islamic banks were founded in Denmark, Australia, United States of America and the United Kingdom, where five Islamic banks have been established between 2004 and 2008. Citibank, HSBC, Standard Chartered, ABN Amro and Deutsche Bank are among conventional banks that have entered the Islamic space.

2.2 Islamic Financial Instruments

Islamic jurisprudence allows the use of a wide array of financing techniques and instruments by Islamic banks. Some of these techniques developed in the period of first Islamic state, others have emerged recently to meet contemporary financing requirements according to Islamic teachings (Iqba and Mirakhor, 1987). Some of the financial instruments include:

a. *Murabahah* (Cost-plus Mark-up)

This is a cost-plus contract in which a client, wishing to purchase equipment or goods, requests a financier to purchase the items and sell them to him at cost plus a declared profit. For instance, a financier who buys a machine for $250,000 can tell its purchaser that he is going to sell it for $270,000, which can be paid back within a certain period. By this technique, a party needing finance to purchase certain goods gets the necessary finance on a deferred payment basis. The finance provider does the purchasing of the goods and sells them on the basis of a fixed mark-up profit, agreeing to defer the receipt of the goods even though the goods can be delivered immediately (Al-Omar and Abdel-Haq, 1996).

*Murabahah* is the instrument used most commonly by Islamic banks, although some use *musawamah* (a sale where only the end selling price is declared, that is the vendor’s profit is not disclosed). In *murabahah*, the bank buys an underlying asset and then sells it. Thus, there is an exchange of asset and money, unlike a
loan, in which money is exchanged for money. Generally, the condition to be met for a valid murabahah contract is disclosure of the cost price to the purchaser and the profit over the cost price to both parties. The cost price must be quantifiable and substitutable; the contract must not involve anything that constitutes riba and the vendor must have bought the item for the contract in valid sale and purchase agreement (Pheng, Lee & Ivan, 2007). However, in reality many people have questioned the legality of murabahah because there is a thin line between it and riba.

b. Salam (Forward Trade Contract)
This is a forward sale contract used for general goods (i.e. commodities). It is a technique whereby a person makes pre-paid purchase of goods. It is a financing means that can be used to fund production. Here, the price is paid at the time of the contact but the delivery would take place at a future date. This mode enables an entrepreneur to sell his output to another at a price determined in advance (Ariff, 1988). Salam is an exemption to the general rule of sales because the vendor is allowed to sell on a forward basis, meaning the subject matter has yet to exist on the day of sale. The conditions for the validity of such future sales are that the goods are not available or cannot be delivered at the time of contracting and that the consideration in lieu of advance payment must be paid, or its rate fixed, at the time of concluding the contracts. Failure to meet these conditions may invalidate the contract. A salam contact is also void if the buyer’s consideration is in the form of a set-off or negation of an existing debt (Al-Omar and Abdel-Haq, 1996:17). Salam, however, is not popular with Islamic banks. It is widely used in Sudan but not elsewhere.

c. Mudarabah (Trust Financing)
This is a two-party contract and a special kind of partnership where one partner gives money to another to invest it in a commercial enterprise. The investment comes from the first partner, who is called rabb-ulmal (which could be the Islamic bank) while the management and the work is an exclusive responsibility of the other called mudarib. Profits generated are shared between the parties according to a pre-agreed ratio/basis. However, if a loss occurs, is borne by the provider of capital, unless the loss is caused by negligence or violation of the terms of the contract. In the event of any loss, the entrepreneur (i.e. the second part) also gets no reward for his labour.

d. Musharakah (Equity Partnership)
The Arabic term “musharakah” means sharing and is used in financial transaction to identify joint ventures or partnerships. Here, more than two parties can be involved, and generally each provides knowledge and skill as well as share of the capital. Knowledge and skill can take the form of management or advisory services or doing the actual work itself. It is possible for one of the partners only to provide capital, in which case he or she becomes a sleeping partner. The profit ratio is pre-agreed in the contract and reflects the level of capital provided, effort, skill and expertise the partners bring to the joint venture. Losses are born by the partners in proportion to the capital they have provided. The liability of the partners is technically unlimited.

e. Ijarah wa Iqtina’
Ijarah is an Islamic alternative of leasing. Leasing backed by an acceptable contract is an acceptable transaction under Shari’ah. The Ijara wa Iqtina’ is a hire purchase agreement between an Islamic bank and its client. The Islamic bank agrees to buy and rent equipment, building or other facility for the client, together with an undertaking from the client to make additional payment in an investment account. The client becomes the owner of the financed equipment whenever he finishes the instalment payment identical with the amount paid by Islamic Window to purchase the equipment plus the agreed additional payment. The rentals as well as the purchase price are fixed in such manner that the bank gets back its principal sum along with profits over the period of the lease.

f. Qard Hassan
It is a benevolence interest-free loan given to a borrower. This loan is extended on a goodwill basis, and the debtor is only required to repay the amount borrowed. Essentially, a person borrows money from another, to be returned at a stipulated future date free of interest. However, upon return, the borrower has discretion to reward the lender for the loan by paying any sum over and above the principal as a token of appreciation to the creditor.
Bay ‘un Muajjal is a trade contract in which the bank earns a profit margin and agrees to receive the price of a commodity from its client at a future date in lump sum or installments. The agreed price can be the same as the spot price or higher than the spot price. It is literally called credit sale, but technically it takes the form of murabahah muajjal.

2.3 Trend of Banking System, Macroeconomic Conditions and Financial Services Internationalisation

A first-rate economic growth in any of the country has the potential to attract both domestic and foreign direct investments, which in turn drives further economic growth through the instrumentality of output and employment increases. These output and employment booms are expected to be reflected in the banking system activities, as the new investments could imply more demand for loans and new jobs created would in addition require banking services such as savings account and consumer credits or salary advances. These activities demand for banking services affect bank loans deposits, assets, expenses and profits. Banks may also require recapitalisation to be able to deal with rising need for large corporate loan requests that may necessitate loan syndication. The depth of the banking system becomes strengthened in the process.

Figure 1 gives an indication of the size of Islamic banking in study countries compared with other countries in Asia and the northern hemisphere. The banking sector in both Iran and Sudan is solely operated by Islamic banks, followed at a distance by Saudi whose Islamic banking share of the banking industry is about 50%. The United Arab Emirates did not reach the 20% mark, so also are Malaysia, Indonesia and Egypt in which the first Islamic bank was established.

![Figure 1: Market size for Islamic Banking](image)

Source: IFSB Financial Stability Report 2014

The macroeconomic environments in the study countries are depicted in Figure 2, which shows the average GDP growth and inflation rates respectively during 2010-2014 period. Qatar recorded the highest average GDP growth rate of 10.5% followed by Saudi Arabia with average GDP growth rate of 6.3%, and Turkey and Kuwait are next with 5.5% and 5.4% respectively. Yemen, Sudan and Iran achieved the lowest average GDP growth rates perhaps due to rebellion and wars in the case of Yemen and Sudan, and the effect of economic sanctions in the case of Iran. The rest of the countries also performed poorly with respect to their average GDP growth rates. This growth performance is reflected in the inflation rates of these countries in the same period. Sudan, Iran and Yemen recorded high rates of inflation on the average, expected in the presence of the conflicts and sanctions imposed while Egypt’s average inflation rate is similar to that of Yemen, an indication of the recent political upheavals in the country. Apart from Turkey, average inflation
rates in the remaining countries are quite low, ranging from about 1% to slightly above 4%.

Financial services internationalisation, which entails crossborder services, banking activities of tourists, foreign direct investments in financial corporations and movement of foreign bankers to host countries to manage banking and other financially related business, among others, influences the nature of the banking system and the competitive structures of banks in host countries. For example, foreign Western banks, such as Citigroup’s Citi Islamic subsidiary in Bahrain was established in 1996 and had a deposit base of $6billion by 2005 compared with little over $0.5billion of Al Baraka of Bahrain (Newsweek, 2005). According to Newsweek (op. cit.), Societe Generale, BNP Paribas, Deutche Bank and Standard Chartered have entered the Islamic banking business while accounting and management consulting firms like Ernst and Young have started offering financial services related to Islamic accounting. In the first example, foreign direct investment stifles domestic Islamic banks operation while healthy competition is derivable from a congregation of foreign banks in a particular islamic banking environment.

3. Literature Review

Many studies have focused on the comparison of Islamic and conventional banks using a variety of measures of performance, which capture the totality of the operations of both types of banks (e.g. Brown et al 2007, Al-Gazzar (2014)). Some studies also concentrated on whether the Shari‘ah compliance of Islamic banks affect the riskiness of their investment in different types of assets compared to conventional banks, due to the former’s relatively less leverage position compared to the latter. In the case of performance comparison, many of the empirical works have deployed a popular corporate performance evaluation criteria of capital adequacy, asset quality, management quality, earnings quality and liquidity capsuled into CAMEL, combined with the examination of whether these and such other factors as the growth of the economy and other macroeconomic variables in terms of inflation and exchange rate affect IBs and CBs differently.

Specifically, Brown et al (2007) compared operational efficiency and performance of Islamic banks in the context of structure, liquidity, lending, performance and profitability of these banks. Deploying varying financial ratios ranging from equity to total assets, net loans to total assets ratios to return on average equity or average assets, they found, amidst problems and challenges facing Islamic banks, that IBs and CBs are very dissimilar. The challenges facing Islamic banks, according to them involve a limited understanding of IBs coupled with limited patronage despite rapid global development of Islamic finance, difficulty in management of liquidity, and social banking function of IBs, among others.

Al-Gazzar (2014) found that IBs outperformed CBs in capital adequacy, asset quality, management quality, and earnings quality and not in liquidity. Also, there was significant statistical difference between
IBs and CBs in capital adequacy, asset quality and management quality, while these three performance measures and GDP growth rate significantly determined the profitability of banks with bank type having a role to play in profitability. Bashir (nd.) assessed the determinants of performance of IBs from eight middle east countries during 1993 – 1998 period using endogenous and exogenous banking characteristics to predict the extent to which these banks were profitable and efficient. He found that high leverage and large loans to asset ratios lead to higher profitability after controlling for macroeconomic environment, financial market structure and taxation. In addition, banks with foreign ownership performed better than domestically owned banks. Taxes affect banks negatively and favourable macroeconomic conditions did otherwise, while equity and bank financing are complementary channels of financing.

Miniaoni et al (2015) was one of the few studies which focused on the implications of the internationalisation of financial services in form of the impact of financial crisis of 2008/2009 on Islamic and conventional indices of Gulf Cooperation Council (GCC) countries (i.e. Saudi Arabia, Bahrain, Oman, Kuwait, Qatar, and United Arab Emirates) using financial ratios and liquidity under the assumption that Islamic investments are insulated from shocks. Hence, the paper investigates whether there is any long-lasting impact of the financial crisis on Islamic index. They did this comparing the mean and variance of Dow Jones GCC Islamic index with conventional index. The Generalised Autoregressive Conditional Heteroscedasticity (GARCH) approach was modified to admit dummy variable for the crisis period. Their result was that the 2008/2009 financial crisis impacted on the mean returns of Bahrain, and not on other countries’ indices. It also impacted volatility in Kuwait, Bahrain and UAE with insignificant effect on the remaining markets. On the whole, the volatility of Islamic index was not lower than conventional index. This finding is in contrast to Hakim and Rashidian (2002) who found that Islamic indices (DJM) with unique risk-return characteristics were not affected by broad equity market (Wilshire 5000 index) and risk-free rate (i.e. 3-month Treasury Bills). It is also in contrast to the findings of Hakim and Rashidian (2010) who compared DJI and DJW and DJS or Green index, which found that DJI performed as well as DJW but not as well as DJS, and concluded that Muslim index investors did not suffer any discernible cost for complying with the Shari’ah restriction on DII. Their results are however similar to Hussain (2004) who inferred that the application of ethical screens in Islamic indices, as proxied by the FTSE Global Islamic index, did not negatively impact on their performance. Though Hussein and Omran (2005) accounted for industry type, size and economic condition in their work, their conclusion was also similar in the sense that DJIMI performed better than conventional index in bull markets but not so in bear markets. In other words, Muslim investors were not worse off in investing in Islamic stock markets (Al-Zarbi & Maghey, 2007) and they can pursue passive stock investment in conformity to religious beliefs without sacrificing financial performance (Benjelbene-Abbes, 2012).

Globalisation of financial services tends to create a strong competitive environment for domestic banks just as import competition affects tangible goods producing domestic firms. Bashir (nd.) contributed to the debate on the relationship between IBs’ performance and financial development but alluded to foreign ownership in characterising bank performance factors into internal (bank size, loan, short-term funding, overhead and ownership) and external (macroeconomic, regulatory and financial market environment). Foreign ownership, taxes, and market capitalisation were control variables, while he created interaction between some determinants with GDP per capita to assess the effect of different levels of income. In terms of methodology, the study utilised cross-country bank-level data obtained from income statements and balance sheet of 14 Islamic banks each year 1993 – 98 periods in 8 countries. For Francois and Estenbach (2004), there is a strong positive relationship between financial sector competition and performance and financial sector openness conceptualised as foreign bank access to domestic markets.

Despite the expectation that IBs will be affected by the 2008 global financial crisis, which created difficulties for many conventional banks worldwide, they were largely insulated (Willson 2009, Yilmaz 2009). Regulation and strict monitoring of banking operations increase technical efficiency for IBs while risk taking reduces as a result. In addition, since IBs loans are done on the basis of profit and loss sharing, it is expected that a negative impact of international financial crisis on the real sector of the economy will affect real sector performance, which in turn might affect IBs. Accordingly, IMF (2010) found that IBs, on average showed stronger resilience during the global financial crisis but faced larger losses than CBs when the crisis hit the real sector.

Methodologically also, bank performance evaluation either uses ratio analysis in conjunction with CAMEL, or stochastic frontier analysis model. The CAMEL approach, established by the Basel Committee
on Banking Supervision in 1988 to comprehensively assess managerial and financial operations of banks was applied by Al-Gazzar (2014), etc. In order to assess the impact of financial globalisation on Islamic economies, Miniaoni, et al (2015) used the log normal return \( R_t = \log \left( \frac{P_t}{P_{t-1}} \right) \times 100 \) to measure the index of returns of Islamic economies stock markets summarised by the Dow Jones Global Islamic indexes and the FTSE Global/Islamic series which evaluate the performance of Shari’ah compliant listed companies in the GCC region. Their study aimed at comparing the effect of the 2008 financial crisis on conventional and Islamic indices of these countries. These indexes of return were subjected to descriptive statistics and volatility tests as well as the GARCH (1,1) which is one of the methods employed to model unequal variances or heteroscedasticity in financial time series and to produce volatility measure for risk analysis, portfolio selection and derivative pricing. A dummy variable was included in the GARCH (1,1) model for variance to capture the period of financial crisis where 1 represents crisis period and 0 otherwise.

Apart from the use of traditional financial ratio analysis-based studies of efficiency and performance of IBs and CBs, frontier approach anchored on Data Envelopment Analysis (DEA) has also been employed for its superiority in the area of removal of differences in input and output prices and more accurate estimation of firm efficiency. According to Hassan and Kayed (2009), causes of 2008 global financial crisis were extraordinarily high liquidity, reckless lending practices, rapid pace of financial engineering which created complex and opaque financial instruments to transfer risk, breakdown of lender-borrower relationship, and informational problems induced by opaque asset pricing. Others include outdated regulation, faulty risk management, and incentive structure that encouraged excessive risk taking, among others.

Part of the characteristics of IBs is their financial inclusiveness particularly as they provide funding to individuals without collateral while small and medium innovative borrowers also do not have to repay loan in the rare event of project failure. Internalisation of financial services implies more competition to domestic IBs, which can impinge on financial inclusion or deepen financial systems in case of positive spill-over effects. Inclusive financial system appears better than redistributive policies by not only equalising opportunities rather than outcomes but it also reduces poverty (population living on less than one dollar a day) faster (Dermirguc-Kunt and Levine, 2007).

Baten and Bagum (2014) used Stochastic Frontier analysis to evaluate and comparison of cost and profit efficiency of IBs in Bangladesh during 2001 – 2010. The result of the translog stochastic cost and profit frontier models show that other earning assets were significant and negative, price of labour significantly positive, while price of fund is significant and negative in the profit model. Cost inefficiency and profit efficiency observed were 43.9% and 82% respectively. Dermirguc-Kunt et al (2004) in examining the impact of bank regulations, market structure and national institutions on the profitability of banks found that stricter barriers to entry and bank activities may increase the cost of financial intermediation, and impeded firm’s ability to access financing from external sources. On the other hand, ease of bank entry due to deregulation gave rise to waves of consolidation and mergers between financial institutions in European countries. Johnes et al (2012) also undertook a comparison of Islamic and conventional banks between 2004 and 2009 using the DEA and found that there was no significant difference in mean efficiency between IBs and CBs when efficiency is measured relative to a common frontier. This comparison was done because of the increasing globalisation and the growing attraction of Islamic finance worldwide, which has led to direct competition between Islamic and conventional banks.

4. Empirical Analysis

Model Articulation, estimation technique and results

Due to the panel nature of the bank data, we articulate the following panel regression equation:

\[ Y_{it} = \beta X_{it} + \beta Z_{it} + \alpha_i + \mu_{it} \]  ………………………………………………………………………. (1)

where \( Y \) denotes performance in bank \( i \) at time \( t \) in each country, \( X \) represents endogenous (internal bank characteristics) variables, \( Z \) symbolize exogenous (external) variables, \( \alpha_i \) is country fixed effects, and \( \mu_{it} \) is the error term. The countries included in the regression are Bahrain, Egypt, Iran, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Sudan, Turkey, United Arab Emirates (UAE), and Yemen.

The paper adopts financial ratios to measure IBs and CBs performance and its determinants. Three
performance measures depict the dependent variables. These are return on equity (ROE), return on assets (ROA) and profit before tax (PPBTA). The internal bank characteristics or bank-level explanatory variables are ratio of profit before tax to total assets, ratio of equity to total assets, ratio of net loans to total assets, ratio of liabilities to total assets, and ratio of net expenses to total assets, while the exogenous or country level variables are GDP growth, inflation, net capital account (the sum of capital inflows and outflows) to denote internationalization of financial services\(^2\), and interaction terms between the internal characteristics variables and macroeconomic variables on the one hand and between the former and net capital account, on the other. We posit that since the capital account records the movement of financial capital into and out of a country which for the most part passes through the banking system, it is the best variable to measure internationalization of financial services in the absence of a direct measure such as an index that captures all the factors in financial internationalisation. Capital inflows are in the form of borrowing, sales of overseas assets, and foreign investments, while capital outflows are lending, buying of overseas assets, and purchases of domestic assets owned by foreign residents.

Separate equations are estimated for conventional and Islamic banks with regard to ROA, ROE and PPBTA, which define their performance. In terms of the a priori expectation, the capital funds-liabilities or equity-total assets ratio measure the structure of the banks, net loans - total assets measure the riskiness of bank lending operations as rapid increase in bank loans may increase risk and adversely affect bank performance in the long-run. Expenses to total assets ratio is a measure of bank operating expenses. Local economic conditions are also analysed by using growth rate of per capita GDP, or GDP. High GDP per capita causes high demand for financial products/services and it is positively related to bank performance.

In line with Farancois et al (2004), trade in financial services is a combination of mix of cross-border trade (cross border supply, consumption abroad, temporary movement of workers abroad) and local establishment (FDI) or commercial presence in WTO parlance. The effect of this combination is to increase number of banks and the associated competition in the host markets and reduce profits of local banks. Therefore, the effect of financial internationalisation is negative given that the largest proportion of this phenomenon is through FDI.

The equation was estimated as a panel with 65 observations for IBs and 100 observations for CBs over 2010-2014 period using both fixed and random effects estimation techniques. All the variables are transformed to logarithms. The random effects model assumes that the random effects are orthogonal to the regressors, and its estimator will be inconsistent if that assumption is wrong. Estimated equations were subjected to the Hausman test to select which of the fixed and random effects models performed better. The null is that both the fixed and random effect estimation methods are both satisfactory in terms of consistency and efficiency or both hence produce similar coefficients. The alternative hypothesis is that the fixed effects estimation is preferred to the random effects estimation, with glaring differences between the coefficients sets of the two, implying that the assumption of orthogonality is wrong. Hence, the bigger the difference, the bigger the Hausman statistic and a significantly large Hausman statistic implies a significantly large difference and a rejection of the null that both methods are satisfactory in preference for the alternative hypothesis that only the fixed effects method is satisfactory.

The Hausman post-estimation tests for misspecification suggest that the random effects estimation for IBs is consistent and efficient while for the CBs, the fixed effects estimator is consistent, in view of the p-value of the Hausman test, especially for return on asset and profit before tax variables. The regression results show that the variable measure of financial services globalization has no significant impact on Islamic banks performance measured in terms of return on equity, return on asset and profit before tax respectively. The coefficient of the variables which depicts the interaction between all the internal characteristics variables (i.e. loan to total asset ratio, equity to total asset ratio, liabilities to total asset ratio and expenses to total assets ratio) with net capital account are negative and statistically insignificant. This may be due to limited businesses of these banks with foreign banks as correspondent banks or the oft-cited limited patronage for

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\(^2\) Alternatives to net capital account exist. One is the Chinn-Bo index of capital account liberalization. However, the index remains the same for several years for many of the countries. Two is crude estimate of tariff-equivalents for financial services trade, based on General Agreement on Trade in Services (GATS) commitments in WTO and used by Francois et al. Three is Heritage Foundation’s “Bank Freedom” index and lastly is the share of foreign banks in the domestic banking system. This variable will be tested eventually before Conference presentation.
Islamic banking in general. In the case of conventional banks, EQTANCA is positive and significant at 1% level while LATANCA is negative and statistically significant at 5% level for returns on assets meaning that internationalisation induced higher equity participation and eased liability management in the conventional banks which increased the return on assets in the first case and reduced the return on assets. The expenses to total assets ratio interacted with internationalisation variable EXTANCA is statistically significant and negative implying that internationalisation contributes negatively to profit before tax.

Table 1: Panel regression results: Random and Fixed Effects Estimators

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<td>EQTA</td>
<td>-0.6067 (0.0000)</td>
<td>0.2269 (0.64)</td>
<td>0.1296 (3.68***)</td>
<td>5.0426 (1.30)</td>
<td>-15.7913 (-2.49**)</td>
<td>-0.6289 (0.0000)</td>
</tr>
<tr>
<td>LONTA</td>
<td>-0.0086 (-0.20)</td>
<td>-0.0027 (-0.06)</td>
<td>0.0111 (0.26)</td>
<td>0.2641 (0.33)</td>
<td>1.4060 (1.20)</td>
<td>0.2953 (1.16)</td>
</tr>
<tr>
<td>LATA</td>
<td>0.3094 (0.3080)</td>
<td>0.0696 (0.0696)</td>
<td>-3.4445 (0.33)</td>
<td>7.5297 (1.20)</td>
<td>0.2899 (1.16)</td>
<td></td>
</tr>
<tr>
<td>EXTA</td>
<td>0.6857 (2.12**)</td>
<td>0.4687 (0.05)</td>
<td>0.0011 (0.38)</td>
<td>0.0287 (0.27)</td>
<td>0.4837 (-1.1942)</td>
<td></td>
</tr>
<tr>
<td>EQGDP</td>
<td>-0.0350 (-0.42)</td>
<td>0.0007 (-0.0271)</td>
<td>0.0430 (0.16)</td>
<td>-0.4168 (-1.17)</td>
<td>0.0677 (0.88)</td>
<td></td>
</tr>
<tr>
<td>CPI</td>
<td>0.05393 (1.29)</td>
<td>0.0630 (1.52)</td>
<td>-0.0122 (-0.11)</td>
<td>-0.0046 (1.06)</td>
<td>-0.0602 (-0.17)</td>
<td>-0.0021 (1.07)</td>
</tr>
<tr>
<td>LONTANCA</td>
<td>-0.0022 (-0.34)</td>
<td>-0.0045 (-0.67)</td>
<td>-0.0004 (-0.54)</td>
<td>-0.0349 (-1.26)</td>
<td>-0.1755 (-1.14)</td>
<td>-0.0343 (1.14)</td>
</tr>
<tr>
<td>EQTANCA</td>
<td>-0.0141 (-0.54)</td>
<td>-0.0247 (-0.92)</td>
<td>0.0024 (0.92)</td>
<td>-0.6362 (2.1164)</td>
<td>0.0593 (0.35)</td>
<td></td>
</tr>
<tr>
<td>LATANCA</td>
<td>-0.0014 (-0.08)</td>
<td>-0.0015 (-0.09)</td>
<td>-0.0018 (-1.10)</td>
<td>0.3846 (-1.66)</td>
<td>-0.9091 (-2.49**)</td>
<td>-0.0363 (0.46)</td>
</tr>
<tr>
<td>EXTRANCA</td>
<td>-0.0504 (1.40)</td>
<td>0.0053 (1.47)</td>
<td>0.0426 (-0.21)</td>
<td>-0.0426 (3.99**)</td>
<td>-1.733 (18.33**)</td>
<td></td>
</tr>
<tr>
<td>CONSTANT</td>
<td>1.5549 (6.75)</td>
<td>-0.3740 (1.52)</td>
<td>1.8709 (76.78***)</td>
<td>2.2404 (1.45)</td>
<td>0.6380 (17.465)</td>
<td></td>
</tr>
<tr>
<td>Prob&gt;Chi2</td>
<td>0.0000 (0.1820)</td>
<td>0.0000 (0.1411)</td>
<td>0.0000 (0.9780)</td>
<td>0.0000 (0.0000)</td>
<td>0.0000 (0.0000)</td>
<td></td>
</tr>
</tbody>
</table>

Source: Authors’ Computation.
Note: *, **, *** represent 10%, 5% and 1% levels of statistical significance respectively. The z-statistics and t-statistics are in parenthesis. ROA, ROE and PPBTA are the dependent variables for model 1, 2, and 3 respectively.

5. Conclusion

The tremendous growth experience of IBs since its first establishment in Egypt in 1963 and the associated global acceptance have made conventional banks to key into Islamic banking through Islamic banking windows or the establishment of Islamic banking subsidiaries in Islamic countries. This growth has seen assets reaching $1.3 trillion in 2011 making Islamic finance industry a substantial and integral part of the global financial system. Empirical research has also shown that IBs were more efficient than the CBs during the global financial crisis and were more resilient to negative profitability and speculation commonly identified with CBs. IBs have also grown due to the globalisation of financial markets, product innovation, delimitation of financial regulations, new technological improvements, development of new Islamic states, and the increased presence of Islamic institutions in northern hemisphere. Assessing the impact of internationally contagious financial crisis on IBs relative to CBs constitutes one of the ways through which scholars have focused on internationalisation of banking services and its implications.
Broadly viewed, globalisation or internationalisation of financial services constitutes the process of integration of financial service sectors of world economies through the expansion of cross-border financial services, increased consumption abroad of financial services, rising foreign direct investment in financial services companies and temporary movement of financial services professionals across country borders either as independent suppliers, or executives linked to financial services foreign direct investments. A narrow conceptualisation of globalisation of financial services tends to concentrate more on only the cross-border flow of financial services, in particular, portfolio investment in country stock markets across the globe. The broad definition of financial services globalisation suggest that its benefits and costs could rub off on domestic Islamic and conventional banks in terms of augmentation of domestic investment, skill acquisition, technology transfer, corporate governance enhancement, productivity growth and knowledge spill-over to domestic firms, among others as well as financial instability and crisis, exchange rate fluctuations, volatility of interest rates and unrestrained import competition. These suggest that trade in financial services has the tendency to influence the performance of both Islamic and conventional banks just as goods trade liberalisation affects import competition status of domestic manufacturing firms.

Using panel regression to analyse the impact of financial services globalisation, the paper finds that the regression results show that financial services globalization variables have no significant impact on Islamic banks’ performance measured in terms of return on equity, return on asset and profit before tax respectively. The coefficient of the variables which depicts the interaction between all the internal characteristics variables (i.e. loan to total asset ratio, equity to total asset ratio, liabilities to total asset ratio and expenses to total assets ratio) with net capital account are negative and statistically insignificant. This may be due to limited businesses of these banks with foreign banks as correspondent banks or the oft-cited limited patronage for Islamic banking in general. In the case of conventional banks, EQTANCA is positive and significant at 1% level while LATANCA is negative and statistically significant at 5% level for returns on assets meaning that internationalisation induced higher equity participation and eased liability management in the conventional banks which increased the return on assets in the first case and reduced the return on assets. The expenses to total assets ratio interacted with internationalisation variable EXTANCA is statistically significant and negative implying that internationalisation contributes negatively to profit before tax.

References

International Seminar on Islamic Banking: Risk Management, Regulation and Supervision, September 30-October 2, Jakarta, Indonesia


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