ISLAMIC BANKS PARTICIPATION, CONCENTRATION AND PROFITABILITY: EVIDENCE FROM MENA COUNTRIES

Abdel-Hameed M. Bashir

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Abdel-Hameed M. Bashir , Economic Policy and Strategic Planning Department
Islamic Development Bank
Email: ambashir@isdb.org

Abstract

Using cross-country bank level data, this paper examines the performance of Islamic banks in a sample of 12 Middle East/North African (MENA) countries, looking specifically at the impact of their participation on the profitability and efficiency of the overall banking sector. Simple statistical tests indicate that there are significant differences in the levels of profitability and riskiness between Islamic banks and their conventional counterparts. A closer look at the data shows that Islamic banks remained small in size, narrowly focused, and posed no serious competitive threat to their conventional counterparts. Given the profitability and efficiencies of Islamic banks mentioned above, our analysis argues that MENA countries could benefit from liberalizing Islamic banks entry restrictions.

ملخص

بالاعتماد على البيانات المستقاة من البنوك على مستوى الأقطار، تبحث هذه الورقة أداء البنوك الإسلامية في عينة مكونة من اثني عشر دولة من الشرق الأوسط وشمال أفريقيا. وتبحث هذه الورقة على وجه التحديد تأثير مشاركة هذه البنوك على ربحية وكفاءة القطاع المصرفي ككل. وتشير اختبارات إحصائية بسيطة إلى اختلافات مهمة في مستويات الربحية والمخاطرة بين البنوك الإسلامية والبنوك العادية. وبالنظر عن قرب إلى البيانات يتضح أن البنوك الإسلامية مازالت صغيرة في الحجم وتركز على فئة صغيرة ولم تمثل أي تهديد من حيث المنافسة مع البنوك العادية. وإذا أخذنا بعين الاعتبار ربحية وكفاءة البنوك الإسلامية المذكورة آنفا فإن تحليلنا يوضح أن دول الشرق الأوسط وشمال أفريقيا يمكنها الاستفادة من تحرير قيود التعامل مع البنوك الإسلامية.

1. Introduction

In the last three decades, Islamic banks were able to enter new markets in many countries around the world[1] and, thus became international. Many countries took advantage of the substantial capital flows due to the oil booms and opened their financial sectors to Islamic banks. Generally speaking, the increased importance of international trade in goods and financial services, and the liberalization of financial markets encouraged the internationalization of the banking institutions, and hence facilitated foreign banks' entry to many countries[2]. In many countries, the banking authorities also encouraged foreign banks' entry, including Islamic banks, as they sought to minimize the cost of recapitalizing their domestic banks and/or when they privatize the state-owned banks[3]. Moreover, financial liberalization has created many channels for the internationalization of banks, including market openness, capital account liberalization, privatization, flexible exchange rate regimes, advances in computers and telecommunications technology, and solid regulatory environments. In fact, the extraordinary technological changes that took place over the last two decades have dramatically altered the financial intermediation landscape and created new challenges and opportunities to financial institutions, including Islamic banks.

On the other hand, liberalization and economic integration are often associated with banks' failure, banking crises, merger and/or acquisition. Experience has shown that, financial liberalization has indeed increased banks' vulnerability to crises (Demirguc-Kunt and Detragiache, 1997), particularly in an environment characterized by weak regulatory institutions and macroeconomic instability. As Grais and Kantur (2002) have argued, the East Asian Financial Crisis of the late-nineties brought to the forefront the critical need for an appropriate institutional infrastructure and confirmed once more the essential pre-requisite for macroeconomic stability.

Against this backdrop, it is indeed important to explore the behavior of international (Islamic) banks in the liberalization "mania" as compared to domestic banks, and to investigate their performance in an environment characterized by competition and market openness. Practitioners, regulators, and policy makers would like to know whether the presence of Islamic banks would spur serious competition with their domestic counterparts. Policymakers would also want to know the potential challenges that still face Islamic banks. The perception of many observers is that, Islamic banks never fully benefited from the opportunities created by liberalization. They contend that Islamic banks remained relatively small, narrowly focused, and in most cases, vulnerable to financial shocks. In reality, however, one could safely argue that Islamic banks were able to circumvent the culprits for vulnerability and fragility caused by financial liberalization. Indeed, Islamic banks have survived and in many cases prospered while the banking industry has experienced dramatic changes over the past two decades. In fact, they managed to survive the competition fostered by liberalization, and in many cases grew in size and significance. A recent study by the Union of Arab Banks indicates that Islamic banking is one of the fastest growing banking industry segments worldwide, with an annual growth rate of 17 percent and an asset base of US$23 billion for the past several years (UAB 2003)[4]. As they grew in size and expertise,

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[1] The trend has been especially pronounced in Muslim countries, although the pattern of entry has not been uniform. An important thing to note here is that, although many Islamic banks were established by domestic funds, many others were foreign-owned.

[2] Islamic Banks' entry was also motivated by the need to intermediate the substantial financial resources that largely stayed outside the interest-based banking system.

[3] Recently, Dubai Islamic banks have acquired 60% of the assets of Bank of Khartoum, the largest state-owned bank in Sudan.

[4] Whether Islamic banks have benefited from financial liberalization or not remains an open question.

Islamic banks were able to penetrate many markets, including the highly regulated markets of the U.S. and Europe. In addition, many global as well as Arab region commercial banks have expanded into offering Islamically-compliant financial products. More importantly, Islamic banks have not experienced any systemic crises similar to those experienced by conventional banks in Asia and Latin America. Yet, they still need to overcome many challenges and exploit many opportunities.

One important question to ask, however, is: how does Islamic banks' entry to a country affect the domestic banking market? In other words, how do conventional banks perform when Islamic banks are allowed to operate in the same market? Answering this question is important because there is at least a conventional wisdom that Islamic banks cannot adequately compete with larger conventional banks. As intermediaries, conventional banks are larger banking organizations that can gather, process, and analyze information at a cheaper cost and hence, efficiently facilitate transactions[5]. Moreover, the economies of scale and scope will enable larger institutions to reduce transaction costs. In contrast, Islamic banks are smaller in size and relatively less experienced. Some argue that, for Islamic banks to exploit the economies of scale and scope, consolidation is inevitable.

When Islamic banks first entered their local markets, they were viewed as a serious competitive threat by local conventional banks. Many customers moved their business with these banks, increasing their deposits and funding opportunities. Consequently, their returns improved more than elsewhere. As the confidence in the Islamic banking sector strengthened, as indicated by strong growth in deposits, many thought that Islamic banks do things differently. Accordingly, conventional banks soon started to open windows or branches that comply with the same requirements of Islamic banks. Proponents of Islamic banks argue that Islamic banks' entry will (i) provide high-quality banking services, which spills over to domestic banks (ii) increase the capacity of domestic banks to support development financing, (iii) facilitate capital inflows and enhance the country's access to international capital, (iv) facilitate the application of more modern banking skills and technology in domestic market. Furthermore, they can also pursue governments to enhance the legal, regulatory, and supervisory procedures and standards. On the other hand, some opponents to Islamic banks' entry were concerned that these institutions will dominate the entire market, depriving domestic banks from growth. Some expressed fear that Islamic banks will service only small segments of the market, favoring large businesses at the expense of small businesses. Indeed, many of the concerns and inspirations did not come true.

Empirical literature has already established a link between foreign conventional banks' entry and domestic bank performance. Claessens et al. (2001) found that the increased presence of foreign banks is generally associated with a reduction in the profitability and margins for domestic banks. Clarke et al. (2001) found that the presence of foreign banks improves financing conditions for all enterprises, although it seems to benefit larger firms more. However, as yet, little cross-country evidence exists to show that these presumed benefits are true for Islamic banks' entry as well.

The motivation of this paper is to evaluate the links between Islamic Banks' entry into domestic markets and the performance of the conventional banks in terms of efficiency and profitability. The paper will focus on three main questions that researchers and practitioners have attempted to address: (1) what draws Islamic Banks to a country or a market? (2) what do Islamic banks do once they enter the market? and (3) what is the impact of Islamic Banks

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[5] Some have questioned this argument, however, stating that not all financial intermediaries collect and process information in the same way. In retrospect, the dramatic advances in computers have made gathering and processing information less costly.

on the profitability of their domestic counterparts?. Answers to these questions could be important in the future structuring of the Islamic banks. Furthermore, comparison with conventional banks operating in the same markets is important to practitioners as well as to policymakers who regulate these depository Islamic institutions.

We believe that this paper contributes to the existing literature, not only by exploring some issues about Islamic banking that have been overlooked, but also by focusing on a region that is characterized by low participation of foreign banks, despite undertaking economic reforms, having considerable success in avoiding crises, and achieving macroeconomic stability.

The rest of the paper will be structured as follows. Section 2 will be devoted to analyzing the factors drawing Islamic banks to a specific market, and what they do once they arrive. Section 3 will investigate the current state of Islamic banks, analyzing their growth and development and characterizing certain performance measures of a sample of Islamic Banks. The data used in this part is compiled from balance sheets and income statements of a sample of banks in 12 Muslim countries. The data allow us to consider how Islamic banks differ from their conventional counterparts in terms of efficiency and profitability. Section 4 compares the performance of Islamic banks to a set of conventional banks operating in the same countries. Section 5 highlights the challenges and opportunities facing Islamic banks and, finally, the paper is concluded in section 6.

2. What Draws Islamic Banks to a Specific Market?

The existing banking literature has primarily argued that, in many countries, foreign banks (Islamic Banks included) enter into domestic markets to facilitate international trade in goods and financial services (Claessens, et al, 1998). Foreign banks' entry is also encouraged by the General Agreement on Trade in Service (GATS) of the World Trade Organization (WTO), which mandated its member countries to open their financial systems to competition and eliminate all entry barriers to the financial sector. The internationalization of the banking sector is also facilitated by globalization and capital account liberalization.

To our knowledge, no previous study has investigated why an Islamic bank enters a specific market[6]. All earlier studies on Islamic banking seemed to focus on conceptual issues describing the underlying principles of Islamic banks and the ideologies behind them (Ahmed, 1981, Karsen, 1982). On the other hand, theoretical framework modeling the operational aspects of Islamic banks (Khan, 1986, Haque and Mirakhor, 1987), and the empirical cross-country studies have focused on performance measures (Bashir 1999, 2002, Bashir and Hassan 2003, Iqbal, 2001). In these studies, Islamic banks were treated as an existing phenomenon and the motive behind their entry and expansion in different countries was not addressed. To a greater extent, the rationale behind their existence was explained by demand-driven factors. Specifically, Islamic banks arise to meet the growing needs of their Islamic clientele.

Although there are many modes through which banks can enter a country, there seemed to be two types of entry for Islamic banks: a de novo operation where the bank opens a branch or a subsidiary; and through joint ventures by owning a stake in a local Islamic bank and/or merging with it. To date, no major mergers and acquisitions have been reported among

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[6] Although the majority of Islamic banks are local banks that operate on their local markets, some of them are owned jointly by national and foreign investors. AlBaraka Group and Dar Al-Mal are credited for establishing many de novo Islamic banks around the world.

Islamic banking[7]. This is so despite the fact that there may be substantial scale economies for mergers between Islamic banks[8].

To answer the question we posed earlier: what draws Islamic banks to a country? One has to mention that, cross-country studies in Islamic banks are still limited as the lack of data has been the major challenge. So there are no clearly identified factors that one could allude to as the motives behind Islamic banks' entry to a specific market. Nonetheless, the banking literature indicates that there are many factors that stimulate foreign banks to enter a country. Many studies have found a positive and significant correlation between the flow of bank foreign direct investment (FDI) and the extent of integration between home and host country (Clarke, et al 2001). However, this assertion, which supports the claim that banks tend to follow their customers abroad, may not be true for Islamic banks. Rather, one would give more weight to cultural and religious connections. Islamic banks tend to be demand driven, and benefit from similar culture and language when entering a market to take advantage of the local opportunities. More importantly, unlike conventional banks, Islamic banks enter a country to deal primarily with segments that shun away from the interest-based traditional banks. This is particularly true for the case of Islamic banks operating in countries with sizeable Muslim minorities[9].

One important factor that seems to be credible and supported by evidence is the profit motive. Islamic banks are attracted by profitable opportunities in the (host or home) country. In a number of countries, Islamic banks tend to serve retail customer bases and, hence, are associated with small businesses, local community, and direct customer contact. Larger traditional banks, on the other hand, are more oriented towards wholesale business. Given their smaller sizes and the high cost of doing business, Islamic banks often find themselves at a comparative disadvantage. They need to overcome this disadvantage either through special expertise or services. In countries like Sudan, Islamic banks specialized in financing agriculture and small handcraft industries[10]. In Bangladesh and Malaysia, Islamic banks are actively involved in micro-finance.

A number of studies also found that, in general, foreign banks are attracted to markets with low taxes and high per capita income (Claessens, Demirguc-Kunt and Huizinga, 2000). Focarelli and Pozzolo (2000) indicated that foreign banks are more likely to enter countries with the right fundamentals (high GDP growth, low inflation, and large stock market capitalization). The literature also indicates that foreign banks enter a market where the average bank size is small, which gives them opportunity to increase their market shares. Foreign banks also enter different markets because they have comparative advantage in collecting and processing information. When applying this to Islamic banks, it is quite true that in the early years, Islamic banks entered countries with relatively small bank sizes such as Jordan, Sudan, and Yemen. The concentration of Islamic banks in countries like Bahrain and other GCC countries certainly explains that Islamic banks are attracted to countries with lower taxes and right fundamentals.

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[7] It is argued everywhere in the literature that when weak domestic institutions are being purchased by, or merged with, efficient foreign entrants, this would bring benefits to the host country presumably due to at least technological progress (Clarke, Cull, Peria, and Sanchez, 2001).

[8] The scale economies associated with consolidation include advances in payments technology, electronic banking, and access to some types of financial services to small customers.

[9] For the most part, Islamic banks specialize in retail rather than wholesale banking. They tend to focus primarily on trade financing and short-term investment.

[10] When capital markets are generally small and underdeveloped, a larger percentage of firms and individuals tend to depend on banks to meet their financial needs (see, Peria and Mody, 2003).

Similar to foreign banks, Islamic banks are also attracted to a banking market where local banks are operating inefficiently, with high average costs, lower net margins, and higher cash flows (signaling an inefficient use of capital). This suggests that Islamic banks take this as an opportunity to increase their market shares and exploit prospects for profits. If Islamic banks, for instance, specialize in providing financing to segments with less access to financial services, such as small and medium-sized enterprises (SMEs), this type of entry should bring substantial benefits to the host country.

Apart from the cultural and religious issues, a crucial factor of Islamic banks' participation in a local market is banking regulations in the host country. Indeed, restrictions on entry, banking activities, branching, size, reserve requirements, and/or capitalization appear to have substantial bearings on Islamic banks. Perhaps the tax laws and capital account liberalization play the most important role in Islamic banks' decisions regarding which country to enter.

3. The Current State of Islamic Banks.

Although the idea of interest-free banking dates back to the mid twentieth century, the current form of Islamic banking came to existence in the mid 1970s when the Islamic Development Bank was established in 1975 as an intergovernmental bank for promoting economic and social development in its member states. The same period also witnessed the establishment of retail Islamic banks that provide current and saving accounts, and investment deposits while operating side by side with their conventional counterparts. Currently, there are almost 200 Islamic banks operating worldwide[11]. Over the years, these institutions grew in terms of size (total assets), width (variety) and depth (complexity) in order to provide financial services to the general public. They are now well established, and their branches are accessible to, and used by, people at all income levels. Theoretically, they operate as financial intermediaries whose liabilities are short-term and long-term (saving and investment) deposits and whose assets are short-term and long-term Islamic (financing) operations, equity investments and other investments. In practice, however, they mix banking and non-banking activities as their assets include securities (stocks), real estate, commercial activities, as well as investment banking and other transaction services they offer for their depositors.

Another important characteristic of Islamic banks is the fact that they focus on relationship banking rather than transactional banking[12]. Relationship banking generally involves the use of soft information, which is not readily available or easily quantifiable. Soft information requires more human input and evaluation and is acquired primarily by working one-to-one with the banking customer. Relationship banking also frequently involves more than the movement of funds from the bank to the client. In some cases, the financier adds real value by providing accounting, business planning, and tax expertise. Relationship banking thus provides a niche for Islamic banks that many conventional banks find less attractive or are less capable of providing.

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[11] Although no reliable statistics showing the actual number of Islamic banks are available, an IMF study indicates that in 1998, there were 176 Islamic banks and financial institutions in 38 countries with US$7.3 billion in paid up capital. Worldwide, total assets were US$148 billion, producing aggregate net profits of US$1.2 billion.

[12] Transactional banking is the provision of intermediation services, the gathering of deposits, and extension of loans. Because transactional products are highly standardized, they require little human input to manage, and involve information that is generally easily available and reliable. Thus in transactional banking hard information drives performance.

3.1 Concentration

To answer the question: what do Islamic bank do once they enter a local market? We use bank-level data to characterize the performance of Islamic banks by focusing on some financial soundness indicators. In this particular study we focus on capitalization, profitability, and efficiency measures. These indicators may give warning of financial difficulties if their values fall below regulatory requirements, or if they fall short of the performance of their conventional competitors. The data used here come from balance sheets and income statements of a sample of 39 Islamic banks from 13 countries for the period 1998 to 2003. Many countries and banks were excluded because the financial data series are missing or mostly incomplete. The data source is BankScope database compiled by IBCA for all countries, with banks included roughly accounting for 90 of the assets of all banks. Where data is available, we included in our sample only countries that have at least two Islamic banks for a given year. We consider a six-year period to assure that our results are not driven by short term (yearly) fluctuations.

Concentration is defined here as the ratio of total assets of Islamic banks (in most cases two or three banks) relative to the total assets of the banking sector (conventional plus Islamic) in the country. This ratio used to measure the extent to which banks' assets are concentrated in the hands of Islamic banks within the banking system. In analyzing concentration, we consider each country to be a market. This seems to be appropriate since bank branching is allowed throughout each country, and that foreign banks' entry is recently allowed. Empirical studies have shown that bank concentration ratio positively affects bank profitability, whereby highly concentrated banks tend to have higher margins (Berger, 1995)[13]. Table 1 provides country average changes in the degree of concentration of Islamic banks over the sample period as percentages. The discrepancies in the level of concentration can also be apparently seen from Fig.1.

Apart from Iran and Sudan, which could be considered as outliers, the degree of concentration of Islamic banks in their local markets is generally low, especially in countries like Bahrain, Jordan, Lebanon, and Tunisia[14].

There may be many reasons for the low concentration of Islamic banks. First, the low degree of concentration may be due to foreign competition which forced domestic banks to consolidate or merge, while Islamic banks remained small in size. To this end, the concentration ratio reflects the growth in the market shares as well as the growth of the asset portfolios. Second, the low level of concentration may be market determined as banks' entry was restricted in these markets. In Bahrain, which is considered a major banking center in the region, Islamic banks concentration (market share) has declined during the sample period before stabilizing around 5.2 percent in 2002 and 2003 (Table 1). The concentration ratio also fluctuated in most of the countries in the sample, but more noticeably in Turkey and Yemen. Although Iran and Sudan are included in Table 1, they are excluded from the analysis because their whole banking systems operate on non-interest basis. Perhaps a question of interest to policymakers is: what is the impact of Islamic banks' concentration on their profitability and efficiency?

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[13] There are competing views explaining the impact of concentration on bank profitability. While the structure-conduct-performance theory (Berger, 1995) predicts that a positive association between concentration and profitability is bad for the economy, the efficiency-structure hypothesis (Demsetz, 1973) contends that larger concentration levels and market shares could reflect greater efficiency by larger banks, which, in turn, are able to lower costs and obtain higher profits (Peria and Mody, 2003).

[14] It should be noted that the ratios reported here are calculated for reported banks only. These may or may not reflect the total banks operating in the respective countries.

3.2 Financial Structure

In this section we focus on the financial structure of Islamic banks. By financial structure we mean size and capitalization of Islamic banks. We use total assets to measure the size of the banking institutions. Column 1 in Table 2 depicts the average total assets of Islamic banks in the sample countries during the sample 1998-2003. As the data show, in 1998, the size of the Islamic banks ranged from over US$13 billion in Saudi Arabia to more than US$100 million in Yemen. This wide discrepancy reflects the difference between the sizes of the economies and the levels of income in the two countries. The average sizes of Islamic banks are also large in Egypt, UAE, Qatar, Turkey, and Bahrain.

Larger bank size is important because it enables banks to adequately diversify credit risk and allows the management to sufficiently invest in new technologies in order to compete effectively. Larger banks are also becoming more cost efficient in their operations, while smaller banks are finding it more difficult to offer a sufficiently broad range of services at competitive prices. It is generally argued that larger organizations can access valuable information at a lower cost, and thus better facilitates transactions. If larger banks are able to reap economies of scale, it is expected that they pass some of these benefits to their customers in terms of better services and higher returns. A second argument is that economies of scale and scope enable larger banks to cut the cost of providing services. More specifically, increasing returns to scale in some of the banking services, such as portfolio management and investment banking, are associated with large bank size.

Column 8 of Table 2 presents the ratios of net loans to total assets. Since loans are the riskiest element of the asset portfolio, we use this ratio to measure the riskiness of the banks in our sample. It is apparent from Table 2 that, in general, Islamic banks in GCC countries hold a high percentage of their portfolios in loans. This will certainly increase the vulnerability of Islamic banks, exposing them to credit risks.

3.3 Capitalization

Capitalization is defined here as the ratio of capital (equity) to total assets. A declining trend in this ratio may signal an increased risk exposure and possibly capital adequacy problem, as capital adequacy and availability ultimately determine the robustness of financial institutions to shocks to their balance sheets. Capitalization is, therefore, important because, in general, well-capitalized banks have higher margins and are more profitable. Bank supervisors use the capital ratio as a rule of thumb to gauge the adequacy of an institution's level of capital needed to support a given level of assets. Since capital management is related to dividend policy, banks generally prefer to hold the amount of capital that is just sufficient to support bank operations. Since 1988, Many studies have found that, banks with higher capital ratios tend to face lower cost of funding due to lower prospective bankruptcy costs (Demirguc-Kunt and Huizinga, 1998). The Basle Accord has imposed uniform capital ratio standards on banks internationally (Bashir, 2003). A widely accepted international standard defined by the Basle Committee on Banking Supervision sets the risk-weighted capital adequacy ratio to be at least 8 percent. Because of the incentives for risk-taking behavior inherent in the operations of Islamic banks, this minimum standard should be higher. A high capital ratio will reduce the moral hazard since it increases the amount of shareholders' capital put at risk. Moreover, the absence of collateral and other guarantees in Islamic finance also raises the overall riskiness in Islamic banks' operations. However, holding large capital ratios, either on a voluntary basis or as a result of regulation can be costly for banks.

In our sample, Islamic banks are not well-capitalized except for few countries. There are wide variations though in the capital-asset ratios across countries. For example, column 3 of

Table 2 shows big variations on average capitalization, ranging between 42.5 to 5.3 percent. More explicitly, the equity of Islamic banks relative to their average total assets (leverage) was about 42.5 percent in Bahrain, 32.8 percent in Tunisia, 28.9 percent in Lebanon, 13.8 in Jordan and 13.5 in Yemen. These considerably higher ratios could be attributed to increased retain earnings, or to banks issuing new equity. Since Islamic banks do not have the options of discount borrowing from their central banks, or borrowing on the inter-bank market, keeping higher capital ratios may be needed to reduce the possibilities of insolvency or bank run. Equally likely, the high ratios may possibly reflect the fact that Islamic banks in our sample are less diversified. Nonetheless, the equity-asset ratios have changed considerably during the sample period; increasing, on average, from 1.84 percent in 1998 to 7.37 percent in 2002 in Sudan, and from 2.94 to 9.52 in Turkey during the same period while declining in all other countries in the sample. The changes in capital/asset ratios can be traced back to many factors, including regulations, size, entry of new banks, enforcement of new standards, or changes in retained equity.

3.4 Aggregate Profitability of Islamic Banks

Evaluating Islamic banks' profitability is a complex process that involves evaluating accounting data. In general, a number of financial ratios are usually used to assess the performance of financial intermediaries. Two such ratios are used here to provide information on performance of Islamic banks: returns on average assets (ROAA) and returns on average equity (ROAE)[15]. Declining trends in these indicators may signal problems regarding the profitability of financial institutions. Both ratios are closely tied to the key item in the income statement; net income, and are used in most structure-performance studies to reflect the bank's ability to generate income from non-traditional services. The ROAA ratio-the result of dividing a bank's net income by its average assets- is one of the most commonly used measures of profitability. It gauges how well a bank's management is using the bank's assets, and can be calculated with various profit measures such as before or after provisions, and before or after tax charges (IMF, 2003). The ROAE ratio (calculated by dividing a bank's net income by its average total equity) tells a bank's shareholders how much the institution is earning on the book value of their investment. This ratio has to be interpreted with caution, since a high ratio may indicate both high profitability as well as low capitalization, and a low ratio can mean low profitability as well as high capitalization. The ratio of ROAA to ROAE falls as the bank's capital-to-assets (leverage) ratio rises. When analyzing these ratios, one has to bear in mind that fundamental differences exist between the operating profiles of Islamic and conventional banks. In terms of funding sources, Islamic banks rely proportionately more on deposits while traditional banks rely on purchasing liabilities. Islamic banks generally finance small businesses, consumers, and agricultural customers and are more dependent on non-interest income, while traditional banks emphasize large commercial customers, large-volume loans, consumer lending, and hence, interest income. Hence, the two types of banks have different profitability and risk profiles.

Column 5 and Column 6 of Table 2 present the returns on average equity (ROAEs) and returns on average assets (ROAAs) respectively, for the sample period. Three important observations relate to the pattern of ROAAs among banks in our samples. First, average returns on assets vary across years for each country in the sample. Second, banks in GCC countries are generally profitable, with ROAAs over 2 percent, and are used as a benchmark. Small-sized banks, like those in Lebanon and Yemen are less profitable compared to the GCC banks, but more profitable than medium-sized banks in Egypt, Jordan, and Turkey. Third, over the years, ROAAs tend to decline in some countries (maybe due to larger sizes)

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[15] These two financial ratios provide a broader understanding of the bank's financial condition since they are constructed from accounting data contained in the bank's balance and financial statement (Bashir, 2003).

and improve in others. Negative ROAAs are reported in the UAE in at least one year, while returns in Egypt, Sudan, and Turkey are much lower compared to returns in the remaining countries in the sample. Not like previous studies (Goldberg and Rai, 1996), the Islamic banking data do not reveal any positive association between profitability and concentration for the sample of banks in the sample countries. Stated differently, this does not support the structure-conduct-performance (SCP) hypothesis, which asserts that banks are able to extract monopolistic rents (profit) in concentrated markets. The result also does not support the efficient-structure (EFS) hypothesis, which states that efficient firms increase in size and market share because of their ability to generate higher profits.

The returns on average equity, on the other hand, vary across years and across countries. As is usually the case, ROAEs are higher than ROAAs, for all countries in the sample (except UAE). However, unlike ROAAs, ROAEs do not follow a specific pattern in our sample. In some countries, ROAE increases with assets size while on others it doesn't. All in all, the data in Table 2 suggest that not all banks perform similarly in terms of ROAE. In fact, the data suggest that some Islamic banks in the sample might be operating somewhat at a competitive disadvantage because their ROAEs are relatively small. A closer look at the data could reveal the underlying causes of low ROAEs. Perhaps in some cases banks are newly established and therefore it takes time for them to return a profit. Moreover, Islamic banks have increased their equity and/or retained earnings as required by regulators and/or increased in terms of size. The banking literature also shows that, when the number of banks in a market increases, deposits, assets, and profits per bank decline. In summary, the cross-country evidence indicates that, in general, Islamic banks penetrate the banking market because of greater fund availability and motive for profits.

3.5 Efficiency Ratios of Islamic Banks

As a measure of Islamic banks' efficiency, we use the accounting value of a bank's cost over net income. Column 7 of Table 2 shows the cost-to-income ratios of Islamic banks in the sample countries. In effect, this ratio combines the ability to generate net revenue (income) to the expenses (cost) incurred in generating such income. Specifically, the ratio shows the cost of generating an extra dollar of profit. Since Islamic banks do not incur direct costs in raising funds (deposits), their total costs include overhead plus all other intermediation expenses[16]. Most importantly, this administrative expense ratio (including payroll and overhead) can be, but is not necessarily due to managerial deficiencies, and is likely to affect profitability negatively. Hence, efficient banks generally operate with low cost-to-income ratios since inefficiency raises costs. In a nonparametric approach, a bank is considered to be inefficient if it could have produced more output at lower cost using several of other banks' input mixes (Mester, 1993).

Evaluating the cross-country data shows that, all Islamic banks in the sample countries are operating inefficiently. As in the case of profitability, the efficiency of Islamic banks does not seem to follow a certain pattern. The most striking thing to note is the fact that, the differences in size, capitalization, and concentration that prevail in our sample do not seem to influence the overall efficiency ratios of banks. For example, banks in Iran, Jordan, Lebanon, Turkey, and Yemen are the least efficient throughout the sample period as reflected by their high cost-to-income ratios. On the other hand, less concentrated Islamic banks in Tunisia, Turkey, and Yemen are relatively more efficient compared to the remaining Islamic banks in the sample. The high cost-to-income ratios revealed by the cross-country data can be

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[16] If Islamic banks incur high administrative costs in the process of providing their services as intermediaries, they are likely to increase the service fees they charge their customers, or demand high profit-sharing ratios in their financing.

attributed to low profitability and/or high overhead incurred by these institutions in trying to overcome the large informational disadvantages. As we stated earlier, Islamic banks focus on relationship banking which requires more human inputs and, hence, higher overhead. The high operating costs could also be the result of extensive branching networks, overstaffing or that the management is choosing inefficiently large amounts of certain inputs (expense preference) required by the intermediation process. Whether the inefficiently high cost-to-income ratios of the Islamic banks in our sample are evidence of managerial or agency problems is an empirical question.

3.6 Liquidity

According to the CAMEL[17] model requirements, liquidity is rated according to: volatility of deposits; reliance on interest-sensitive funds; technical competences relative to structure of liabilities; availability of assets readily convertible into cash; and access to interbank markets or other sources of cash, including lender-of-last resort facilities at the central bank. However, since most of the above facilities require the payment of an interest rate, Islamic banks may face more difficulties than conventional banks in securing short-term funds if needed. Hence, Islamic banks may be obliged by regulators to hold high liquidity. However, since Islamic banks have obligations only towards demand deposit holders, the liquidity requirements may not be as severe as in the case of conventional banks (where they have obligations towards all deposit holders). Accordingly, the above liquidity rating may needs to be modified when applied to Islamic banks.

Table 2 shows the liquidity ratios of the Islamic banks in our sample, where liquidity is defined as the ratio of liquid assets to customer and short-term funding. Liquid assets in conventional banking refer to cash and deposit balances in other banks (including reserve requirements with the central bank), while the customer and short-term funding captures the liquid portion of the liabilities. High liquidity ratios, either self-imposed for prudential reasons or as a result of regulation (i.e., reserve or liquidity requirements) inflict a cost on banks since it implies that banks have to give up holding higher yielding assets (see, Peria and Mody, 2003). As the last column of Table 2 shows, except for few countries (Egypt, Qatar, Tunisia), Islamic banks in our sample have high liquidity ratios. A closer look at the data shows that liquidity is negatively correlated with profitability. In particular, highly liquid banking markets like Sudan, Lebanon, and Yemen are less profitable as reflected by their ROAAs. A possible interpretation of this result is that, highly liquid banks are less diversified and, hence, less profitable.

4. Examining Differences between Islamic and Conventional Banks.

In the following analysis, we answer the question: what is the impact of Islamic Banks on the profitability of their domestic counterparts? By identifying key financial ratios characterizing the performance of conventional banks and comparing them to the financial ratios of Islamic banks discussed in the previous section

Columns 1 and 2 of Table 3 reveal that the conventional banks in the banking markets in our sample are larger in size and well capitalized compared to the Islamic banks. There are many reasons for this. First, conventional banks in our sample have been there for a long time and have larger networks of branches. In other words, they are more transaction oriented. Many studies found a positive relationship between a bank's asset size and the number of branches (Vertinsky, 1992, Williams, 1996, 1998). Second, conventional banks hold diversified asset portfolios that include deposits and non-deposits funds and, hence, have larger asset

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[17] CAMEL stands for Capital adequacy, Asset quality, Management soundness, Earnings, Liquidity, and Sensitivity to market risk (see, IMF, 2000).

portfolios. Third, since conventional banks have been there for a long time, their capital bases have increased by retained earnings. Finally, conventional banks are required by regulators to maintain sufficient capital to support their large asset portfolios.

As apparent from Table 3, the assets and equity of conventional banks grew substantially over the years. The fact that growth in size is consistent across countries and across time undermines the cyclical behavior. Moreover, with the exception of Turkey, all banks maintained capital adequacy ratios that satisfy the Basle Committee's capital requirement.

Table 3 also shows the profitability ratios of conventional banks in the sample. Except for Turkey, all markets show positive profits as reflected by ROAAs. Banks in GCC countries could be considered as benchmark because of their profitability. Banks in Egypt, Lebanon, and Tunisia are equally profitable, while banks in Jordan and Yemen are less profitable. Fig.2 compares the aggregate rates of returns on average assets (ROAA) between conventional and Islamic banks in our sample during the study period. As can be clearly seen, on aggregate, Islamic banks are slightly more profitable than conventional banks. In fact, Islamic banks outperformed conventional banks that use more sophisticated technologies and instruments. A simple statistical test shows that the two types of banks generated, on average, different ROAA. The null hypothesis that there is no difference in the mean returns is rejected even at the 1% level (t= 4.41)[18]. This is consistent with previous studies which assert that foreign banks have higher profitability than domestic banks in developing countries (Claessens, et al,1998). Our result, however, has to be taken cautiously. There are many factors that come into play here. First, the result represents only the banks that reported their data during the sample period. Second, since Islamic banks are relatively small in size, their ROAA may be affected by their size.

On the other hand, all banks in our sample distributed returns on equity comparable to those of Islamic banks. This underscores the assertion that the entrance of Islamic banks into the banking market has not affected the profitability of conventional banks. In fact, the two types of banks seem more to complement each other than compete since each type appeals to a certain group of customers.

The efficiency of conventional banks can be measured by both the ex ante and ex post spreads. Ex ante spreads are calculated from the contractual rates charged on loans and rates paid on deposits. Ex post spreads consist of the difference between banks' interest revenues and their actual interest expenses.

Column 7 of Table 3 presents the cost-to-income ratios (efficiency) of conventional banks. Comparing these ratios to their counterpart in Table 2, it becomes apparent that the two groups of banks compare well in terms of efficiency as reflected by lower cost-to-income ratios. As could be seen from Fig.3, the two ratios are almost identical except for 2003. When conducting a simple statistic procedure to test whether the two types of banks have the same efficiency levels, the null hypothesis of no difference in means could not be rejected (t = 0.77). This contradicts previous results that found foreign-owned banks to be less efficient than the domestic banks in developed host countries (Clarke et al, 2001). One important explanation for this is the economies of scale associated with size, which lead to lower unit costs in conventional banks. Banks that operate at optimal economies of scale will have the lowest costs and the resulting higher profits. To the extent that more economies of scale and scope exist in conventional banking, larger banks tend to focus on transaction banking which is likely to result in cost effectiveness.

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[18] The hypothesis tested: H0: $\bar{x}_1 - \bar{x}_2 = 0$, where $\bar{x}_1$ is the average of ROAAIslamic and $\bar{x}_2$ is the average (ROAAConventional), against H_1: $\bar{x}_1 - \bar{x}_2 \neq 0$.

Column 8 of Table 3 presents the ratios of loan to total asset. As mentioned earlier, this ratio is used as a proxy for credit risk. As can be seen from Table 3a, except for few countries, conventional banks in our sample hold relative low percentage of their portfolios in loans. This could be taken as an indication that these institutions are more diversified compared to Islamic banks. Fig.4 compares the Net Loans to Total Assets Ratios between conventional and Islamic banks.

It is clear from Fig. 4 that Islamic banks' portfolios are riskier compared to their conventional counterpart. In principle, the bulk of the assets of Islamic banks are made up of profit-loss sharing arrangements, which are uncollateralized and insured. These assets carry far more risk than the collateralized assets of conventional banks. Hence the ratio of riskier assets (loans) to total assets should typically be higher for Islamic banks than conventional banks. When testing for whether Islamic banks' portfolios are riskier than the portfolios of conventional banks, the simple t-test shows that, on average, there are significant difference on the degree of riskiness between the two types of banks (t=9.3).

The last column of Table 3 documents the liquidity of conventional banks in our sample. Fig.5 depicts the liquidity of the two types of banks in our sample. Except for 2001, conventional banks, on aggregate, are more liquid compared to their Islamic counterparts. This contradicts the widely held view that Islamic banks have excess liquidity[19]. In individual countries, however, conventional banks in Bahrain, Jordan, Qatar, and Yemen have very low liquidity ratios compared to the Islamic banks in these countries[20]. More noticeably, conventional banks in Tunisia and Turkey are more liquid than Islamic banks in the two countries. When contrasted with profitability, the data reveal that banks with low liquidity ratios are more profitable. Less liquid banks are expected to be more diversified in their asset portfolios.

5. Challenges Facing Islamic Banks

Bearing in mind the above, Islamic banks face formidable challenges that limit their growth and expansion. Despite being in business for more than three decades, no major merger of acquisition has ever been reported in the industry. Indeed, Islamic banks need to consolidate and merge with each other in order to take advantage of the economies of scale and be competitive. Further, they need to innovate Islamicaly-structured instruments for asset and liability management. In fact, their concentration on trade financing exposes them to potential moral hazard and other forms of credit risks. Appropriate pricing and control of risks are key to ensuring a sound operation of Islamic banks. Investing in research and development could overcome most of these challenges.

Islamic banks are not limiting their operations to holding deposits and giving loans. Rather, Islamic banks, at times, get involved in direct investment by financing projects on the basis of profit-and-loss sharing and/or holding equity. Such non-traditional operations would certainly expose Islamic banks to operational risks. Operational risks, on the other hand, would be exacerbated by the narrow range of Islamic instruments that can mitigate risks

Further, since Islamic banks do not ask for collateral (at least theoretically), it is quite possible that increased risk-taking by their clients increases investment risk and/or credit risks as these clients become unable or unwilling to pay back their loans due to shocks that adversely affect the economic performance of their investment. To overcome such

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[19] When testing the differences on mean liquidity, the null hypothesis of difference in means is rejected at the 10% level, indicating that conventional banks are riskier (t=2.1).

[20] If the liquidity ratios of conventional banks are considered to be the ratios required by regulators, one could argue that Islamic banks hold more liquidity than required.

circumstances, Islamic banks adopt various procedures to reduce investment/credit risks, such as screening applicants for project financing, diversifying their project financing based on risk factors, and/or keep provision for doubtful debts. Despite these measures, the default risk can not be entirely eliminated entirely. Islamic banks are in dire need for instruments for credit risk management.

It is widely accepted that Islamic banks are characterized by high liquidity. As explained in section 3 above, the liquidity levels in Islamic banks is lower compared to their conventional counterparts. However, our results should not be taken as conclusive given the size of our sample. Yet, liquidity of Islamic banks is generally associated with low profitability, and indirectly with inefficiency. Islamic banks will not be able to compete for deposits and funds unless they reduce their liquidity levels by diversifying their portfolios. One formidable challenge facing these institutions is innovating Islamicaly-structured instruments to absorb and manage liquidity. To overcome this obstacle, Islamic banks need to invest in research and development.

Currently, Islamic banks are heavily concentrating on short-term trade financing. For the industry to grow and satisfy its objectives, Islamic banks need to focus on long-term project financing and equity valuation. In other words, sound asset and liability management is crucial if Islamic banks have to be profitable and efficient.

The analyses of sections 3 and 4 document that Islamic banks are small in size compared to their conventional counterparts. By being small in size, Islamic banks are missing the economies of scale and scope associated with large size. The literature indicates that there may be substantial scale economies from consolidation and mergers between banks, presumably due to technological progress.

Our analysis also shows that Islamic banks are operating with high overhead costs. One possible reason for the high costs is overstaffing. To reduce these costs, Islamic banks need to increase the efficiency of their staff by investing in training and development. An efficient workforce can enhance productivity and eliminate the underemployed staff. This also applies for members of the Management and Shari'ah Advisory Boards.

6. Summary, Conclusion, and Implications

The banking markets in many countries in our sample are becoming increasingly integrated and open to foreign banks. As such, they are allowing Islamic banks to operate side by side with conventional banks. Islamic banks, on the other hand, have expanded in many countries and were able to grow substantially in relatively short time. However, they stayed relatively small in size, narrowly focused and less concentrated.

Using a cross-country bank level data, we compared the performance of Islamic and conventional banks operating in MENA region. Our results did not clearly support the argument that the presence of Islamic banks would have an adverse impact on the profitability and efficiency of domestic banks. However, our results indicate that Islamic banks are operating inefficiently, albeit profitable compared to their conventional counterparts. The inefficiencies in Islamic banks could be attributed to the limited number of instruments used for short-term placement of funds in order to absorb liquidity and manage risk. Since Islamic banks remained restricted on the type of operations they can finance, their portfolios seem to be concentrated on equity and non-interest-based financing. More specifically, they remained narrowly focused on retail banking, especially trade financing. As such, their portfolios are more risky compared to conventional banks. Given their sizes and level of concentration, our results indicate that Islamic banks do not pose a serious competitive threat to conventional banks.

Given the gains in profitability and liquidity management mentioned above, our analysis suggest that the MENA countries could benefit from liberalizing Islamic banks' entry restrictions. However, it should be noted that the presence of Islamic banks is not sufficient to improve efficiency in the banking systems in our sample, since many weak domestic banks are allowed to operate. Overall, the example presented in this paper illustrates that solely opening the banking sector to Islamic banks does not solve the problem of banking efficiency, enhance the provision of services, or transform the banking sector into an engine of economic growth. Significant efforts need to be taken to eliminate the various impediments of the banking sectors.

Before closing, it is important to mention that our results are preliminary and, hence, should be interpreted cautiously. Given the small size of the sample, the short time series, and the quality of the data used, our results can be considered as suggestive rather than conclusive. Future research in this area may provide insightful results.

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Figure 1

Concentration of Islamic Banks in 1998

Figure 2

Returns on Average Assets

Figure 3

Cost-to Income Ratios for Conventional and Islamic Banks

18

Figure 4

Net Loans/Total Assets Ratios

Figure 5

Liquidity of Convetional and Islamic Banks
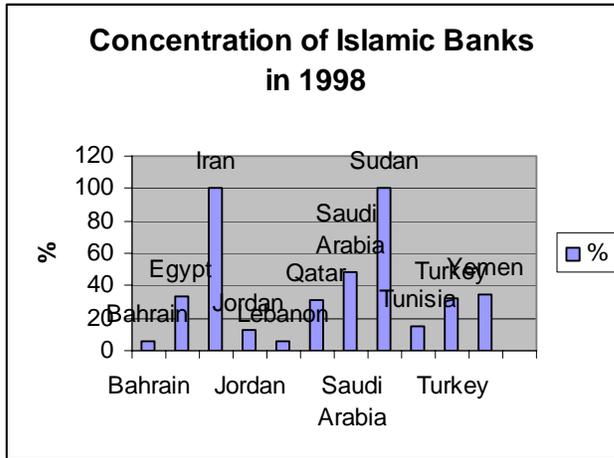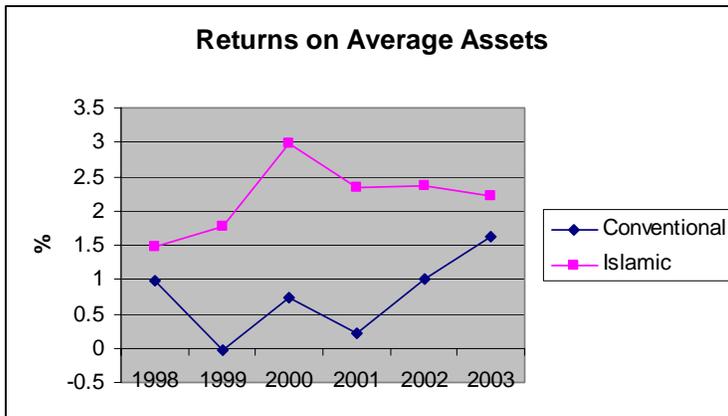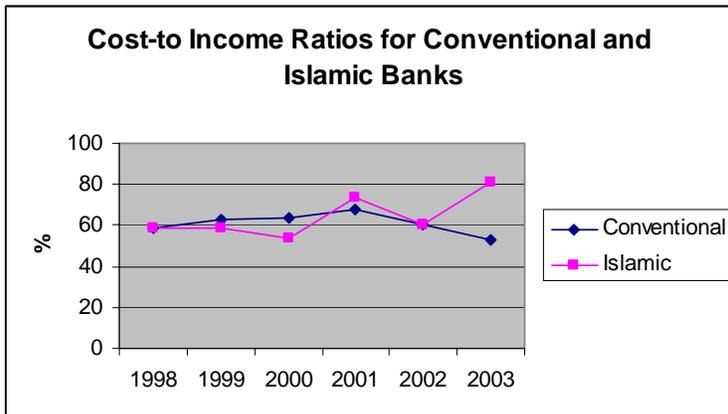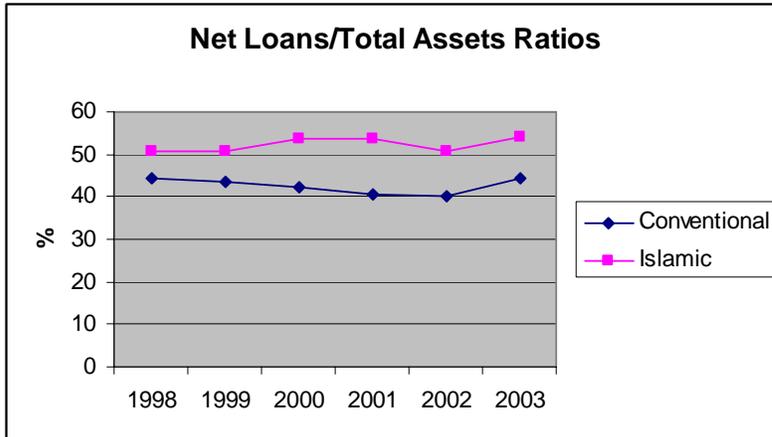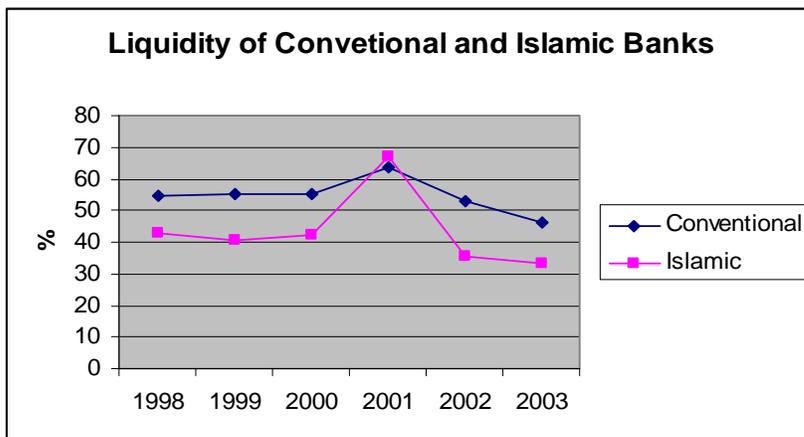
Table 1: Islamic Banks Concentration Ratio (%)

Country	1998	1999	2001	2000	2002	2003
Bahrain	6.2	7.6	5.2	5.7	5.2	5.2
Egypt	33.1	37.1	32.2	36.3	33.2	n.a.
Iran	100	100	100	100	100	100
Jordan	12.6	13.4	14.0	13.2	12.0	n.a.
Lebanon	6.0	5.8	n.a.	9.7	n.a.	n.a.
Qatar	30.6	29.4	32.9	28.8	33.3	29.4
Saudi Arabia	49.0	49.0	51.2	50.1	53.2	53.3
Sudan	100.0	100.0	100.0	100.0	100.0	100.0
Tunisia	15.2	15.5	14.7	15.6	11.9	-
Turkey	32.2	17.6	5.9	13.1	7.9	8.9
Yemen	34.5	40.7	55.0	46.3	55.0	39.2

Source: Author calculation

Table 2: Islamic Banks Performance (Average: 1998-2003)

Bank Size		Structure		Profitability		Efficiency		Liquidity
Total Assets			Equity/	Return on	Return on	Cost to	Net Res laons/	Liquid
Country No.of Banks	Millions of dollars	Equity	Total Assets	Average Equity (ROAE)	Average Assets (ROAA)	Income Ratio	Rat.ii Total Assets	Assets/Cust &ST Funding
Percentage (%)								
Bahrain (4)	458.76	119.24	42.46	10.61	5.33	52.46	54.55	39.04
Egypt (1)	1468.55	50.15	5.30	8.65	0.48	47.83	41.72	9.73
Iran(12)	7298.65	365.44	14.95	19.55	1.98	59.73	43.05	52.98
Jordan (2)	730.44	68.21	13.75	4.25	0.64	59.82	32.61	45.98
Lebanon(2)	57.60	9.35	28.92	13.97	2.42	56.69	28.24	101.05
Qatar (2)	1002.28	8.75	7.92	24.48	1.94	41.90	81.01	11.45
Saudi Arab(1)	13592.97	1709.89	12.77	26.1	3.41	n.a.	41.84	65.22
Sudan (4)	139.22	2.76	4.85	n.a	-0.68	260.53	n.a.	n.a
Tunisia(1)	174	56.98	32.83	4.48	1.51	44.84	47.14	2.37
Turkey(5)	620.93	44.75	7.24	13.55	0.36	93.87	71.07	27.71
UAE (2)	2692.4	273.22	18.09	0.2	2.66	94.56	n.a.	n.a.
Yemen(2)	101.31	10.77	13.50	12.98	1.57	59.19	41.1	54.38

Source: Author calculation
n.a. =not available

Table 3: Conventional Banks Performance (Average: 1998-2003)

Bank Size		Structure		Profitability		Efficiency		Liquidity
Total Assets		Equity	Equity/ Total Assets	Return on Average Equity (ROAE)	Return on Average Assets (ROAA)	Cost to Income Ratio	Net Res laons/ Rat.ii Total Assets	Liquid Assets/Cust &ST Funding
Country No.of Banks	Millions of dollars							
		Percentage (%)						
Bahrain	7418.51	627.41	16.42	11.15	2.15	47.89	45.35	41.18
Egypt	3063.37	183.17	9.59	11.47	1.16	48.98	50.28	19.29
Iran	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Jordan	5804.45	544.43	8.55	8.10	0.79	57.32	41.41	46.71
Lebanon	1436.12	94.42	9.77	7.3	0.94	70.80	28.33	73.50
Qatar	2270.11	312.85	22.43	24.48	1.98	39.23	47.60	n.a.
Saudi Arabia	12945.02	1194.73	9.62	17.10	1.64	46.09	41.28	35.69
Sudan	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a	n.a.
Tunisia	1177.79	117.18	14.29	9.74	1.11	57.41	66.28	29.84
Turkey	4901.90	521.92	10.10	16.64	-1.89	84.34	32.10	62.45
UAE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Yemen	116.49	8.35	8.81	5.67	0.31	56.41	28.78	69.82

Source: Author calculation