



Contents lists available at ScienceDirect

Economic Modelling

journal homepage: www.elsevier.com/locate/econmod

Bank overall financial strength: Islamic versus conventional banks

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ARTICLE INFO

JEL:

G21
C44
C53

Keywords:

Bank strength
Islamic banking
Multicriteria

ABSTRACT

A number of recent studies compare the performance of Islamic and conventional banks with the use of individual financial ratios or efficiency frontier techniques. The present study extends this strand of the literature, by comparing Islamic banks, conventional banks, and banks with an Islamic window with the use of a bank overall financial strength index. This index is developed with a multicriteria methodology that allows us to aggregate various criteria capturing bank capital strength, asset quality, earnings, liquidity, and management quality in controlling expenses. We find that banks differ significantly in terms of individual financial ratios; however, the difference of the overall financial strength between Islamic and conventional banks is not statistically significant. This finding is confirmed with both univariate comparisons and in multivariate regression estimations. When we look at the bank financial strength within regions, we find that conventional banks outperform both the Islamic banks and the banks with Islamic window in the case of Asia and the Gulf Cooperation Council; however, Islamic banks perform better in the MENA and Senegal region. Second stage regressions also reveal that the bank overall financial strength index is influenced by various country-specific attributes. These include control of corruption, government effectiveness, and operation in one of the seven countries that are expected to drive the next big wave in Islamic finance.

1. Introduction

The market share of Islamic banking is still small in the global financial sector; however, it is growing fast in many countries, especially in the Middle East and Asian regions (International Monetary Fund, 2015). In theory, there are many differences between Islamic and conventional banks. Nonetheless, these two types of institutions compete in the same banking arena, and some claim that the Islamic ones showed stronger resilience, on average, during the global financial crisis (e.g. Hasan and Dridi, 2010). Therefore, it is not surprising that Islamic banks have attracted considerable attention by academics, policy makers, and other market practitioners.

Within this context, a growing number of studies investigates the differences in the performance between the two types of banks. For example, many studies compare the efficiency of Islamic and conventional banks. There are two issues associated with these studies. First, their findings are mixed. For instance, Srairi (2010) conclude that Islamic banks are, on average, less cost and profit efficient than conventional banks. Bader et al. (2008) conclude that there are no significant differences. Johnes et al. (2014) find that Islamic banks are typically on a par with conventional ones in terms of gross efficiency, significantly higher on net efficiency and significantly lower on type

efficiency. Second, an important drawback is that while these indicators capture adequately the efficiency of banks in terms of transforming their inputs into outputs, they usually fail to take into account other aspects like risk and liquidity.

Other studies compare the financial ratios of the banks, focusing on individual aspects like capital adequacy (Beck et al., 2013), deposits and loans growth (Karim et al., 2014), credit risk (Kabir et al., 2015), bank insolvency risk (Bourkhis and Nabi, 2013), and profitability (Beck et al., 2013). The conclusions of these studies, as for the relative performance of the two groups across different dimensions, are often conflicting. For example, Beck et al. (2013) find that Islamic banks are less cost-effective, but have a higher intermediation ratio, higher asset quality and are better capitalized, whereas at the same time there are no differences in terms of insolvency risk and profitability. Therefore, the drawback of this analysis is that it provides only partial views, and it is difficult to conclude if one group is better than the other in terms of overall performance and financial strength.

In the present study we attempt to close this gap in the literature by asking a straightforward question: does the overall financial strength of Islamic banks differ from that of conventional ones? To this end, we propose the use of a multicriteria methodology that allows us to aggregate various financial criteria and estimate an overall indicator

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of financial strength. Thus, we obtain a general picture about the overall financial strength of Islamic versus commercial banks, instead of focusing on individual bank characteristics. In a second stage, to shed more light, we also investigate whether and how bank overall financial strength is influenced by country specific attributes, like institutional development and macroeconomic conditions.

The advantage of the multicriteria framework that we use is that it allows us to simultaneously take into account the conflicting objectives of managers and the unique operating characteristics of different types of banks, and examine multiple scenarios with respect to the way that these contribute to overall bank financial strength. For example, under the “skipping” hypothesis there is a trade-off between short-term operating costs and future loan performance problems (Berger and DeYoung, 1997). The underlying idea is that a bank can maximize its profits by lowering its operating expenses in the short run by skipping on the resources devoted to underwriting and monitoring loans. However, this may result in loan performance problems and increase the costs to deal with these problems in the future. Additionally, as discussed in Doumpos et al. (2016) there is a trade-off between liquidity and profitability. Managers may try to increase bank returns, by decreasing the liquid assets that they hold. However, this may result in liquidity risk. Nonetheless, prudent managers should aim for profit maximization, while minimizing the non-performing to loans ratio, and maintaining liquidity, capital adequacy, etc. The idea that gains on one dimension must be potentially sacrificed on another dimension (i.e. trade-off) is central in the analysis of financial economics and bank management (Thakor, 2014). Therefore, it is not surprising that various studies highlight the need to take into account the multi-dimensionality of performance, instead of focusing on individual measures like profits, liquidity, etc. (see e.g. McKiernan and Morris, 1994; Devinney et al., 2010; Kyrgidou and Spyropoulou, 2013).

To our knowledge, this is the first study in the Islamic banking literature that adopts this multicriteria methodological framework. We believe that such an analysis is particularly important, in light of the different business model and objectives of Islamic and conventional banks. For instance, while Berger and DeYoung (1997) refer to conventional banks, this issue is of considerable relevance to Islamic banks as well. As we discuss in Section 2, Islamic banks do not take collateral for credit risk and as such additional efforts are necessary during the screening of the proposed projects. Similarly, Islamic banks and conventional banks have different options when deciding about the liquid assets that they keep in their portfolio as the former cannot invest in conventional interest-bearing bonds, and they can only invest in Sukuk issues which have various differences. Taken together with a different philosophy in terms of risk-return sharing between the two types of banks, it is natural to wonder if these differences translate into differences in the overall financial strength of banks.

The rest of the paper is as follows. Section 2 provides a short background to the main differences between Islamic and conventional banks. Section 3 describes the data and methodology. Section 4 discusses the results. Section 5 concludes.

2. Background on Islamic banking

This section provides a brief discussion of the key features of Islamic finance and its potential influence on bank financial strength. The first element is the prohibition of interest-bearing contracts since the Quran prohibits the receipt and payment of interest in all transactions. However, to ensure their sustainability and continue their operations, Islamic banks must receive some kind of reward. For this reason they rely on the idea of risk sharing under profit/loss sharing (PLS) arrangements. This idea extends to the liability side, and consequently, Islamic banks become partners with both deposits and borrowers, and they share risk with both.

For example, under the classic concept of *mudaraba* there are two parties, one with capital (i.e. financier or silent partner), and one with

know-how (working partner) that provides labour and entrepreneurship for the completion of a project. The financier provides the capital and the entrepreneur has the ultimate control over the project. If the project is profitable the two parties share the profits at a pre-arranged ratio, whereas in the case of losses, the entire loss is borne exclusively by the financier. In the case of Islamic banking, an intermediary (i.e. the bank) comes into the concept to create a triangle. Investors deposit their funds at the bank, and the bank finances projects put forward by entrepreneurs. In this arrangement, the investor is essentially a sleeping partner who provides capital and then shares the profit or absorbs the loss. The entrepreneur must present a good proposal, and convince the financier that it is viable and profitable, etc. Consequently, the bank has a dual role. When the bank accepts funds from an investor, it becomes an entrepreneur; and when it finances a project it becomes the financier.

Another common agreement used by Islamic banks is based on a *musharaka* contract. In this case the bank and one or more clients establish a partnership or joint venture for an economic activity where all parties may contribute some percentage of all three factors of economic production (i.e. capital, labor, and entrepreneurship). A partner may keep its share in the partnership until the very end of the project or not, depending on whether it is a consecutive *musharaka* or diminishing *musharaka*. The profit and loss sharing ratio may be revised every time the client repurchases equity units or according to some other agreement between the bank and the client.

The composition of the assets portfolio of Islamic banks also differs from the one of conventional banks. More detailed, conventional banks may diversify their portfolio by allocating part of their funds to non-lending investments like interest-bearing bonds that have different risk-return characteristics. However, Islamic banks are not allowed to invest in such interest-bearing securities, and they can only invest in Islamic bonds (i.e. *Sukuk*).¹ At the same time, this means that Islamic banks lack liquid securities on the asset side (Saeed and Izzeldin, 2016). Another difference is that conventional banks use both debt and equity to finance their asset portfolio, whereas Islamic banks depend primarily on equity financing and deposits. These deposits come in two forms for Islamic banks. First, there are current deposits that bear no interest, and serve as safekeeping accounts. Depositors have access to their accounts and may withdraw money any time they wish. Second, there are savings deposits that do not carry interest rate but participate in the profits of the bank. In this case, depositors cannot withdraw money prior to the maturity date without a penalty.

Finally, in addition to the PLS activities, Islamic banks may engage in other activities like lease and fee-based services. For example, Islamic banks may receive fees through: (i) consultation and professional services, fund placements and trust services (*Ju'ala*), (ii) agency contracts (*Wakalah*), (iii) lease contracts (*Ijarah*), (iv) purchase and

¹ Sukuk issues do not earn interest payments as conventional Western bonds. Instead they are asset-based securities and they are not considered debt instruments. More detailed, Sukuk issues are associated with the partial ownership of the underlying asset, and the investor can be either rewarded with a share of the profits derived from the assets or share a loss. The issue of Islamic banks' liquidity in relation to the availability of short-term liquid assets has been mentioned in a number of studies. For instance Kammer et al. (2015) highlight that “Islamic banks tend to hold high levels of liquidity, but they suffer from a lack of well-developed markets for Shari'ah-compliant, high-quality liquid assets (HQLA). This tends to force many Islamic banks to hold a higher share of cash, which affects their profitability” (p. 22). They also discuss the lack of regular sovereign issuance at different maturities which is critical for deepening the market, since only a few governments of central banks have issuance programs as part of their public debt management strategy (Bahrain, Malaysia and Qatar). Thus, it appears that the development of Sukuk falls short compared to the alternative of Treasury bills which is a very mature and liquid market. Iqbal and Mirakhor (2011) also highlight the lack of liquidity and the complexity of Sukuk issues, along with managerial implications. Finally, Godlewski et al. (2013) approach this issue from a market perspective, and they document that the stock market is neutral to announcements of conventional bonds but it reacts negatively to announcements of Sukuk bonds.

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