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Islamic vs. conventional banking: Business model, efficiency and stability

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ABSTRACT

How different are Islamic banks from conventional banks? Does the recent crisis justify a closer look at the Sharia-compliant business model for banking? When comparing conventional and Islamic banks, controlling for time-variant country-fixed effects, we find few significant differences in business orientation. There is evidence however, that Islamic banks are less cost-effective, but have a higher intermediation ratio, higher asset quality and are better capitalized. We also find large cross-country variation in the differences between conventional and Islamic banks as well as across Islamic banks of different sizes. Furthermore, we find that Islamic banks are better capitalized, have higher asset quality and are less likely to disintermediate during crises. The better stock performance of listed Islamic banks during the recent crisis is also due to their higher capitalization and better asset quality.

1. Introduction

The recent global financial crisis has not only shed doubts on the proper functioning of conventional "Western" banking, but has also increased the attention on Islamic banking, as some observers have pointed to their superior performance during the crisis (Hasan and Dridi, 2010). Academics and policy makers alike point to the advantages of Sharia-compliant financial products, as the mismatch of short-term, on-sight demandable deposit contracts with long-term uncertain loan contracts is mitigated with equity and risk-sharing elements. In addition, Sharia-compliant products are very attractive for segments of the population that demand financial services that are consistent with their religious beliefs. While Sharia-compliant financial assets still constitute only a fraction of total global banking assets (1.5%), their importance has been increasing rapidly, and not only in Islamic countries, as between 2006 and 2011, total assets in Sharia-compliant financial institutions have doubled to USD 900 billion (Financial Times, 2011). In addition, Islamic financial institutions have a relatively high market share in several emerging markets, such as Malaysia and several Middle Eastern countries. However, little academic evidence exists on the functioning of Islamic banks, as of yet.

This paper compares the business model, efficiency, asset quality, and stability of Islamic and conventional banks, using an array of indicators constructed from balance sheet and income statement data across a sample of 22 countries with both Islamic and conventional banks. In addition, we gauge the relative performance of both bank groups during local banking crises and the recent global financial crisis. Our paper thus sheds light on an important debate. While proponents of Sharia-compliant financial services point to clear differences in business models of Islamic and conventional banks and to higher efficiency and stability of Islamic banks, critics argue that (i) conventional and Islamic banks might be different in form but are similar in substance and/or (ii) Islamic banks do not have any advantages in efficiency and stability (Kuran, 2004).

In theory, Islamic finance differs significantly from conventional finance. Specifically, Sharia-compliant finance does not allow for the charging of interest payments (riba), as only goods and services are allowed to carry a price, does not allow for speculation, and prohibits financing of specific illicit activities. At the same time, Sharia-compliant finance relies on the idea of profit- and loss- and thus risk-sharing, on both the liability and asset side and posits that all transactions have to be backed by a real economic transaction that involves a tangible asset. This would suggest clear differences in funding and activity structures of Islamic and conventional banks. In practice, however, Islamic scholars have developed products that resemble conventional banking products, replacing interest rate payments and discounting with fees and

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contingent payment structures. Chong and Liu (2009), for example, find that in Malaysia only a small portion of Islamic bank financing is based on profit-loss sharing and that Islamic deposits are not interest-free, but closely pegged to conventional deposits, a finding confirmed by Khan (2010b) for a sample of large Islamic banks across several countries. In addition, leasing-like products are popular among Islamic banks, as they are directly linked to real-sector transactions. Nevertheless, the residual equity-style risk that Islamic banks and their depositors are taking has implications for the agency relationships on both sides of the balance sheet as we will discuss below. We will test whether differences in the business model are reflected in indicators of income and funding structure as well as intermediation efficiency.

Theory does not make clear predictions whether Islamic banks should be more cost-effective or more stable than conventional banks. On the one hand, the equity-like nature of savings and investment deposits might increase depositors' incentives to monitor and discipline the bank. At the same token, the equity-like nature of deposits might distort the bank's incentives to monitor and discipline borrowers as they do not face the threat by depositors of immediate withdrawal, while it increases the overall riskiness of assets. In addition, Sharia restrictions tend to increase asset concentration and limit the use of hedging instruments for banks. A similar ambiguity relates to the efficiency of Islamic banks. On the one hand, monitoring and screening costs might be lower for Islamic banks given the lower agency problems. On the other hand, the higher complexities of Islamic banking might result in higher costs and thus lower efficiency of Islamic banks. Further, the younger age of Islamic banks compared to most conventional banks might imply higher cost structures.

We use a sample of Islamic and conventional banks over the period 1995 to 2009 to assess whether there are significant differences between conventional and Islamic banks. Focusing on a sample of countries with both types of banks allows us to control for unobserved time-variant country-specific effects, thus a clearer identification of such differences than when comparing banks from different countries. We find no significant differences in business orientation (as measured by the share of fee-based to total income or the share of non-deposit in total funding). In contrast, we find that Islamic banks are less cost-effective than conventional banks, but have a higher intermediation ratio, higher asset quality and higher capital-asset ratios, suggesting a more conservative approach to risk-taking. The differences between Islamic and conventional banks are more prominent for smaller Islamic banks. Further, we find significant cross-country variation, with the differences in intermediation ratio, cost efficiency, asset quality and capitalization between Islamic and conventional banks driven by a few countries. In addition, this variation is partly due to the difference in the market share of Islamic banks in these countries which is likely to reflect the different levels of maturity, sophistication and competitive behavior of these banks. Considering the performance of Islamic and conventional banks during crisis periods, we find that Islamic banks are better capitalized, have higher asset quality and are less likely to disintermediate during crises. We also find a relatively better stock market performance of Islamic banks during the recent crisis, again possibly due to their higher capitalization, and better asset quality.

This paper contributes to a small but growing literature on Islamic finance. While there is a large practitioner literature on Islamic finance, in general, and specifically Islamic banking, there are few academic papers up to now.[1] Cihak and Hesse (2010) find that small Islamic banks are more stable than small conventional banks, with the reserve holding for large banks.[2] Abdull-Majid et al. (2010) find that the relative efficiency of Islamic and conventional banks varies significantly across countries. On the country level, Baele et al. (2012) find lower defaults for Islamic than for conventional loans even among the same borrower and same bank in Pakistan, while Ongena and Sendeniz-Yuncu (2011) find for Turkey that Islamic banks mainly deal with young, multiple-bank, industry-focused and transparent firms. On the deposit side and also using a sample of Pakistani banks, Khan (2010a) finds Islamic banks enjoy substantially higher deposit growth rates than conventional banks and even benefited during the recent crisis in terms of higher deposit inflows. Several authors have explored the relative efficiency of Islamic and conventional banks, such as El-Gamal and Hulusi (2005) for Turkish banks and Srairi (2010) for banks in the Gulf Cooperation Council region.[3] This general dearth of academic work on Islamic finance stands in contrast with the increasing importance that Islamic banking has in many Muslim countries in Asia and in Africa. With this paper we hope to contribute to the emerging literature on this topic. Unlike previous papers, we focus on multiple dimensions along which theory predicts that conventional and Islamic banks differ. Unlike previous papers, we carefully control for omitted variable bias and we explicitly gauge the relative performance of Islamic banks during the recent crisis.

This being one of the first bank-level explorations of Islamic banks, two important caveats are in place. First, anecdotal evidence suggests that there are significant differences across countries in terms of how Sharia-compliant products are exactly structured, with some of the banks basically offering conventional products repackaged as Sharia-compliant products. This implies that we need to exercise caution when interpreting Islamic banking in the context of traditional models of financial intermediation. In addition, there are differences across different Muslim countries in what is considered Sharia-compliant and what is not, which makes it difficult to do cross-country comparisons. Our finding of significant cross-country variation in differences between Islamic and conventional banks supports this assessment. Second, given the different nature of conventional and Sharia-compliant products, as discussed in Section 2, balance sheet and income statement items might not be completely comparable across bank types even within the same country.[4]

The remainder of the paper is structured as follows. Section 2 presents some of the basic Sharia-compliant products and links these products to the theoretical literature on financial intermediation. Section 3 presents data and methodology. Section 4 uses bank-level data to assess the relative business orientation, efficiency, asset quality and stability of Islamic and conventional banks. Section 5 compares the relative performance of conventional and Islamic banks during crisis periods and Section 6 concludes.

2. Sharia-compliant products and agency problems

There are five principles that differentiate Islamic or Sharia[5]-compliant finance from conventional finance. On the one hand, there are the prohibition on *riba* (usury, which is generally defined as

[1] For one of the earliest academic contribution, see Bashir (1983), and for an early survey, see Zaher and Hassan (2001).

[2] Abedifar et al. (2011) confirm these findings for small Islamic banks in a sample of countries with both Islamic and conventional banks. Turk-Ariss (2010) finds for a sample of 13 countries that Islamic banks are better capitalized but less competitive.

[3] Among other papers, Olson and Zoubi (2008) show that financial ratios allow discriminating between conventional and Islamic banks among financial institutions in the Gulf Cooperation Council region.

[4] See Karim (2001) for a discussion on varying accounting practices across countries with Islamic banks.

[5] Sharia is the legal framework within which the public and private aspects of life are regulated for those living in a legal system based on fiqh (Islamic principles of jurisprudence) and for Muslims living outside the domain.