Does Diversification Improve Bank Performance in Dual-Banking Systems?

By:

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Conventional intermediation theories argue that imperfections in financial markets are a raison d'être for financial intermediaries such as banks. Islamic banks are no different from their conventional counterparts in this regard as they too perform similar intermediary functions. However, unlike their conventional counterparts, the principles of Islamic banks are different as they are operated on Shariah-based precepts of riba avoidance and risk sharing. In practice, however, Islamic banks are claimed to be likened to conventional banks, which raises concerns about possible convergence of these two banking systems over time.

Regardless of these claims, Islamic banks are distinguishable from their conventional counterparts in at least two regards: first, a significant portion of Islamic banks' deposits is in investment accounts (44.11% as of 2014 according to IFSB), which are equity-like in nature and second, their financings are linked to a real asset or real economic activity. In conventional banking, all deposit and lending activities are debt-based. Consequently, it is expected that the risk-return profiles of the two banking systems differ considerably, though both pursue the objective of maximizing profits per unit of risk or minimizing risk per unit of profit. The modern portfolio theory postulates that the latter can be achieved through optimal diversification strategies. However, corporate finance theorists suggest that diversification strategies increase complexity, overhead costs, agency costs and inefficiency and that the objective of minimizing risk per unit of profit is best achieved by focussing on their business lines so as to take advantage of management's expertise.

The literature is inconclusive on these opposing arguments. The diversification literature is mainly on conventional banking and there is scarce evidence on Islamic banking.

Given the scant literature, a study was carried out to evaluate the impact of sectorial and contractual diversification on bank returns and risk in dual-banking systems. The former is based on the economic sectors to which financing and loans are extended and the latter is based on the underlying contracts used for such financing and loans. While the former is applicable to both Islamic and conventional banks, the latter is applicable only to Islamic banks. Using the Herfindahl-Hirschman Index and Shannon Entropy measures, the research attempted to answer the following questions: (i) does the loan and financing portfolio diversification across different economic sectors have any impact on returns and risk of banks in dual-banking systems; Is the impact the same for Islamic and conventional banks? (ii) does the diversity of Shariah contracts have any impact on returns and risk of Islamic banks? (iii) does the impact of diversification on bank returns in dual-banking systems vary with the risk level; and, is the impact the same on both Islamic and conventional banks? (Note: while sectoral diversification applies to both bank types, contractual diversification applies to Islamic banks only).

An analysis of 106 banks (46 Islamic and 60 conventional) from six-dual-banking system countries, namely, Malaysia, Bahrain, Kuwait, Qatar, Saudi Arabia and the United Arab Emirates for the period 2005- 2015, shows the following preliminary findings:

(1) Conventional banks are on average better diversified in terms of sectoral diversification than Islamic banks. This, however, is expected given that Islamic banks are restricted from engaging in financing illicit activities/ sectors by Shariah. (2) Prior to the 2008 global financial crisis, both types of banks experienced negative trends in sectoral diversification, but the trends reversed in post-crisis though have not reached the pre-crisis level. (3) Contractual diversification, on the other hand, is comparatively much lower than sectoral diversification and has been declining for the most part of the period for Islamic banks. (4) Conventional banks are relatively larger in size, more profitable, less volatile, and have better quality loans, whereas Islamic banks are better capitalized and more engaged in financing (lending) business.

However, a detailed analysis summarized in the Table below suggests the following conclusions:

		Conventional Banks			Islamic Banks		
		ROAA	ROAE	NPL	ROAA	ROAE	NPL
Sectoral Diversification by HHI	Overall	▼	▼	▲	▼	▼	▲
	@ different risk levels	▼ $ifNPL \leq 7$	▼ $ifNPL \leq 19$		▼ $ifNPL \leq 6$	▼ $ifNPL \leq 6$	
Sectoral Diversification by SE	Overall	▼	▼	▲	▼	▼	▲
	@ different risk levels	▼ $ifNPL \leq 6$	▼ $ifNPL \leq 19$		▼ $ifNPL \leq 8$	▼ $ifNPL \leq 7$	
Contractual Diversification by HHI	Overall				×	×	×
	@ different risk levels				×	▼ $ifNPL \geq 14$	
Contractual Diversification by SE	Overall				×	×	×
	@ different risk levels				×	▼ $ifNPL \geq 20$	

Note: ▲ Means an Increase ▼ Means a decrease × Means insignificance

> **"Islamic banks rely heavily on debt-based contracts"**

Table: Summary of Regression Results

- Sectoral diversification has a negative impact on returns and a positive impact on risk of banks in dual-banking systems. This impact is evidenced in both Islamic and conventional banks and there is no difference in how sectoral diversification affects Islamic and conventional banks.

- The impact of sectoral diversification on bank returns varies across risk levels. It negatively affects returns at low-risk levels and has no effect at moderate- and high-risk levels. Overall, both Islamic and conventional banks are subject to the same effects of sectoral diversification with marginal differences in the effect magnitude.

- The effects of sectoral diversification vary to some degree across our six countries. It has a negative impact on Malaysian bank returns at all levels; it has a negative impact on Bahraini, Kuwaiti and UAE bank returns at low-risk levels, but a positive impact at high-risk levels; and, it has no impact on Saudi and Qatari bank returns at all.

- The 2008 crisis played a crucial role in determining the course of sectoral diversification effect on bank returns. Prior to the crisis, it had no effect at all. The effect turned negative only in the post-crisis.

- By and large, contractual diversification is found to have no effect on either returns or risk of Islamic banks. There is weak evidence of negative effects at high-risk levels and positive effects at very-low-risk levels.

In brief, there are diseconomies of sectoral diversification for banks, both Islamic and conventional, that expand into new sectors. These diseconomies arise in the form of reduced returns concurrently with worsening of credit quality (increased risk). By implication, banks in dual-banking systems can increase their returns and lower their risk if they focus or concentrate on one sector or a smaller group of sectors. In addition, relatively high levels of diversification amongst banks did not provide any buffer against the 2008 crisis. In fact, it made things worse. As for the contractual diversification, for the most part, it does not come with either economies or diseconomies. There is only some weak evidence that there are marginal economies for Islamic banks at very-low-risk levels and diseconomies at high-risk levels.

There are at least four possible reasons for diseconomies of sectoral diversification. First, the bank management might lack the necessary expertise for good quality screening, selection and monitoring of borrowers in new sectors. This affects their monitoring effectiveness and makes the exposure to new sectors costlier. This is usually reflected in the increased provision for bad and non-performing loans and financing, and consequently reduction in returns. Second, due to competitive conditions in the new sectors, banks may be subject to adverse selection and a winner's curse effect. Third, due to a lack of effective market discipline and monitoring by shareholders, managers may not pursue the diversification or focus strategy that maximizes shareholder value. The high concentration of banks provides additional comfort to the managers to pursue their own agendas by increasing their market power at the expense of efficiency.

As for the contractual diversification, Islamic banks heavily rely on debt-based contracts. This supports the notion of convergence in practice.

The findings lend support to the suggestions by corporate finance theorists that banks should focus on their business lines to take advantage of management's expertise and minimize agency problems. For both banking systems, diversification does not seem to support their objective of minimizing risk per unit of returns.

From the policy perspective, regulators should design policies that limit the sectoral diversification levels and incentivize de-diversification of the banking sector. Since poor management and lack of expertise may be the cause of diversification diseconomies, there must be some comprehensive supervisory standards for effective internal monitoring and evaluation and risk management. The heavy reliance on debt-based contracts in Islamic banks requires some support from regulators to help Islamic banks foster their axiomatic competencies by creating at least a level playing field if not a favourable environment for equity-based financing.