To be Efficient, Islamic Banks Should Either be Funds Managers or Duplicate Conventional Financial Products

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Abstract:

This paper measures and compares the cost and profit efficiencies of 51 Islamic banks: comprising of 10 operating in Malaysia and 41 operating in the GCC countries, using the Stochastic Frontier Approach (SFA). We document high profit and cost efficiencies scores within overall the sample. In addition, to look for the Islamic banks' efficiency determinants, the paper compares the different practices of each set of banks. The findings argue that the Malaysian Islamic banks draw efficiency from insuring safety to depositors and from developing large range of shariaa compliant financial products. Especially, they often circumvent Islamic principles to duplicate conventional financial products. While the GCC Islamic banks seem to draw efficiency from the real estate and securities investing. Especially, the GCC Islamic banks seem to be rather funds managers whose major concern is maximizing depositors' earnings.

Keywords: Islamic Banks' Efficiency, Islamic Banks' Practices, Stochastic Frontier Approach (SFA).

1. Introduction

As the crucial implication of financial institutions' efficiency on the economy growth and prosperity, studies focused on the efficiency of financial institutions, become an important part of banking literature (Berger and Humphrey, 1997). Some were interested in developing literature that propose models for measuring the efficiency levels of banks, others are dedicated to the identification of parameters promoting banking efficiency through essentially comparative studies among intra and international banks

However, and while there has been extensive literature on the efficiency of US and European conventional banking industries (Berger and Mester 1997, Berger and Humphrey, 1997; Goddard *et al*., 2001; Weill, 2004; Bos and Kool, 2006; and Bader, 2007, Akhtar 2002), empirical works on the efficiency of Islamic banks, is still in its infancy.

Nevertheless, we argue that this lack of academic interest towards Islamic banks efficiency is belonging to the underlying Islamic financial principles that naturally guarantee efficiency of Islamic banks.

Especially, the partnership association with customers, the closely near with the real economy and the commitment to consider the group utility will necessary mobilize customers saving and channel them toward financing socially and economically performing projects.

So the expected implication of Islamic banks and their depositors will promote rigour and thoroughness when studying any project viability. Then the Islamic financial system aims to limit wealth waste and to promote the overall economic prosperity and growth.

In this paper, we try to appreciate to what extent the Islamic financial principals are credible guarantors of the Islamic banks efficiency. We evoke this questioning for three reasons. First when translating principals into practices, Islamic banks are referring to different schools[1]. Second, in practice Islamic banks are far from what they are expected to be (M.K. Hassen, 1999). And third, many studies assert that Islamic banks are more efficient than the conventional ones.

1 The KSA Islamic banks refer to Hanbali School, the other GCC banks refer to Maliki school and Malaysian Islamic banks refer to Shafii School.

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So, what drives the Islamic banks efficiency?

In this paper, using the stochastic frontier approach (SFA) we compare cost and profit efficiencies scores of 51 Islamic banks, 10 Malaysian Islamic banks and 41 GCC Islamic banks[2]. The results assert that both sets of Islamic banks are profit and cost efficient, with slight supremacy to the GCC Islamic banks.

Then, we try to look for Islamic banks, efficiency determinants into practices of each set of banks especially in mobilizing and using the customers' savings.

Our comparative analysis reveals that the two sets of banks implement different strategies to mobilize and preserve customers' savings. Especially the GIBs focus on maximizing the depositors' earnings, while the MIBs seek to insure safety to depositors.

Moreover and about the funding use, the GIBs spend essentially in fixed and held for sale properties investments. Doing so, GIBs seem opting for better market diffusion and for high performing investments. But, the MIBs use funding essentially, in financing economy, and in improving innovation activity. They seem enough influenced by the conventional banking industry which is expected to insure safety to depositors and financing to the economy growth.

So they spend much on intangible investing and innovation activities in order to develop shariaa compliant products. But we remark that Malaysian banks are often tending to release Islamic principles and to replicate the conventional products under new lexicon.

We argue that these different strategies are not hazardous but they are involved by the particular context rounding each group of banks. Especially all of the MIBs (except one bank) are Islamic windows related to conventional banks. So it's obvious to remark some tendency toward the conventional finance, mainly in insuring safety to depositors and in warring about the banking core activity. While the GIBs are operating in an overbanked financial system[3], so they affront tough competition. To drain and preserve customers' saving they are betting on realizing high earnings to depositors.

The rest of the paper is organized as follows: in section 2, we present an overview of the literature dealing with Islamic banks efficiency. Section 3 describes data and measures the profit and cost efficiency using the SFA. Section 4 focuses on some relevant practices used by each set of banks. Section 5 concludes the paper.

2. Overview

Below we highlight the main studies and academic contributions that dealt with the Islamic banks efficiency. Typically, all the literature was interested by comparing the efficiency scores between the Islamic and conventional banks. Some studies assert the efficiency supremacy of Islamic banks; other studies denied such supremacy and affirm the absence of any difference among Islamic and conventional banks efficiency.

Al Shammari (2003) uses the translog stochastic cost and alternative profit frontier approaches to estimate bank efficiency in GCC countries and then compares Islamic bank efficiency with other types of banks. Cost efficiency estimates for banks in the countries under study averaged 88%. This suggests that the same level of output could be produced with approximately 88% of current inputs if banks under study were operating at the most efficient level. The efficiency scores based on geographical location, ranged from 83% in Qatar to 92% in Saudi Arabia. Moreover, he finds that the average cost efficiency based on bank specialization ranged from 84% for investment banks to 91% for Islamic banks. Al shammari (2003) concludes that Islamic banks have higher cost efficiency because of their generally lower cost of funds compared to commercial and investment banks.

This level of technical inefficiency is similar to the range of 10-15% found in the survey of 130 studies undertaken by Berger and Humphrey (1997).The results appear slightly lower than the levels of inefficiency found in European banking. (Goddard *et al* 2001).

The better efficiency score showed by the Islamic banking is also confirmed in a study led by Al-Jarrah and Molyneux (2003)[4]. They also use the stochastic frontier approach,

2 We exclude the KSA Islamic banks from the sample. We argue that these banks enjoy a government support and a relaxing competitive environment. In KSA, there are only six banks.

3 In the GCC there are 51 islamic banks serving 15 million people while in Malaysia, there are 10 islamic banks serving 28 million people.

4 Limam (2001) uses data envelopment analysis to investigate the efficiency of 52 GCC banks for 1999 although no distinction between Islamic and conventional banks.

with the Fourier-flexible functional form, and estimate bank cost and profit efficiency for banks operating in Bahrain, Jordan, Egypt and Saudi Arabia. Al-Jarrah and Molyneux (2003) found that the standard profit efficiency scores ranged from 56% for investment banks to 75% for the Islamic banks. Similar results are found from the alternative profit function estimates where Islamic banks are again the most profit efficient.

El-Gamal and Inanoglu (2002) used the stochastic frontier approach to estimate the cost efficiency of Turkish banks over the period 1990 to 2000. The study compared the cost efficiencies of 49 conventional banks with four Islamic special finance houses. Overall, the authors found these firms to be the most efficient and this was explained by their emphasis on Islamic asset-based financing which led to lower non-performing loan ratios. El-Gamal and Inanoglu (2004) substantially extend their earlier study by providing an alternative method for evaluating bank efficiency scores. Again they examine the cost efficiency of Turkish banks throughout the 1990s. They distinguish between groups of banks that have different production technologies. They find that the Islamic financial firms have the same production technology as conventional (mainly domestic) banks, and using standard stochastic cost frontier estimates they show that the Islamic firms are among the most efficient. In addition, they use a new labor efficiency measure – and again Turkish Islamic special finance houses are found to be among the most efficient. Hussein (2003) provides an analysis of the cost efficiency features of Islamic banks in Sudan between 1990 and 2000. Using the stochastic cost frontier approach, he estimates cost efficiency for a sample of 17 banks over the period. As Sudan has banking system based entirely on Islamic banking principles, Hussein compares the Sudanese banks with the foreign owned banks. The results argue that the State owned banks are the most cost efficient. The analysis is extended to examine the determinants of bank efficiency. Here, Hussein finds that smaller banks are more efficient than their larger counterparts.

However, there is no conclusive evidence in this regard since the second group of literature gives contrary findings. Especially the studies inserted in this group include works that document non significant differences between the efficiency level of the Islamic banks versus conventional ones.

In this regard, Abdul Majid *et al*. (2003) used the stochastic cost frontier approach to estimate the cost efficiency of Malaysian banks over the period 1993 to 2000. Their data set included 34 banks (24 local and 10 foreign) from a total of 55 commercial banks in operation during the period of study. They used translog cost function to arrive at inefficiency measures. The results show that Islamic banks did marginally better than conventional banks in terms of efficiency although both produce at a cost that is respectively 30.2% and 28% higher than necessary. The slight edge achieved by the Islamic banks over conventional banks is not however statistically significant. However, at least it can be safely concluded that Islamic banks are at least as efficient as their conventional counterparts despite a more restrictive business environment. In another study (Samad and Hassen, 1999), the profitability performance of Islamic banks in Malaysia was compared to 8 conventional banks using the financial ratios. The study found that the average profit of Malaysian Islamic banks is significantly lower than the conventional banks. Sarker (1999) did a study on all Islamic banks in Pakistan by developing the co-called banking efficiency model. The study concluded that Islamic banks couldn't achieve maximum efficiency under the conventional banking framework because of constraints that they face. Metwally (1997) compared the performance of 15 conventional banks and 15 "riba" free or interest-free banks from all over the world. The statistical results suggest that profitability and efficiency differences are not statistically significant between the two types of banks.

Also Shamsher, Taufiq and Bader (2009), measure and compare the cost and profit efficiency of 80 banks in 21 of organization of Islamic conference (OIC) countries: comprising of 37 banks and 43 Islamic banks, using the Stochastic Frontier Approach (SFA). The findings suggest that are no significant differences between the overall efficiency results of conventional versus Islamic banks. We finish with Hamim, Naziruddin and S. Musa (2007) who measure the technical and cost efficiency of full-fledged Islamic banks with Islamic windows in Malaysia, using Data Envelopment Analysis (DEA). They found that the first set of banks were more efficient than the Islamic windows but less efficient than the conventional banks.

Overall, the general finding from this literature is that Islamic banks are at least as efficient as their conventional bank competitors and in most cases are more efficient.

3. Efficiency Measure and Comparison

Berger and Humphrey (1997) note that efficiency estimation techniques can be broadly categorized into parametric methods using econometric techniques and the non-parametric methods using the linear programming method. However, no consensus exists as to the preferred method for determining the best-practice frontier against which, relative efficiencies are measured.

The two approaches differ mainly in how they handle the random error and the assumptions made on the shape of the efficient frontier. However, each has its particular strengths and weaknesses.

The non parametric approach presents the main advantage of the ability to characterize the frontier technology in a simple mathematical form, however it makes no accommodation for noise (Fried *et al*, 1993) so any deviation from the best practice frontier are attributed to inefficiency as it does not allow for noise to be taken into account.

Mainly for this weakness, and to avoid any biased interpretation, we use in this study the parametric approach that allows noise in the measurement of inefficiency, although this approach requires us to specify the functional form of the cost and the profit function.

Especially we use the stochastic frontier approach (SFA), this method is widely documented in the literature (Carvallo and Kasman, 2005; and Beccalli et al, 2006). Below, we briefly describe the technique and data.

3.1. Methodology: SFA approach

To measure the profit and the cost efficiency of the selected Islamic banks, we use in this study the parametric stochastic frontier approach developed by Aigner *et al*. (1977) and Meusen and Broeck (1977).

This approach has been widely used by many studies in evaluating banking efficiency (Kraft and Tirtiroglu, 1998; Hassan and Marton, 2003; Bonin *et al*, 2005; Freisd Taci, 2005; Bos and Kool, 2006; and Kwan, 2006).

The SFA requires first the definition of a standard cost or profit function.

Cost efficiency gives a measure of how close a bank's cost to the best practice bank's cost that produces the same bundle of output under the same conditions.

Costs, C, depend upon prices of inputs, P, the quantities of outputs, Q, random error, v_c, and cost inefficiency, u_c. The cost function can be specified as following:

$$C = f(Q, P, v_c, u_c) \quad \textbf{(1)}$$

After defining the cost function, the SFA consists in estimating the minimum cost or the maximum profit frontier for the entire sample from balance sheet data. The efficiency measure for a specific bank observation will be its distance from the frontier.

As the standard literature assume, we use the translog functional form to estimate the cost and the profit frontier (Bos and Kolari, 2005; Shamsher, Taufiq and Bader, 2007)

So, the stochastic cost frontier model can be written as follows:

$$\text{Ln } C_{it} = \mathbf{B_0} + \sum^{n}_{j=1} \mathbf{B_j} \ln y_{it} + \sum^{m}_{k=1} \ln w_{kit} + \tfrac{1}{2} \sum^{n}_{j} \sum^{m}_{l} \mathbf{B_{jl}} \ln y_j \ln y_l + \tfrac{1}{2} \sum^{m}_{k} \sum^{m}_{p} \mathbf{B_{kp}} \ln w_{kit} \ln w_{pit} + \tfrac{1}{2} \sum^{n}_{j} \sum^{m}_{k} \mathbf{B_{jk}} \ln y_{jit} \ln w_{kit} + \mathbf{B_{qt}} + u_{it} + v_{it} \quad \textbf{(2)}$$

Where ln C = the natural logarithm of the total cost;

Ln y_{yt} = the natural logarithm of the j^{th} output (j=1, 2, 3…n.);

Ln w_{kit} = the natural logarithm of the k^{th} input price (k=1, 2, 3…m);

U_{it} = the non-negative cost inefficiency related to input used.

V_{it}= the random variables due to measurement errors in the input variable or the effect of unspecified explanatory variables in the model.

t= year of observation

B_s is the coefficients to be estimated.

Following Coelli *et al*. (1998) and Bos and Kolari (2005), a measure for the cost efficiency for bank k at time t is[5]:

5 Linear homogeneity was imposed in input prices by normalizing the dependant variables and input price variables.

Table 1: Cost and Profit' Efficiencies of Malaysian, GCC and all Islamic Banks of The Sample

Banks category	*Descriptive statistics*	*Cost efficiency*	*Profit efficiency*
All banks	*N*	*51*	*51*
	Mean	0.392	0.793
	Standard deviation	0.112	0.032
	Maximum	0.685	0.895
	Minimum	0.165	0.698
Malaysian Islamic banks	N	10	10
	Mean	0.342	0.752
	Standard deviation	0.022	0.034
	Maximum	0.365	0.775
	Minimum	0.298	0.685
GCC Islamic banks	N	41	41
	Mean	0.405	0.804
	Standard deviation	0.029	0.032
	Maximum	0.488	0.812
	Minimum	0.383	0.781

$$CE_{kt} = \{E[\exp(u_{KT})]/\varepsilon_{KT}\}^{-1} \quad (3)$$

This measure takes on a value between 0 (fully inefficient) and 1 (fully efficient) and indicates how close a bank's costs are to the costs of a fully efficient bank under the same conditions based on its inputs, outputs, prices and controlling variables.

3.2 Variables' Definition: The Intermediation Approach

Most studies on inefficiency use the intermediation approach in measuring a bank flow of services. Under this approach, deposits are treated as inputs and loans as outputs (Sealey & Lindley, 1977). It is a popular approach partly because of the ease of acquiring the required data.

All banks, within the intermediation framework are modeled as multi-product firms, producing three outputs and employing three inputs.

The input or the cost vector: Based on previews researches (Isik and Hassan, 2002 Hassan, 2005), the total cost of inputs in equation 2, is defined to include all labor expenditures[6], fixed asset[7] capital expenses and total funds expenditures[8]. All variables are measured in million of US dollars.

The output vector includes three natures of outputs: (1) total loans plus advances and financing (2) other earning assets such as investment securities, specialized and directed loans plus the inter-bank loans, (3) off-balance sheet items. The inclusion of the off-balance sheet items as an output is of great importance particularly to Islamic investment banks where restricted investment accounts are not recorded in the balance sheet and considered as off-balance sheet items.

In conclusion, the exogenous variables will be the different input' costs and output' prices and the dependant variable in our profit function will be the total revenue created by these three outputs, minus the total inputs' cost.

3.3 Data

6 The price of labor is measured by total expenditures on employees such as salaries, employee benefits and reserves for retirement pay, divided by the total funds.

7 Price of fixed asset: total expenditure on premises and fixed assets (depreciation) divided by the book value of premises and fixed assets.

8 Price of total funds: total interest expense or income distributed to depositors plus other operating expenses divided by the total funds.

Table 2: Structure and Remuneration of Customers's Deposits: Malaysian Versus GCC Banks1

This table reports the structure and the shariaa concept contracts underlying the customers' deposits in each set of banks, to construct the table we use the annual balance sheet and the financial statement of each bank included in the two sets of banks. The first line gives the annual average percentages of total deposits reported to total asset of each set of banks. The second line gives the average deposit structure of each set of banks. CA: current account; SA: saving accounts and NIDC: negotiable Islamic debt certificates. IG: general investment; IS: special investment.

	MIB						*GCC*		
Deposits/Total assets	82%						55%		
Deposit type and structure: % to total deposits.	Non-mudharaba deposit			Mudharaba deposit			Current	Saving	Investment (general and wakala)
	60%			40%					
	CA	SA	NIDC	SA	IG	IS			
	28%	9.6	28.4	4.4	8.2	20	12.5%	5.4%	80%
Shariaa concept underling the deposit type	Wadiah or amana			Mudharaba			Quard		Mudharaba
Remuneration formula	Fixed income distributed as gift or hiba			Income distributed as profit share according to some rate established by Shariaa board			100% free		Income distributed as profit share according to some rate established by Shariaa board
Cost of deposits (% of income to customers/ total deposit)	2%						2.2%		

1 In this table and in the rest of the work, we deal with average percentages information's. We opt for percentage ratios to be able to lead comparatives analysis into heterogeneous currencies and size sample.

This study used a sample of 51 Islamic banks: comprising of 10 Islamic banks operating in Malaysia and 41 Islamic banks operating in the GCC region (4 from Kuwait, 3 from Qatar, 24 from Bahrain, and 10 from United Arab Emirates).

The data includes essentially some financial and corporate data which are collected from the annual financial statements and balances sheet of each bank included in the sample. We collect data from the annual reports published in the web site of each bank. The study covers the period 2004-2011.

3.4. Efficiency Measure Results

The results for overall cost and profit efficiency of all banks and Malaysian versus GCC Islamic banks, using stochastic frontier approach (SFA) are given in Table 1.

Similar trend is observed for cost and profit efficiency of GCC and Malaysian Islamic banks. That is banks in both banking streams are more profit efficient and less cost efficient. Table 1 shows that the GCC Islamic banks (GIBs) are more cost efficient than the Malaysian (MIBs) ones. The cost efficiency mean score of the GIBs is 40.5 while the cost efficiency score of the MIBs is limited to 34.2.

These results hint that for the same output level, the GIBs are finding inputs at more attractive prices and less expensive than those used by the MIBs. These results which are similar to those of Shamsher, Taufiq and Bader (2009) are very interesting and recommend us to explore the input structure of each bank group i.e. the deposit funds costs of the MIBs and the GIBs.

Indeed and contrary to Shamsher, Taufiq and Bader (2009), in this paper we find that the GIBs are also more profit efficient than the MIBs. The mean profit efficiency score of the GIBs is about 80.4 while the profit efficiency

Table 3: Comparison of the Financing Activities Versus the Investment Activities in the two Set of Banks

	MIB	*GIB*
Financing activities	44%	32%
Investment activities	34%	48%

The table gives the annual percentage average of the financing activities reported to total asset of each set of banks, the investment activities reported to total assets, the income from financing activities reported to total income and the income from investment activity reported to total income. We recall that each data is the average annual percentage of all the banks included each set of banks

score of the MIBs is about only 75.2.

These results may be expected and not surprising since the GIBs are significantly more cost efficient. Nevertheless, it would be interesting to explore their respective use choices of the mobilized funds.

4. GCC versus Malaysian' Islamic Banks : Comparative Practices' Study

Hereafter, we try to look for the drivers of the Islamic banks efficiency into the respective practices of each set of banks, especially in mobilizing and in using funds.

4.1 Malaysian Versus GCC Islamic Banks Practices Into Mobilizing Customers' Savings

As conventional bank, the customers' deposits constitute the main funding source of each Islamic bank.

Nevertheless, and by difference to conventional bank which remunerate deposits by some predetermined interest rate; the Islamic banks don't distribute any predetermined interest to depositors.

It is true that all Islamic banks obey properly to this Islamic rule related to prohibition of distribution of any interest; however the conception of the alternative remuneration differs among the Islamic banks, especially between the MIBs and the GIBs[9].

Table 2 highlights the different shariaa concept underlying the deposits' accounts. These conceptual differences has crucial implications on (1) deposits' costs level, (2) the freedom assigned to each set of bank in using customers deposits and (3) different liquidity and profitability constraints levels.

In the following, we highlight and we interpret the main differences that emerge from table 2.

The GIBs enjoy of larger portion of profit sharing investment accounts (mudharaba contracts) : that is the GIBs are less exposed to liquidity risk and they are enjoying a larger freedom in using these funds.

Moreover, the GIBs are commitment only to distribute profit share to investment accounts. The other accounts are costless.

MIBs remunerate investments and saving deposits (either by distributing gifts or profit share). Moreover 50% of these costly funding (non mudharaba deposits) engage de MIBs to distribute some monthly fixed income. So the MIBs deposits seem behaving as conventional ones. i.e they are associated with safety and fixed income.

Besides and by concerns of ensuring income safety to depositors, MIBs are obliged to construct the PER (profit equalization reserves) while the GIBs are free to practice or not to practice the PER or the IRR[10].

Finally, and although the GIBs don't remunerate all deposits as do the MIBs, their deposits are more expensive than the MIBs ones. That is the GIBs offer more attractive remuneration to investment deposits, while MIBs distribute moderate remuneration to all types of deposits.

9 We note that the two sets of banks consider the deposits as liabilities which underpins a commitment to repay the principal or an offer some guarantee of capital recovery. Except of a little number of GIB which consider the investment deposit as equity related to the investment accounts 'holders.

10 We notice that there are some GIB in our sample that practice both the PER and the IRR to reassure the holders.

Table 4 (panel a): Comparison of the Two Sets of Banks Customers' Types and Financing Purposes

	MIB			*GIB*		
Customers type	Retail banking	Corporate banking		Retail banking	Corporate banking	
	78%	20%		60.9%	29%	
Financing purpose		Business banking	Investment banking		Business banking	Investment banking
		63%	37%		92%	8%
Doubtful financing or financing impairment	5.2%			2%		

This table gives in terms of annual average percentage, first the retail banking volume and the corporate banking volume, each reported to the gross financing and advances. Second the financing purpose, especially we compute the volume of the business banking and that of the investment banking, each reported to the gross corporate financing. And third the volume of the non covered financing, reported to the gross financing and advances.

Table 4 (panel b) : Comparison of the Financing Products' Structure of the Two Sets of Banks this Table Gives the Volume of Each Financing Product Reported to the Gross Financing and Advances

	MIBs	*GIBs*
Mudharaba	5%	0.04%
Musharaka	13%	9.5%
Murabaha (cost-plus)	11%	54%
Installment sale	2%	15%
Istisnaa	0.016%	0.02%
Al ijara thumma al-baii (finance lease)	0.18%	19.4%
Bai bithaman ajil	24%	Not used
Quard El-hassen (benevolent loan)	0.004%	0.0005%
Baii al dayn (financing trading)	2%	Not allowed
Baii al-inah (personal finance)	19%	Not allowed
Al tawarrok	19%	2%
Al rahn	3%	Not allowed

Table 4 (panel c): Comparison of the Products' Billing Way

	MIBs	*GIBs*
Billed at fixed rate	38%	72%
Billed at floated rate	62%	28%

This panel gives the volume of financing billed at fixed rate and the volume of financing billed at floated rate. Each reported to gross financing and advances.

4.2 Malaysian Versus GCC Islamic Banks: Different Funds Allocations

A look on the allocation funds strategy followed by each set of the banks reveals again, many different practices in distributing funds between, consumption financing, corporate growth financing and investing.

Especially we note the followings:

- MIBs are more concerned with financing activity than are the conventional ones. The financing activity among the GIBs doesn't exceed 32% of the total assets. That is the GIBs are tending to deviate from the banking industry' core business, toward funds management.
- Both sets of banks offer essentially retail banking, nevertheless the MIBs seem offering higher corporate investment financing, especially investment financing through mudharaba and musharaka contracts.
- Different performing and growth investments choices: the MIBs seem opting for investing in fixed income financial assets and in intangible assets such as IT infrastructure and systems, research and development and product innovations. But the GIBs banks seem to opt for real estate and securities investing and in improving their geographical penetration.
- Refined comparison of the financing activities among MIBs and GIBs

Table 4 (panel a) gives the customers types and financing purposes distribution of each set of banks. Especially, we distinguish between the products offered to householders (retail banking), and those offered to firms (corporate banking). Moreover in the corporate banking we distinguish between business banking and investment banking.

Moreover, from the refined analysis led in Table 4 (panels a and b) about financing activity, we remark that the MIBs are offering a larger range of financing products. And they are more able to finance firms' growth through mudharaba and musharaka contracts. But the GIBs seem to be more prudent, and they focus only on financing goods acquisition[11].

11 Such financing products are safer, since they are backed to a real asset.

The overuse of such risky products based on mudharaba and musharaka shariaa concepts, could be enough costly and risky to MIBs.

Our conclusion could be strengthened by the findings inherent to doubtful financing. Especially, we find that the MIBs document as impairment financing of about 6% of the gross financing and advances, where the impairment financing is only about 2% in the GIBs.

Furthermore, Table 4 (panel c) compares the billing way practiced in the two set of banks. Especially we distinguish between financing products billed at fixed rate and those billed at floating rate. Here again, we find another explanation of the higher profit score documented by the GIBs.

The study affirms that about of 65% of the financing products offered by the GIBs are billed at fixed margin. Besides, the fixed margin is determined by consideration to the worst possible change in the benchmark interest rates.

These findings reflect that the GIBs are more prudent and more selective in offering corporate financing. And they focus only on safe and asset backed retail and corporate financing billed at fixed rate.

- Refined comparison of the investing activity among MIBs and GIBs :

The investment activity covers two main purposes that are growth and profitability. Through fixed investments, banks aim to improve their geographical penetration, their infrastructure and their branding. But the held for sale investments aim to drive direct profits. They consist in buying assets in order to sell them at higher prices.

Table 5 reveals different choices among fixed investments strategies within the two set of banks. Especially the GCC banks are more focusing on growing their perimeter by improving their market penetration and diffusion, while the MIBs are more concerned with research and development investments and with product innovations[12].

Such observations help to understand the better profit efficiency score of the GIBs. Especially, the fixed

12 We find that the MIBs are offering a large set of products, they the first launcher of sukuk, in the other hand the GIBs are more better diffused and had penetrated several foreign markets

Table 5: Investment Activities Comparison: the GIB Versus the MIB

	Investing activities choices					
	Fixed investment		*Held for sale investment*			
	Tangible assets	Intangible assets	Real estate and properties	Fixed income securities	Other securities	Other investments types
MIBs	32%	68%	13%	58%	18%	11%
GIBs	72%	28%	43%	12%	37%	8%

This table refines the investment strategy of each set of banks. Especially it distinguishes between fixed investments and held for sale investment chosen by MIBs and by GIBs.

investments drive immediate and direct profitability. But the research and development investments involve high expenses volume without promising direct and sure profitability.

Also, we notice that MIBs are more able to release Islamic principles, through innovating products that are banned in the GCC banks, such as *bai-inah; baii-daiin and the baii bithaman ajil.*

About the held for sale investment, also we document different strategic choices among the two sets of banks. Especially, the MIBs opt for fixed income financial assets[13] ; while GIBs opt for securities and real estate investments.

These different strategic investments choices underlie various worries. Especially, by preferring investing in fixed income financial securities, the MIBs seem looking for liquidity and safe income. Looking for liquidity is legitimate, especially when 60% of the total customers' deposits are non-mudharaba funds assigned on short temporal horizons. Also the fixed income helps to insure fixed remunerations and gifts to depositors and so to preserve customers. So investing in fixed income financial assets seems to be the MIBs' strategy to manage liquidity risk and to improve branding. Nevertheless, and against liquidity and safety the fixed income financial assets are not as performing as the other risky securities.

But the GIBs seem to prefer investing in properties and securities. The real estate investing is less liquid but it promises safer and higher surplus value. But such concentration may expose GIBs to higher market risks.

Also, the GIBs seem to be interested with securities which promise liquidity and high expected earnings, but again they are associated with high risk markets.

the GIBs seem able to support higher risk levels, since most of their customers' deposits are assigned as wakala contract on relatively long temporal horizons, besides the GIBs haven't any commitment to distribute fixed income to the holders of saving and current accounts.

So GIBs seem driving their profit efficiency from investing in risky but performing assets. But the MIBs seem counting on insuring safety to depositors and financing to economy, by offering large range of products that duplicate conventional banks products, but presented under Islamic lexicon.

5. Conclusion

The existing literature often leads comparison between the Islamic and the conventional banks. The main contribution of this paper is to lead comparison within Islamic banks.

The finding argues that the Islamic banks are far from homogeneity. Especially we document significant different practices between Malaysian and GCC Islamic banks.

Moreover these differences seem to translate different strategic managerial options to drain efficiency.

The results reveal that are not the Islamic financial principles which drive Islamic banks' efficiency, rather each set of bank has defined its strategic efficiency' sources.

13 Especially composed of Malaysian government investment certificates; Malaysian government treasury bills and negotiable debt certificates.

Our study argues that the GIBs draw efficiency from cautious and selective financing activity, but more importantly they are counting on real estate and securities investments. We think that the GIBs are more managers' funds rather than banks.

Especially, the GIBs which operate in an overbanked environment where they affront heightened competition seem to be more worried about the best investing formula to fructify deposits, to satisfy and preserve depositors and drain further customers savings.

About the MIBs which are Islamic windows are more preserving the banking intermediation philosophy. That is they count more on financing activities. Especially, they are focusing on developing large range of financial products. Nevertheless, the proposed products are often duplicating the conventional products and so associated with some Islamic banks release.

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