

Profitability of Islamic Financing Tools

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This study analyses the profitability of Islamic financing tools, based on a sample of forty-one banks, from thirteen MENA countries, covering the period of 2006 to 2016. Fixed effect panel data analysis is used. The results show that Islamic banks are missing a large portion of profits by underinvesting in Mudarabah and Istisna, which are the most profitable financing tools, while placing more than 40% of their assets in Murabaha and Ijara financing tools which have no significant effect on profitability. The results also show that while size and cash have a significant positive effect on profitability, there are no significant effects of leverage or security investments on banks' profitability.

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1. Introduction

Islamic banks and Islamic financing tools have begun to present themselves as new ways to provide financing sources, in a highly competitive market dominated by the conventional banking system. They need to operate with the highest level of efficiency as well as profitability, in order to survive in such a competitive environment.

This competitive environment makes it difficult for Islamic banks to manage their assets and their financing portfolio. Islamic banks finance their clients differently than conventional banks; instead of offering direct credit (loans) which involves providing clients with cash, Islamic banks finance their clients using a variety of specific Islamic financing tools. None of these tools involve the direct transfer of cash to clients. In using these Islamic financing tools, Islamic banks act as intermediaries to finance their clients.

In these nonconventional ways and by avoiding direct cash loans, Islamic banks help the economy to eliminate inflation. However, this creates a challenging task of how to choose among the different financing tools. Conventional banks, on the other hand, create money in the process of re-lending; the creation of money leads to higher liquidity which will push the demand for products and services, leading to inflation.

To achieve profits, Islamic banks distribute their assets among different types of Islamic financing tools with varying rates of return, in order to gain maximum profits from their portfolios. Many researchers have studied the profitability of Islamic banks, focusing on the determinants of profitability and how banks' characteristics can affect their profitability. Other researchers have compared the profitability of Islamic banks to conventional banks. In this study, the profitability of Islamic banks will be investigated in more detail by examining their sources of profitability.

By understanding from which sources Islamic banks can generate higher profits and which sources generate lower profits, Islamic banks are able to restructure their assets in such a way that will generate more profits and help the banks to become more profitable and efficient.

1.1 Islamic Financing Tools

As previously mentioned, Islamic banks provide financing to their clients in nonconventional ways; rather than providing cash directly to their clients, Islamic banks use Islamic financing tools which include the following;

Murabaha (cost-plus sale). In *Murabaha* financing when a client wants to obtain financing to purchase an asset the bank will purchase that asset then re-sell it to their client by adding a profit over the cost of the asset. The client then pays the bank on an instalment basis.

Musharakah (joint venture contract). In *Musharakah* financing, banks enter a partnership with their clients by providing capital to the project and sharing its risks and returns.

Mudarabah (trustee financing contract). In *Mudarabah* financing, banks enter a special partnership with their clients; in this partnership one party will provide the capital for the project with no right to participate in the business or its management, while the other party provides the management and works for the project with no responsibility to provide any capital. Both parties share the profit, while losses are assigned only to the party which provides the capital; unless the party responsible for management acts in an irresponsible manner or the loss is intentional, in which case they share the losses with the capital provider.

Ijara (leases). In *Ijara* financing, banks purchase assets then lease them to their clients using capital or operating lease contracts. Profits on this type of contract can be generated through periodic rent.

Istisna (manufacturing order). In *Istisna* financing, banks are ordered by their clients to manufacture or build an asset with given specifications. Profits can be achieved via the profit margin banks charge over the cost of manufacturing or building.

Of the tools described above, Islamic banks place the greatest emphasis on *Murabaha* financing. This tool allows banks to set and identify their profits upfront, and is easily applied and monitored. Banks purchase assets, sell them to their clients, then ensure that their clients pay the regular instalments. The second largest share of capital is usually placed in *Ijara* financing for the same reasons as *Murabaha* financing. *Ijara* financing allows banks to set and identify their profits upfront, and it is also easy to apply and monitor.

Conversely, Islamic banks place a very small share of capital in *Musharakah* financing, *Mudarabah* financing, and *Istisna* financing. Islamic banks place a small share in these tools since the outcomes from these tools might involve losses and the process of applying and monitoring them is complex.

The remainder of this paper will be organised as follows. Section 2 will provide the literature review of the topic. The data and methodology will be presented in Section 3. After this, Section 4 will discuss the results and findings of this paper. Subsequently, the conclusion of this paper will be presented in Section 5.

2. Literature Review

As mentioned earlier, literature on the profitability of Islamic banks focuses on general aspects regarding profitability, in one area it focused on the determinants of profitability, and in another it compared the profitability of Islamic and conventional banks.

Trad et al. (2017) analysed a sample of seventy-two banks from twelve countries over the period of 2003 to 2014. They found that bank size and capital ratio are the main variables in determining the profitability of Islamic banks.

Khan et al. (2014) investigated five Pakistan banks over the period of 2007 to 2014. They found that Islamic banks' profitability is affected by the gearing ratio, asset management, deposit ratio, non-performing loan ratio, and consumer price index.

Hassan and Bashir (2004) studied the profitability determinants of Islamic banks in twenty-one countries over the period of 1994 to 2001, their results showing that banks with a high debt to capital ratio and banks with high capital are more profitable. The results also show that taxes affect performance negatively, while favourable macroeconomic conditions affect performance positively. The results indicate that there is a positive relationship between overhead expenses and profitability.

Haron (2004) studied the determinants of profitability in Islamic banks based on a sample of fourteen Islamic banks. He found that profitability is affected by liquidity, total expenditures, funds invested in Islamic securities, the percentage of the profit-sharing ratio between the bank and the borrower, interest rates, market share, size of the bank, funds deposited into current accounts, total capital and reserves, the percentage of profit-sharing between bank and depositors, and money supply.

Bashir (2003) investigated the determinants of profitability among eight Islamic banks in the Middle East during the period of 1993 to 1998. He found that a high loan to assets ratio, high equity to assets ratio, and foreign ownership, lead to high profitability.

Similar studies have been conducted by many other researchers, with their results being highly consistent.

Alkassim (2005) used sixteen Islamic and eighteen conventional banks in the Gulf Cooperation Council Countries (GCC) to compare the profitability of Islamic and conventional banks, with the results showing that bank size and total expenses have a positive effect on Islamic banks but a negative effect on conventional banks, while non-interest expenses have a positive effect on the profitability of both Islamic and conventional banks.

Alzoubi (2013) investigated the profitability of Islamic banks compared to conventional banks using a sample of conventional banks and ten Islamic banks from Saudi Arabia, Kuwait, the United Arab Emirates (UAE), and Jordan, between 2007

and 2013. The results show that there is a statistical difference between the profitability of Islamic and conventional banks, however, the assets of Islamic banks have a higher growth rate than those of conventional banks.

Moin (2008) studied the performance of one Islamic and five conventional banks, over the period of 2003 to 2007. Based on several profitability measures, the results show that conventional banks are more profitable than Islamic banks.

While several researchers have compared the profitability performance of Islamic and conventional banks, the results have been mixed. Some researchers found that Islamic banks outperform conventional banks, yet others found the opposite, and some researchers found no significant differences between the profitability of the two groups, including: Onakoya and Onakoya (2013), Samad (2004), Siraj and Sudarsanan (2012), and Ansari and Rehman (2011).

3. Data and Methodology

Based on a sample of forty-one Islamic banks, which were taken from thirteen countries in the MENA area (including Bahrain, Egypt, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi, Sudan, Syria, UAE, and Yemen) between 2006 and 2016, the researcher conducts fixed effect panel data analysis to analyse the profitability of Islamic financing tools in Islamic banks.

The dependent variable in this research is profitability (ROA), which is measured as the ratio of net income after tax to total assets. This ratio represents the profits made by Islamic banks on their assets, therefore, as this ratio increases it indicates a higher level of profitability.

In terms of independent variables, nine variables are used to investigate how different financing tools contribute to the bank's profitability. The variables are:

Bank size (SIZE); bank size is measured as the natural logarithm of the total assets. Larger banks are profitable, as they are better able to diversify investments and reduce marginal costs.

Cash ratio (CASH); cash ratio is measured as the ratio of cash and cash equivalents to total assets. Cash does not generate returns for the bank, and as the cash ratio increases the bank's overall profitability will decrease.

Securities (SEC); is measured as investment in securities to total assets. Although securities generate returns for the bank, these returns are relatively low, and holding a large proportion of securities does not lead to a high level of profitability.

Murabaha financing (MR); is measured as *Murabaha* financing to total assets. *Murabaha* financing is the main financing tool used by the bank, however, the *Murabaha* rate is pre-set by the bank at the beginning of the financing period which limits the contribution of this tool to increasing overall profit.

Musharkah financing (MS); is measured as *Musharkah* financing to total assets. The profit or losses from *Musharkah* financing depend on the actual profit or loss from the business itself; consequently, *Musharkah* financing is expected to make a greater contribution to overall profit.

Mudarabah financing (MD); is measured as *Mudarabah* financing to total assets. Like *Musharakah* financing profits or losses from *Mudarabah* financing depend on the results of the business which leads to a greater contribution to overall profit.

Istisna financing (IS); is measured as *Istisna* financing to total assets. The profits from *Istisna* financing are determined at the beginning of the financing, similar to *Murabaha* financing, however, the profit margin of *Istisna* financing is be more flexible than the *Murabaha* rate, which is usually controlled by the central bank. Consequently, *Istisna* financing is expected to make a greater contribution to overall profit.

Ijara financing (IJ); is measured as *Ijara* financing to total assets. In *Ijara* financing the profit margin is determined up front, consequently, the contribution to overall profit is expected to be limited.

Leverage (LEV); is measured as total liabilities to total assets. The variable is used to control the effects of financial leverage on the bank's profitability. All variables are calculated based on statistics obtained from the banks' annual reports.

The following model is applied to measure the profitability of Islamic financing tools in Islamic banks:

$$ROA_{i,t} = \beta_1 SIZE_{i,t} + \beta_2 CASH_{i,t} + \beta_3 SEC_{i,t} + \beta_4 MR_{i,t} + \beta_5 MS_{i,t} + \beta_6 MD_{i,t} + \beta_7 IS_{i,t} + \beta_8 IJ_{i,t} + \beta_9 LEV_{i,t} + \varepsilon_{i,t} \quad (1)$$

Using the described model and variables, how Islamic financing tools affect profitability will be investigated, before attempting to ascertain whether Islamic banks invest in the most profitable tools or need to restructure their portfolios.

The profitability of Islamic banks has been studied by several researchers; the focus mainly being on the banks' characteristics without considering the asset structure. After controlling for the banks' characteristics, how each financing tool contributes to the bank profitability will be investigated.

As each Islamic financing tool has its own inherent characteristics, it is expected that the contribution to profitability will vary from tool to tool. In order to achieve the highest efficiency of these tools, Islamic banks should shift their investments from tools with the lowest contribution to profitability to those with the highest contribution.

4. Results and Analysis

The analysis will begin by showing some descriptive analyses of our sample. As shown in Table 1, Islamic banks place more than one third of their assets in the *Murabaha* financing tool; approximately one quarter of the assets are cash to meet any liquidity requirements, and approximately 10% are financial assets. The second largest investment portion in Islamic financing tools is in *Ijara* financing, while Islamic banks only invest approximately 6% in *Musharakah* financing, *Mudarabah* financing and *Istisna* financing combined.

Islamic banks usually place a large portion of their assets in *Murabaha* financing because it is the tool which requires the least effort to apply and control; Islamic banks

purchase an asset as required by their clients, then sell it back at a higher value. The banks are then required to monitor their clients to make sure they pay on time.

Table 1: Descriptive Results

	Average	Median	Maximum	Minimum	Standard deviation
ROA	1.47	1.21	12.85	-6.28	2.42
SIZE	21.68	21.82	25.16	14.55	1.69
CASH	26.57	22.35	89.43	1.56	19.22
SEC	10.84	9.48	47.63	0.00	8.58
MR	34.87	33.93	86.57	0.00	19.28
MS	2.07	0.15	35.12	0.00	3.99
MD	3.21	0.00	56.44	0.00	7.35
IS	1.07	0.00	24.24	0.00	2.64
IJ	8.40	3.88	46.34	0.00	10.47
LEV	83.20	86.13	97.62	2.94	11.17
Observations	334	334	334	334	334

Notes: The dependent variable is the bank's profitability (ROA). The independent variables are as follows: bank size (SIZE); cash ratio (CASH); securities (SEC); *Murabaha* financing (MR); *Musharkah* financing (MS); *Mudarabah* financing (MD); *Istisna* financing (IS); *Ijara* financing (IJ); and leverage (LEV). The following data is for the period 2006 to 2016. Source: Calculated from banks' annual reports, period 2006-2016.

Table 2: Correlation Matrix

	ROA	SIZE	CASH	SEC	MR	MS	MD	IS	IJ	LEV
ROA	1.000									
SIZE	0.020	1.000								
CASH	-0.061	-0.542	1.000							
SEC	0.048	0.083	-0.277	1.000						
MR	-0.106	0.467	-0.365	-0.176	1.000					
MS	-0.039	-0.183	-0.142	0.246	-0.091	1.000				
MD	0.445	-0.142	-0.120	-0.003	-0.346	0.089	1.000			
IS	0.119	0.188	-0.137	0.044	-0.043	0.058	0.016	1.000		
IJ	-0.075	0.391	-0.402	-0.139	-0.041	-0.143	-0.059	0.061	1.000	
LEV	-0.040	0.251	-0.033	-0.033	0.233	0.087	-0.151	0.125	-0.080	1.000

Notes: The dependent variable is the bank's profitability (ROA). The independent variables are as follows: bank size (SIZE); cash ratio (CASH); securities (SEC); *Murabaha* financing (MR); *Musharkah* financing (MS); *Mudarabah* financing (MD); *Istisna* financing (IS); *Ijara* financing (IJ); and leverage (LEV). This data is for the period 2006 to 2016.

Source: Calculated from banks' annual reports, period 2006-2016.

Ijara financing has the second largest portion of assets because it is also relatively easy to apply; Islamic banks acquire an asset which is rented to their clients, and then collect the rent on a regular basis.

Other financing including *Musharkah* financing, *Mudarabah* financing, and *Istisna* financing are more complicated in their application, which makes Islamic banks less likely to invest in these tools.

As Table 2 shows, all of the variables have low correlations, which indicates that there is no multicollinearity between the research variables. Table 3 shows the results of our regression between 2006 and 2016.

Table 3 : Regression Results

Variable	Coefficient
SIZE	0.0019*
CASH	0.0177*
SEC	0.0234
MR	0.0087
MS	-0.0281
MD	0.1607***
IS	0.0782*
IJ	-0.0059
LEV	0.0000
Adj. R square	25.6100
F-statistic	7.0353***
Observations	334

Notes: $ROA_{i,t} = \beta_1 SIZE_{i,t} + \beta_2 CASH_{i,t} + \beta_3 SEC_{i,t} + \beta_4 MR_{i,t} + \beta_5 MS_{i,t} + \beta_6 MD_{i,t} + \beta_7 IS_{i,t} + \beta_8 IJ_{i,t} + \beta_9 LEV_{i,t} + \varepsilon_{i,t}$. The dependent variable is the bank's profitability (ROA). The independent variables are as follows: bank size (SIZE); cash ratio (CASH); securities (SEC); *Murabaha* financing (MR); *Musharkah* financing (MS); *Mudarabah* financing (MD); *Istisna* financing (IS); *Ijara* financing (IJ); and leverage (LEV) for the period 2006-2016. ***, **, and *, indicate that the coefficients are significant at the 1%, 5%, and 10% levels respectively.

From Table 3 we can obtain several results. The size of the bank has a significant positive effect on its profitability, indicating that as a bank becomes larger it can involve itself in the use of more financing tools, as well as increasing the size of investment in these tools, which will allow the banks to generate more profit as well as reduce the marginal costs of services.

Cash has a significant positive effect on a bank's profitability. While cash does not generate a return for the bank, it can be used to finance the different financing tools. As Islamic banks do not give cash loans to their clients, they also cannot receive cash loans from other banks. This situation makes cash held by banks an important source of financing, which explains the positive relationship.

Investment in securities has no significant relationship to a bank's profitability, as a large portion of these securities is used as a liquidity substitute and not only for investment.

Although banks place the largest portion of their assets in *Murabaha* financing, the results show that *Murabaha* financing has no significant effect on the profitability of banks. Since the *Murabaha* rate is pre-determined and controlled by the central bank, *Murabaha* financing will contribute to the overall profit at the same rate, which means that regardless of whether banks increase or decrease the portion of *Murabaha* financing in their assets portfolio, *Murabaha* financing has no significant effect on overall profitability.

Musharkah financing also has no significant effect on profitability, as it involves banks participating directly with clients in actual projects which involve sharing profits or losses. As some projects will generate profits while others might involve losses, the overall effect might be unclear and lead to an insignificant effect on profitability.

Mudarabah financing has a significant positive effect on the profitability of Islamic banks, as *Mudarabah* financing contributes to the overall profit based on the actual return on the investment with no boundaries. As Islamic banks receive the actual return from the investment instead of a predetermined rate, *Mudarabah* financing affects profitability in a stronger way, which explains this significant positive effect.

Istisna financing contributes positively to banks' profitability, as banks can freely set up the profit margins on this tool over the costs that have been paid to build or create the assets. Investing in *Istisna* financing will help banks to generate more profits after covering all costs involved in the process. For these reasons, *Istisna* financing has a significant positive effect on the profitability of banks.

Ijara financing is similar to *Murabaha* financing, and has no significant effect on the profitability of banks. The return on this tool is limited by level of rent in the market, which makes the contribution of this tool to profitability insignificant.

Leverage has no significant effect on profitability, since it does not matter from where the bank obtains its finance. In Islamic banks, depositors do not receive a fixed interest rate on their deposits; they share the profits of any investment they enter with the bank, and consequently, all parties will share the same rate of return.

5. Conclusion

Banks invest their funds in different types of assets in order to generate a return on these investments. These assets can contribute to the overall return in different ways. The aim of this study is to analyse the various Islamic financing tools to determine which are the most profitable for banks.

Based on a sample of forty-one Islamic banks taken from thirteen countries in the MENA area, we found that Islamic banks place the largest portion of their assets in *Murabaha* financing and *Ijara* financing as these tools are the easiest to apply and monitor. Unfortunately, these tools have no significant effect on the banks' profitability, as the profit margins of these financing tools are limited by central bank regulations on rent levels, which render the contributions to overall profits insignificant.

On the other hand, the portion of assets invested in the most profitable tools - *Mudarabah* financing and *Istisna* financing - was relatively low; as these tools are more difficult to be applied, banks tend to invest less in them.

The results also show that size has a positive effect on banks' profitability, while leverage has no significant effect. While holding financial assets has no effect on a bank's profitability, cash does.

Islamic banks should consider the effects of the different tools on overall profitability, and restructure their assets portfolio in a way as to help maximise their profits to keep up with the competitive environment in the banking sector.

The main limitation of this research is that it only focuses on the contributions of Islamic financing to a bank's profitability, without considering the risks of these tools. It is recommended that banks adjust their asset portfolios to include more *Mudarabah* and *Istisna* financing, by reducing the focus on less profitable tools such as *Murabaha* and *Ijara* financing.

References

- Alkassim, F., 2005, The Profitability of Islamic and Conventional Banking in the GCC Countries: A Comparative Study. *Master degree*, Universitas Negeri Yogyakarta.
- Alzoubi, T., 2013, Profitability Comparison of Islamic and Conventional Banks. 4th European Business Research Conference, London - United Kingdom, 2013.
- Ansari, S., and Rehman, A., 2011, Financial Performance of Islamic and Conventional Banks in Pakistan: A Comparative Study. 8th International Conference on Islamic Economics and Finance, Doha, 2011, 1-19
- Bashir, A., 2003, Determinants of Profitability in Islamic Banks: Some Evidence from the Middle East. *Islamic Economic Studies* 11, 1-27.
- Haron, S., 2004, Determinants of Islamic Bank profitability. *The Global Journal of Finance and Economics* 1, 11-33.
- Hassan, M., and Bashir, A., 2004, Determinants of Islamic banking profitability. In: Munawar Iqbal and Rodney Wilson (ed.) *Islamic Perspectives on Wealth Creation*, Edinburgh University Press, Edinburgh: 118-141.
- Khan, M., Ijaz, F., and Aslam, E., 2014, Determinants of Profitability of Islamic Banking Industry: An Evidence from Pakistan. *Business & Economic Review* 6, 27-46.
- Moin, S., 2008, Performance of Islamic Banking and Conventional Banking in Pakistan: A Comparative Study. *Masters Degree*, University of Skovde.
- Onakoya, A., and Onakoya, A., 2013, The Performance of Conventional and Islamic Banks in the United Kingdom: A Comparative Analysis. *Journal of Research in Economics and International Finance* 2, 29-38.
- Samad, A., 2004, Performance of Interest-free Islamic banks vis-à-vis Interest-based Conventional Banks of Bahrain. *Journal of Economics and Management* 12, 1-15.
- Siraj, K., and Sudarsanan, P., 2012, Comparative study on performance of Islamic banks and conventional banks in GCC region. *Journal o Applied Finance and Banking* 2, 123-161.
- Trad, N., Trabelsi, M., and Goux, J., 2017, Risk and profitability of Islamic banks: A religious deception or an alternative solution?. *European Research on Management and Business Economics* 23, 40-45.

