

Determinants of financial profitability -Econometrical analysis of UAE and Qatar's Conventional and Islamic banks-

Les déterminants de la rentabilité financière -Analyse économétrique des banques conventionnelles et islamiques Des Emirats Arabes Unies et du Qatar -

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ABSTRACT

In a context of instability and strong changes, the question of financial intermediaries' performance has grown to become an influential issue. This dynamic notion remains difficult to measure, not only because of its complexity but also the multiplicity of its determinants. The purpose of this research is to measure the impact of the last financial crisis, on the global performance levels of conventional banks compared to their Islamic counterparts, through the identification and the assessment of the main factors affecting their profitability and efficiency.

Our empirical approach will be illustrated by econometrical models, conducted on a sample covering two thirds of the banks in the UAE and Qatar, on the basis of which we will attempt to evaluate the performance levels of the two financial intermediaries to understand their behaviour and to provide a typical model of banking operations. Taking into consideration the results of the estimates obtained, in order to use each of the determinants evaluated by the exact weight assigned to it, and maximize banking profitability.

Key words: Conventional banking ; Islamic banking ; Performance ; Profitability ; Econometrical Models.

RESUME

Dans un contexte d'instabilité et de fortes mutations, la question de la performance des intermédiaires financiers s'est imposée comme une problématique influente. Cette notion dynamique reste difficile à mesurer, non seulement en raison de sa complexité mais aussi de la multiplicité de ses déterminants. L'objectif de cette recherche est de mesurer l'impact de la dernière crise financière, sur les niveaux de performance globale des banques conventionnelles par rapport à leurs homologues islamiques, à travers l'identification et l'évaluation des principaux facteurs affectant leur rentabilité et leur efficacité.

Notre approche empirique sera illustrée par des modèles économétriques, réalisés sur un échantillon couvrant deux tiers des banques des Emirats Arabes Unies et du Qatar, sur la base duquel nous tenterons d'évaluer les niveaux de performance des deux intermédiaires financiers afin de comprendre leur comportement et de fournir un modèle typique des opérations bancaires rentables, en prenant en considération les résultats des estimations obtenues, afin d'utiliser chacun des déterminants évalués selon le poids exact qui lui est attribué, et de maximiser la rentabilité des systèmes bancaires.

Mots clé : Banques conventionnelles ; Banques islamiques ; performance ; rentabilité ; modélisation économétrique.

INTRODUCTION

Islamic finance has emerged dramatically as well as tremendous progress has been noticed these last years around the world in the Islamic banking field. Following the recent global financial crisis, the interest in this branch has grown further, as its fundamentals have provided the Islamic banking industry with a solid foundation that has enabled it to withstand the consequences of the crisis more vigorously than its conventional counterpart.

One and main difference between Conventional and Islamic finance is that the latter's model does not allow investing in instruments that have triggered the global financial crisis. These include toxic assets, derivatives and securities. Fairer conditions of competition between IBs¹ and CBs² in this regard cannot be guaranteed, it is in this context that the issue of performance grows and becomes an influential issue in a context of instability and strong mutations. Nevertheless, this dynamic notion remains difficult to measure for the complexity and the multiplicity of its determinants.

It is thus with the objective of analyzing the behavior of the two types of financial intermediaries in times of crisis, and with the intention of apprehending the craze towards this Islamic mode of financing considered robust and unbreakable, that we are conducting this study.

Our empirical approach for measuring performance will be illustrated by an econometric model using multiple regression analysis, on the basis of which we will try to answer the following problem: **What are the determinants that impact financial performance and how are they managed by conventional and Islamic financial intermediaries in times of crisis and post-crisis?**

The current study is conducted on the basis of a non-probability convenience sample made up of 2/3 banking groups of Qatar and UAE, flagship countries of the Middle East. It is spread over a decade 2007-2017, in order to cover the critical period of the financial crisis experienced in 2008 and to monitor the evolution of performance levels. These countries were chosen not only because of the importance of Islamic banks in their banking systems but also the availability of data.

¹ Islamic banks

² Conventional banks

The first part of this article will focus on the presentation of the selected variables and the econometric model used. The second part will present the results obtained. The final part will focus on the interpretation of the results and their detailed explanation.

1. Variables and models:

The recent global crisis has renewed the emphasis on the relationship between Islamic banking and financial stability and, more specifically, on the resilience of the Islamic banking sector during crises compared to the classical banking. Before we move on to a more in-depth analysis of the factors affecting performance, in order to understand the effect of each of the components studied, we will first identify its major determinants, which will allow us then to trace the combination through which banks could maintain high levels of performance.

Profitability ratios are one of the most frequently used ratios in financial analysis, as they quantify operational performance and management efficiency. The profitability ratios used in this study to assess the profitability of IBs versus BCs include:

1.1 Dependent variables :

Return on Equity (ROE): This ratio measures the profitability of the bank's equity. It also makes it possible to assess the return on capital invested by shareholders and expresses their ability to generate a certain level of profit.

Return on Assets (ROA): This is the expression of the profitability of the bank's assets. It measures the effectiveness of the company in generating profits by mobilizing its material and immaterial resources.

1.2 Independent variables:

These are the explanatory variables of bank profitability; they are presented as follows:

Total Asset (AST): Asset analysis (bank's size) is considered as an integral part of the quantitative assessment of bank's performance. However, its impact is strongly debated among researchers. Those who consider that size has a positive impact on performance because it allows, on one hand, to reduce costs due to the economies of scale that this entails, and on the other hand, a large size bank can also raise capital at a lower cost. And there are others who

consider that size has a negative impact on banks profitability because of the general expenses asset's growth policy generates.

Market capitalization (M.K): The world's major banks each have a market capitalization that can exceed millions of dollars. However, financial crises caused a sharp drop from the outset. Statistics show that market capitalization combined with economic conditions have a direct impact on the performance levels of conventional banks.

Non Performing Loans on total loans (NPL.L): This ratio has been shown to be a good indicator of future performance issues, as it reflects loan quality and allows for a past measure of credit risk.

Personnel expenses to total asset (PERSOX.A): It reflects employment and the total amount of wages and salaries. It is taken into account in order to intercept the effect of operating costs on the banking system. Since efficiency is measured against the resources consumed, it is therefore essential that efficient banks should operate at lower costs.

Cost to income (CST.INC): It is calculated by dividing operating expenses by the generated operating income. This ratio is important in determining the profitability of a bank.

Liquid Assets to total Deposit (LADR): This analytical tool is used to help assess the relative risk profile of a financial institution. It measures the level of liquidity available to the bank, generally funded by customer deposits, and provides an overview of its history of stability.

Equity to total asset (EQT.A) : It is used to determine the health of a bank's balance sheet in general, and to assess its financial leverage in particular. Equity should represent around 8 to 10% of total liabilities / assets, and should remain limited, as this would encourage financial institutions to use the effect of leverage, which gives them better returns.

The multiple regression model remains the most appropriate statistical tool for the study of multidimensional data. Particular case of linear model, it constitutes the natural generalization of simple regression. Here the performance depends on the size of the bank, the quality of the loans granted, the liquidity, the sources of financing and the functional expenses incurred:

$$\text{PERF} = f(\text{AST} + \text{MK} + \text{NPL} + \text{EXPA} + \text{COST.INC} + \text{LADR} + \text{EQT.A})$$

$$\text{ROA} = f(\text{ASSETS} + \text{M.K} + \text{NPL/L} + \text{PERSOX/A} + \text{C.INC} + \text{LADR} + \text{EQT.A})$$

$$ROE = f(ASSETS + M.K + NPL/L + PERX/A + C.INC + LADR + EQT.A)$$

The estimated degree of influence of the selected measurement indicators will then be presented in the form of the following basic equation:

$$Y_i = b_0 + b_1X_1 + b_2X_2 + \dots + b_nX_n + \varepsilon_i$$

2. Diagnosis of tests performed on data:

Before analyzing the parameters of the model considered and examining the results of the ANOVA, it is imperative to verify the normality of the dependent data and to eliminate the premises of asymmetry of the variances, through the Kolmogorov-Smirnova test. We are working on a population where the dependent variables ROE and ROA are distributed normally. We, therefore keep the null hypothesis which states that these two variables are distributed symmetrically, with a significance level greater than 5% (Appendix 1)

United Arab Emirates

2.1 Assessment of the relevance of the –ANOVA-

Chart n°1: ANOVA

Modèle UAE CB		Somme des carrés	ddl	Carré moyen	F	Sig.
1	Régression	1,221	7	,174	14,678	,065 ^b
	résidu	,024	2	,012		
	Total	1,244	9			

a. Variable dépendante : **ROA**

b. Prédicteurs : (Constante), Equity/Assets, Cost/income, MARKET CAPITALIZATION, NPL/L, ASSETS, Perso X/A, Assets/Deposit

Modèle UAE CB		Somme des carrés	ddl	Carré moyen	F	Sig.
1	Régression	65,793	7	9,399	6,491	,140 ^b
	résidu	2,896	2	1,448		
	Total	68,689	9			

a. Variable dépendante : **ROE**

b. Prédicteurs : (Constante), Equity/Assets, Cost/income, MARKET CAPITALIZATION, NPL/L, ASSETS, Perso X/A, Assets/Deposit

Modèle UAE IB		Somme des carrés	ddl	Carré moyen	F	Sig.
1	Régression	1,046	6	,174	1,615	,037 ^b
	résidu	,324	3	,108		
	Total	1,370	9			

a. Variable dépendante : **ROA**

b. Prédicteurs : (Constante), Equity/Assets, Cost/income, Assets/Deposit, Perso X/A, NPL/L, ASSETS

Modèle UAE IB		Somme des carrés	ddl	Carré moyen	F	Sig.
1	Régression	121,637	6	20,273	1,355	,043 ^b
	résidu	44,897	3	14,966		
	Total	166,534	9			

a. Variable dépendante : **ROE**

b. Prédicteurs : (Constante), Equity/Assets, Cost/income, Assets/Deposit, Perso X/A, NPL/L, ASSETS

Source: Author

F is a test of global significance, which tends to say that among our 7 exogenous variables, there is at least one that significantly explains the performance. The given results show that, we are less than 5% likely to be wrong in saying that these models help predict performance better than a simple average.

Therefore, we retain the alternative hypothesis of the existence of a statistically significant relationship between our explanatory variables and our variables to be explained.

2.2 Assessment of the fit of data to the model:

Chart n°2: The multiple regression model

Modèle UAE CB	R	R-deux	R-deux ajusté	Erreur standard de l'estimation
1	,990 ^a	,961	,914	,1089

a. Prédicteurs : (Constante), Equity/Assets, Cost/income, MARKET CAPITALIZATION, NPL/L, ASSETS, Perso X/A, Assets/Deposit

b. Variable dépendante : **ROA**

Modèle UAE CB	R	R-deux	R-deux ajusté	Erreur standard de l'estimation
1	,979 ^a	,948	,810	1,20

a. Prédicteurs : (Constante), Equity/Assets, Cost/income, MARKET CAPITALIZATION, NPL/L, ASSETS, Perso X/A, Assets/Deposit
 . b.Variable dépendante : **ROE**

Modèle	R	R-deux	R-deux ajusté	Erreur standard de l'estimation
1	,874 ^a	,764	,691	,328

a. Prédicteurs : (Constante), Equity/Assets, Cost/income, Assets/Deposit, Perso X/A, NPL/L, ASSETS
 b. Variable dépendante : **ROA**

Modèle	R	R-deux	R-deux ajusté	Erreur standard de l'estimation
1	,855 ^a	,730	,681	3,86856863195 5778

a. Prédicteurs : (Constante), Equity/Assets, Cost/income, Assets/Deposit, Perso X/A, NPL/L, ASSETS
 b. Variable dépendante : **ROE**

Source : Author

The adjusted R-square indicator measures the fit between the observed data and our model, which will assess the extent to which the regression equation of the chosen variables is suitable for describing banking performance. We can therefore affirm that the independent variables chosen strongly explain our two dependent variables, as of 91% CB-ROA 81% CB-ROE and 69% IB-ROA 68% IB-ROE.

2.3 The parameters of established models:

The next charts make it possible to determine the weight of the independent variables and their contribution to the chosen model.

Chart n°3: Parameters of the model

Modèle (CB ROA)	Coefficients non standardisés		
	B	Erreur standard	Sig.
1 (Constante)	17,731	11,195	,025
MARKET CAPITALIZATION	3,97	,0050	,042
ASSETS	-1,472	,0020	,037
NPL/L	-27,612	5,418	,036
Perso X/A	78,436	6,051	,025

Cost/income	-,514	,113	,045
Assets/Deposit	5,021	4,692	,039
Equity/Assets	11,818	2,788	,054

Modèle (CB ROE)		Coefficients non standardisés		
		B	Erreur standard	Sig.
1	(Constante)	79,710	3,594	,055
	MARKET CAPITALIZATION	,001	,001	,046
	ASSETS	-,0300	,000	,050
	NPL/L	-20,358	59,818	,038
	Perso X/A	58,436	11,608	,023
	Cost/income	-3,804	1,247	,029
	Assets/Deposit	13,041	5,795	,025
	Equity/Assets	-52,688	5,737	,012

Modèle (IB ROA)		Coefficients non standardisés		
		B	Erreur standard	Sig.
1	(Constante)	-11,375	8,168	,028
	ASSETS	1,10	,000	,046
	NPL/L	-9,162	6,604	,029
	Perso X/A	-,855	4,026	,038
	Cost/income	-,003	,169	,048
	Assets/Deposit	9,647	,427	,017
	Equity/Assets	2,246	1,756	,031

Modèle (IB ROE)		Coefficients non standardisés		
		B	Erreur standard	Sig.
1	(Constante)	-129,865	,170	,270
	ASSETS	-5,50	,000	,903
	NPL/L	-96,779	7,755	,302
	Perso X/A	-65,188	6,431	,850
	Cost/income	,220	1,992	,919
	Assets/Deposit	10,626	3,904	,210
	Equity/Assets	30,853	8,413	,838

Source : Author

We note that in our model with several independent variables, some are very significant and contribute to the explanation of the level of overall banking performance, others less significant and not very relevant.

$$\text{ROA Conventional} = 17.731 + 3.97 \text{ MKp} - 1.472 \text{ AST} - 27.61 \text{ NPL.L} + 78.43 \text{ PersoX.A} - 0.514 \text{ C Inc} + 5.021 \text{ AST.D} + 11.81 \text{ Eq.A} + \epsilon_i$$

$$\text{ROE Conventional} = 79.71 + 0.01 \text{ MKp} - 0.03 \text{ AST} - 20.35 \text{ NPL.L} + 58.43 \text{ PersoX.A} - 3.804 \text{ C.Inc} + 13.041 \text{ AST.D} - 52.68 \text{ Eq.A} + \epsilon_i$$

$$\text{ROA Islamic} = -11.37 + 1.1 \text{ AST} - 9.162 \text{ NPL.L} - 0.855 \text{ PersoX.A} - 0.003 \text{ C Inc} + 9.647 \text{ AST.D} + 2.246 \text{ Eq.A} + \epsilon_i$$

$$\text{ROE Islamic} = -129.865 + 5.5 \text{ AST} - 96.77 \text{ NPL.L} - 65.188 \text{ PersoX.A} - 0.22 \text{ C.Inc} + 10.62 \text{ AST.D} + 30.85 \text{ Eq.A} + \epsilon_i$$

Qatar

2.4 Assessment of the relevance of the –ANOVA–

Chart n°1: ANOVA

Modèle QATAR CB		Somme des carrés	ddl	Carré moyen	F	Sig.
1	Régression	3,731	7	,533	10,132	,003 ^b
	résidu	,105	2	,053		
	Total	3,837	9			

a. Variable dépendante : **ROA**

b. Prédicteurs : (Constante), Equity/Assets, NPL/L, Cost/income, Perso X/A, MARKET CAPITALIZATION, ASSETS, Assets/Deposit

Modèle QATAR CB		Somme des carrés	ddl	Carré moyen	F	Sig.
1	Régression	101,458	7	14,494	7,534	,012 ^b
	résidu	3,848	2	1,924		
	Total	105,306	9			

a. Variable dépendante : **ROE**

b. Prédicteurs : (Constante), Equity/Assets, NPL/L, Cost/income, Perso X/A, MARKET CAPITALIZATION, ASSETS, Assets/Deposit

Modèle QATAR IB		Somme des carrés	ddl	Carré moyen	F	Sig.
1	Régression	10,576	6	1,763	168,311	,001 ^b
	résidu	,031	3	,010		
	Total	10,607	9			

a. Variable dépendante : **ROA**

b. Prédicteurs : (Constante), Equity/Assets, NPL/L, Cost/income, Assets/Deposit, Perso X/A, ASSETS

Modèle QATAR IB		Somme des carrés	ddl	Carré moyen	F	Sig.
1	Régression	89,311	6	14,885	363,767	,000 ^b
	résidu	,123	3	,041		
	Total	89,434	9			

a. Variable dépendante : **ROE**

b. Prédicteurs : (Constante), Equity/Assets, NPL/L, Cost/income, Assets/Deposit, Perso X/A, ASSETS

Source: Author

As shown above, there is a statistically significant relationship between our explanatory variables and our variables to be explained.

2.5 Assessment of the fit of data to the model:

Chart n°2: The multiple regression model

Modèle	R	R-deux	R-deux ajusté	Erreur standard de l'estimation
1	,986 ^a	,973	,877	,22

a. Prédicteurs : (Constante), Equity/Assets, NPL/L, Cost/income,

Perso X/A, MARKET CAPITALIZATION, ASSETS, Assets/Deposit

b. Variable dépendante : **ROA**

Modèle	R	R-deux	R-deux ajusté	Erreur standard de l'estimation
1	,982 ^a	,963	,836	1,388

a. Prédicteurs : (Constante), Equity/Assets, NPL/L, Cost/income, Perso

X/A, MARKET CAPITALIZATION, ASSETS, Assets/Deposit

b. Variable dépendante : **ROE**

Modèle				Erreur standard
QATAR IB	R	R-deux	R-deux ajusté	de l'estimation
1	,939 ^a	,967	,906	,102

a. Prédicteurs : (Constante), Equity/Assets, NPL/L, Cost/income, Assets/Deposit, Perso X/A, ASSETS

b.Variable dépendante : **ROA**

Modèle				Erreur standard
QATAR IB	R	R-deux	R-deux ajusté	de l'estimation
1	,929 ^a	,977	,901	,20

a. Prédicteurs : (Constante), Equity/Assets, NPL/L, Cost/income, Assets/Deposit, Perso X/A, ASSETS

b.Variable dépendante : **ROE**

Source: Author

The results obtained show that our chosen independent variables strongly explain our two dependent variables - respectively ROA and ROE - at 87% and 83% for conventional banks as well as at 90% and 90% for Islamic banks.

There is therefore a robust match between the observed data and our model.

2.6 The parameters of established models:

The next charts make it possible to determine the weight of the independent variables and their contribution to the chosen model.

Chart n°3: Parameters of the model

Modèle (CB ROA)	Coefficients non standardisés		
	B	Erreur standard	Sig.
1 (Constante)	-7,127	6,730	,040
MARKET CAPITALIZATION	,001	,001	,046
ASSETS	-2,846	,000	,010
NPL/L	-11,994	15,641	,023
Perso X/A	79,372	11,554	,049
Cost/income	-,973	3,176	,038
Assets/Deposit	2,996	1,684	,017
Equity/Assets	69,502	6,756	,019

Modèle (CB ROE)		Coefficients non standardisés		
		B	Erreur standard	Sig.
1	(Constante)	-,169	0,697	,027
	MARKET CAPITALIZATION	7,544	,001	,045
	ASSETS	-8,607	,000	,033
	NPL/L	-11,085	4,581	,036
	Perso X/A	43,736	9,593	,028
	Cost/income	-25,039	1,208	,032
	Assets/Deposit	22,061	,185	,016
	Equity/Assets	-48,770	2,263	,013

Modèle (IB ROA)		Coefficients non standardisés		
		B	Erreur standard	Sig.
1	(Constante)	,616	1,200	,043
	ASSETS	6,503	,000	,019
	NPL/L	-25,039	3,261	,015
	Perso X/A	-22,786	1,449	,016
	Cost/income	-16,157	1,200	,001
	Assets/Deposit	1,814	1,696	,036
	Equity/Assets	5,590	5,239	,026

Modèle (IB ROE)		Coefficients non standardisés		
		B	Erreur standard	Sig.
1	(Constante)	5,178	2,373	,017
	ASSETS	,01	,000	,006
	NPL/L	-70,506	2,213	,047
	Perso X/A	-40,939	5,178	,002
	Cost/income	-77,041	2,372	,000
	Assets/Deposit	4,807	3,353	,024
	Equity/Assets	60,118	1,355	,010

Source: Author

The Qatari banks performance equations are broken down as follows:

ROA Conventional = -7.127 +0.001MKp -.84 AST -11.99 NPL.L +79.37 PersoX.A -0.97 C Inc
 +2.996 AST.D + 69.502 Eq.A + ϵ_i

ROE Conventional = 0.169 + 7.54 MKp -8.607 AST -11.085 NPL.L + 43.73 PersoX.A - 25.03 C.Inc
 +22.06 AST.D -48.77 Eq.A + ϵ_i

ROA Islamic = 0.616 +6.503 AST -25.039 NPL.L - 22.78 PersoX.A – 16.157 C Inc +1.814 AST.D
+5.59 Eq.A + ϵ_i

ROE Islamic = (5.178 +0.01 AST -70.506 NPL.L - 40.93 PersoX.A -77.041 C.Inc + 4.807 AST.D
+60.118 Eq.A + ϵ_i

3. Interpretation of the results:

Result 1- ASSETS: In a context of structural weakness of the financial system, the size of the bank measured by the weight of its assets is negatively correlated with its overall performance level. This is the case for classical banks. The larger the size of conventional banks, the more difficult they become to manage. Let us also recall that the increase in size of a conventional bank, beyond the critical size, is the consequence of an aggressive growth strategy, often obtained at the expense of performance margins. This results in the accumulation of costs and the crowding out of resources that could be used to develop profitability strategies.

However, the increase in the size of assets has a positive impact on Islamic banks -in contrast to their classical counterparts-, whose evolution goes hand in hand with their returns on equity and investment, given their assets' solidity. Indeed, the basic principle of Sharia prohibiting "Gharar" speculation leads to a lower appetite for market risks, as well as a lower taste for long-term investments, which can better serve liquidity management purposes.

An increase in the assets of participatory banks is the consequence of a policy of strengthening participatory operations, through Musharaka and Mudaraba financing, as well as instalment sales operations and investment in real estate or shares that are legal and in compliance with Islamic laws. The result is a systematic improvement in performance.

An increase in the asset size of an Islamic bank would allow it to improve its leverage and bargaining power towards its clients in participatory contracting transactions, enrich its returns and thus increase its longevity.

Result 2 - MARKET CAPITALIZATION: Market capitalization is an indicator of the overall performance of any publicly traded company, especially large financial institutions. Indeed, the performance of banks is positively related to their stock market values. Financial crises cause

significant instability and high volatility in the financial markets, which leads to a fall in bank stocks and thus a deterioration in their performance.

Result 3 - NON-PROFITABLE LOANS TO LOANS: Being a warning indicator of solvency problems, the non-performing loans ratio is negatively correlated with the level of bank performance. Indeed, a high NPL ratio suggests future performance problems, as it reflects the quality of insolvent loans and thus a very high credit risk, both for conventional and Islamic banks.

Result 4 - PERSONNEL EXPENSES TO ASSETS: This ratio refers to the efficiency of the allocation of a portion of bank resources, relating to the use of salaries and wages. As far as Islamic banks are concerned, excessive staff expenses would negatively affect financial performance. As measured by the resources consumed, efficiency is the achievement of objectives at lower costs. It is therefore indisputable that a financially efficient bank should operate with lower staff costs. The results show that the performance of the CBs is positively related to wages and salaries. Indeed, the establishment of monetary sources of motivation would lead conventional bankers to make more efforts to encourage prospects to become loyal customers, depositors and savers, which would increase bank resources, reduce financial debts and allow the granting of more loans and thus increase the turnover of banks.

Result 5 - COST TO INCOME: This ratio is primarily used to determine the profitability of financial institutions. It describes the efficiency with which the bank is managed. The results obtained show that the lower this ratio is, the better it is and it indicates a better financial performance. There is an indirect relationship between the cost/income ratio and the bank's profitability. It compares a bank's operating expenses to its revenues. The lower the cost/income ratio, the better the performance of our two banking categories, conventional and Islamic.

Result 6 - LIQUID ASSETS TO DEPOSIT: A low percentage of LADRs may suggest that the financial institution is either liquidity constrained or less reliant on debt financing and more reliant on sound, risk-free deposits (the case of Islamic banks). Banks could balance their liquidity risk by holding high levels of liquid assets. As a driver of performance, current resources provide the liquidity needed for the banking system to function. Liquid deposits, therefore, are a stable and cheaper source of funds than borrowed funds, and therefore generate more profits for banks. Although better maturity matching of assets and liabilities theoretically

occurs with longer-term debt financing, there is potentially a price to pay in terms of reliance on wholesale debt and interbank markets, particularly during periods of stress. That said, the results suggest that this ratio is perfectly aligned with bank performance levels; for both categories of banks, its increase generates an increase in performance.

Result 7 - EQUITY TO ASSETS: Equity to assets shows a positive relationship with profitability, while the opposite might have been expected due to the general ability of leverage to increase returns. The higher the equity to assets ratio, the lower the leverage of banks, meaning that a major percentage of their assets are held by themselves and their investors although the IBs hold in terms of current resources the accounts (PSIA: Profit sharing investment accounts), these remain dependent on the quality of the investment in which the Islamic bank participates and can therefore have a positive impact (if the projects are profitable) or negative (if the projects show a loss) on the performance of the bank. Equity is therefore the key resource for these banks in case of distress or excessive loss sharing with its clients.

The ratio of equity to total assets is ultimately positively correlated with financial performance, thus contradicting arguments that increased leverage would be even more beneficial to bank profitability.

CONCLUSION

There seems to be a clear message that asset selection and monitoring is paramount. Excessive asset building does not necessarily mean increased performance, contrary to popular belief. However, it is recommended that Islamic financial institutions pursue this quest to increase their assets until they reach a critical size, allowing them to operate in the banking market with ease. This double effect determinant (negative on conventional banks and positive on participatory banks) is strictly related to the very nature of the assets of these two banking categories.

On one hand, conventional assets mainly built on marketable securities, standard loans and overdrafts are riskier insofar as borrowing clients can become insolvent at any time (as was the case in the 2008 global crisis) and generate a significant non-performing loan rate. Hence the negative link between asset growth and the performance of conventional banks.

On the other hand, Islamic assets are built on Musharaka investment contracts, Mudaraba financing Murabaha credit sales and Salam-Istina'a, which are based on participatory operations between the bank and its clients. The more the bank participates in them, the more it gains in profitability, given that the projects are profitable. Hence the positive link between the growth of assets and the performance of Islamic banks.

Not far behind is the level of asset liquidity. Although banks have become less flexible in the aftermath of the 2008 global financial crisis on the levels of liquid assets to be held as required by Basel III regulations, it is very important to continuously test the impact of liquid assets and their effect on the bank's profitability. This would prevent them from holding excess liquidity and allow them to operate at a level that optimizes performance.

Not to forget a ratio of a great importance, the equity to asset, which in this sample has a predominantly positive influence on bank profit. This could be explained by banks with high creditworthiness having a wider franchise, and thus a competitive advantage over others that tend to generate more profits through greater risk-taking, and the use of leverage to good effect.

The results may have implications for bank management in planning their capital structure, asset quality and liquidity strategies to improve performance.

Appendix 1: Normality tests

Qatar

CB	Kolmogorov-Smirnov ^a		
	Statistiques	ddl	Sig.
ROA	,130	10	,200*
ROE	,190	10	,200*

a. Banques conventionnelles

IB	Kolmogorov-Smirnov ^a		
	Statistiques	ddl	Sig.
ROA	,241	10	,103
ROE	,360	10	,051

a. Banques islamiques

UAE

CB	Kolmogorov-Smirnov ^a		
	Statistiques	ddl	Sig.
ROA	,196	10	,200*
ROE	,158	10	,200*

a. Banques conventionnelles

IB	Kolmogorov-Smirnov ^a		
	Statistiques	ddl	Sig.
ROA	,220	10	,185
ROE	,211	10	,200*

a. Banques islamiques

Source : Author

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