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Bangladesh's Mutual Funds

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Evaluation of Portfolio Performance

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The Impact of the Merger Transaction as Acquisition on Governance and the Performance Payment: Case of the Tunisian Society of Banks and of Attijari Bank

By Yosra Elhaj Ali & Boudabbous Sami

University of Sfax, Tunisia

Summarizes- This article discusses the influence of the transaction of merger and acquisition on the performance and on the internal governance. We are going to put the light on the transaction of merger and acquisition, governance and the performance. Then, we will analyze the effects of the transaction of merger on the performance of the two Tunisian banks; Attijari Bank and Tunisian society of banks. And in order to measure the impact of the transaction of merger and acquisition on the two banks we appeal to analysis by ratios and analysis by the test of equality of hopes: two observations of different variances.

Keywords: governance, performance, the transaction of merger and acquisition.

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Strictly as per the compliance and regulations of:

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Introduction

The financial liberalization and the financial instability have affected quickly the banking activity and the economy in general through the fundamental role it plays in the growth of the economy of the country. The transaction of the merger or acquisition as a solution for the banks in order to achieve certain goals has several advantages, but the essential problem remains the operational application. For this transaction, it must take into consideration the management of knowledge.

Thanks to certain specificities, the Bank differs from the classic firm. In this context, it has its own governance because of its impact on the economy in general. Therefore, the governance of the Bank is characterized by the importance of the mechanisms, both external and internal in the purpose of disciplining the manager. The technological and economic development fact birth of an interest to integrate the governance mechanisms banks as to treat the problems of financial crises and to face the financial instability.

Our research work deals with the impact of the transaction of merger-acquisition on the governance and the impact of this transaction on the performance.

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I. Review of the Literature

a) *The difference between mergers and acquisitions*

i. *The merger*

The finance d'entreprise and the management of 'opérations financières have proposed that the expression merger and acquisition (it is sometimes referred to as "the Fusac") resumed the various aspects of the redemption of a firm by another firm. Bunel and Duhautois and Gonzalez (2008) stress that "the transactions of merger and acquisition may be defined as an external growth operation which passes by the taking of partial control or total of a company called "cedant" to the company "beneficiary".

In Tunisia, Article 411 of the Code of Commercial Companies stipulates that "the merger is the meeting of two or more corporations to form a single. The merger may result either from the absorption by one or several companies, other companies, or the creation of a new society from those. ". The Tunisian law has not framed or the number of companies that can intervene in a merge operation nor their legal forms.

ii. *Acquisitions*

First, the acquisition transaction corresponds to the redemption of an organization by another organization. In what follows, we will list the different forms of firms purchased such that is banking organizations or non-rated banking, organizations not rated or of individual organizations.

Other forms which seek the acquisition of securities of the firm quoted on the stock exchange are the public offer of purchase, the public offer of exchange and the assignment of control blocks.

There are types of fusion.

➢ The merger by absorption

The merger by absorption refers to the disappearance of one or several banks to associate with another company. In other words, it is the case of a firm which absorbs another in maintaining its own identity.

➢ The merger by the creation of a new company

The merger by the creation of a new society means that two or several firms disappear in order to create a new firm. For example, the two firms A and B will merge to form the firm C.

The Typology of the operations of mergers

Mergers are often classified under four main types: horizontal, vertical, conglomerate and concentric.

- The horizontal fusion

For Mucchielli and Köhler (2000), during a horizontal fusion two competing companies join together to do as a. Mergers and Acquisitions concern horizontal of the undertakings belonging to the same sector of activity and competing directly.

- The vertical amalgamation

For Atti and Srairi (2003), "the vertical amalgamation is made between firms involved at different stages of a process of production on a market". In other words, the operations of mergers and acquisitions are vertical of operations which bind of firms from successive processes related to the same industry.

- The merger conglomérée

Habeck, Kroger and Tram (2001) stipulate that "mergers conglomerate mergers include companies without any link with each other, they do not correspond to a sectoral strategy, but to a diversification strategy at the level of the group. The aim is to achieve a financial balance because it dilutes the risk." Hartmann and Geismar (2003) have clarified that the mergers-acquisitions conglomerates concern undertakings exercising professions totally different.

- The merger and acquisition centric

Hartmann and Geismar (2003) have pronounced that the operations of concentric nature enroll in a logic of diversification linked. The companies are not competing directly, but they can exploit synergies of nature essentially technological or commercial. As well that they can put in common some assets such as technology, the matter first, logistics, sales force, the channel of distribution, the purchase, the administration-central… Several work practices have shown that this type of merger does not clearly influence the results (Mucchielli and Köhler, 2000).

b) The Governance

According Charreaux (1997), the governance is presented by a set of "organizational mechanisms having for effect to delineate the powers and to influence the decision of the leaders". In addition, Zingales (2000) has defined governance as "a set of laws and rules which govern the operation of the firm".

The Bank governance differs from the governance of the company by its taking into account the insurance of deposits, the management of risks in a systematic and specific, the optimization of the funds allocated to the Borrowers, internal control systems and the structure of the capital without forgetting that the liabilities are mainly of deposits available at any time in order to satisfy the demand of the Depositaries.

The external mechanisms of governance are the markets for products and services, the labor market, the financial market and the prudential regulation. In the area of governance of banking, several researchers are interested in terms of administration.

c) The performance

Within the literature Financial and Managerial, several definitions are used in order to give a more accurate picture regarding the concept of the performance.

The current language offers four important meaning to the concept of performance: the consequences of the Act, success, the action and the capacity.

According Albanes (1978), the performance is "the reason of management positions, it implies the efficiency and effectiveness".

d) The empirical research of the impact of the merger-acquisition on governance and the performance

Moreover, we will deal with the impact of the transaction of merger and acquisition on the governance.

i. *The impact of the merger-acquisition on the internal mechanisms of governance*

The impact of the merger on the ownership structure

Article 191 of the/DSC (Delegate Central Union: Establishment of Negotiation) stipulates that: "The merger will simultaneously the acquisition by the Associates of the companies which disappear from the quality of associated companies beneficiaries in the conditions determined by the merger contract".

The effects of the merger on the board of directors

However, to facilitate the operations of fusion between the companies, the idea of the merger may contain provisions which allow to increase the number of members of the board of directors which can exceed the maximum number. In fact, the art 418 AT/DSC provides that "the number of directors of a limited company may temporarily exceed, in the case of a merger, the total number of administrators in function since 6 months in the merged companies without being able to be higher than 24".

ii. *The impact of the merger-acquisition on the banking performance*

In order to measure the impact of the transaction of merger on the performance of the banks merged, we appeal to the comparison of the accounting indicators of the performance before and after the completion of this transaction. B. Artz et al. (2009) discover that when technologies are variables and quite ineffective, the transaction of Merger between 2 private enterprises may be beneficial.

Heaby et al. (1991) as well as cornet and Tehranian (1992) have noted that there is an increase in the level of the performance of the banks merged if one compares with that of the banking sector. After the transaction of fusion, the improvement of the performance is due to the increase in assets, to the high capacity to attract deposits and of the increase in the performance of the workers. The assessment of the performance requires the use of accounting measures, the goodwill, taxs, the interests of the long term loans, the profits before depreciation, etc.

II. The Methodology

a) Presentation of the sample

Our study focuses on STB and Attijari Bank. We collect accounting information for the' empirical analysis with the balance sheets, stocks Guide and the financial statements published by the Financial Market Council (CMF) and the Professional Association of Banks of Tunisia (APBT). For the Tunisian society of banks the study period extends between 1995 and 2009, but for Attijari Bank the study period extends between 2000 and 2009.

b) Results and Interpretations

The impact of the merger transaction as acquisition on the internal mechanisms of governance

- The impact of the operation of fusion-absorption of the STB on the governance mechanisms of the Bank absorbed

On 02 January 2001, the merger by absorption of the NTDB and the BDET by the STB is carried out. The transaction of fusion generates an increase in the number of members of the Council of 11 to 12 (in 2002). Concerning the structure of property, the Tunisian society of banks has 8 860 000 new shares are born of the contributions of the NTDB (2 460 000 shares) and the BDET (6 400 000 shares). On 02 January 2001, the social capital of the STB is of 124 300 000 dinars divided into 24 860 000 shares Nominal of 5 dinars each.

- The impact of the operation of acquisition of Attijari Bank on the governance mechanisms

On 25 November 2005, the Bank has experienced a separation between the functions of management and control. In addition, the size of the Board of Directors has experienced a decrease of 12 members, in 2005 to 11 after the operation of acquisition.

The new structure of the property of the bank of the South would be as follows: 53.54% of capital for Andalumagreb, 21.08% for other shareholders, 12.48% of capital for the group Mohamed Driss, 8.83% for the group M The Mzabi zoughi, 2.14% of capital for the group Doghri and 1.93% of capital for the Group Mabrouk.

c) The impact of the transaction of mergers and acquisitions on the performance

We will begin our analysis by the STB, then we are going to deal with the case of Attijari Bank.

The Tunisian society of banks

- Analysis by the ratios

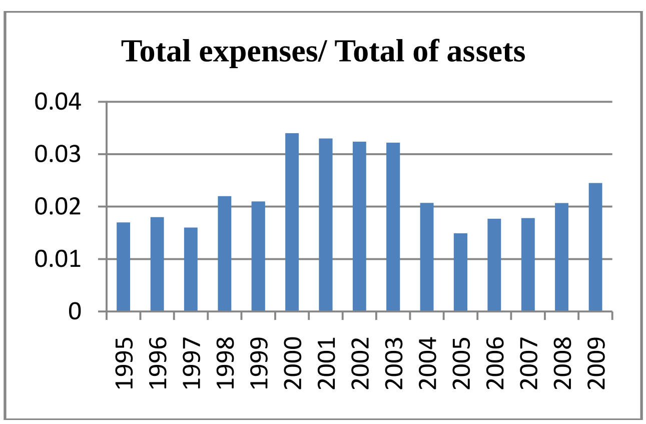

Chart 1 : Variation of total expenses in relation to the total of assets between 1995 and 2009

The ratio of total expenses in relation to the total of assets has experienced an increase during the two periods before and after the transaction of fusion-absorption. Then, we are talking about the lack of cost reduction.

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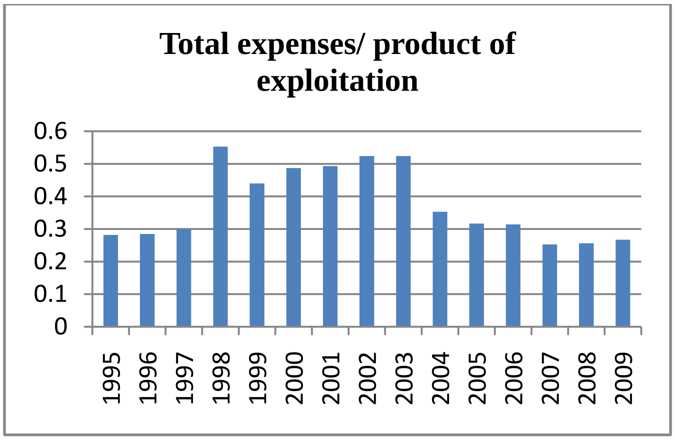

Chart 2 : variation of total expenses in relation to the product operating between 1995 and 2009

By basing ourselves on the ratios R1 and R2, we observe that the transaction of fusion absorption of the STB with NTDB and BDET has not achieved a reduction in costs, it has generated of efficiency gains except for the period (2004 to 2009).

For this, the ratio of total expenses in relation to the proceeds of exploitation has seen a decrease during the period from 2004 up to 2009. The transaction of merger has registered gains in efficiency, during 2008 and 2009, because the ratio of R1 is on the rise.

We see an increase in the ratio of R1 due to the increase in total expenses and total assets and a decrease in the ratio of R2, which is explained by the increase of the product of operation during 2008 and 2009.

We note that the gain in efficiency is from the reduction of costs for 2004, 2005, 2006, 2007, but it is from revenues which have increased via the Fusion for 2008 and 2009, because this period has not experienced a reduction of costs.

Cornet and Tarhanian (1992), Spindt and Tarhanian (1992) and Fixler &Zieschang (1993) have proposed the idea that when the efficiency gains amount after the merger, they come from the share of revenues instead of being from costs.

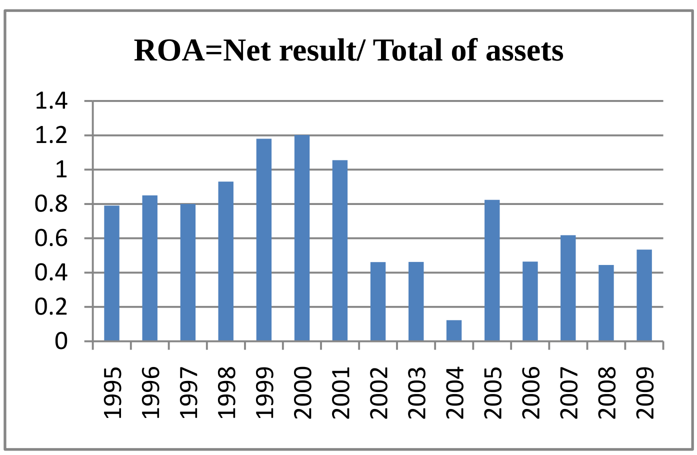

Chart 3 : Variation of ROA between 1995 and 2009

This graph shows the evolution of the ratio of economic profitability of the STB. We find that in contrast to the period of pre-merger in which is registered an upward trend, the period of post-merger was characterized by the decrease of this ratio (0.123) in 2004.

The coefficient of exploitation is a Banking index which shows the profitability, the efficiency and effectiveness of the operation of a bank. The decrease in this ratio expresses that the merger creates a negative effect on the economic profitability of the Bank target, it is not efficient in this period.

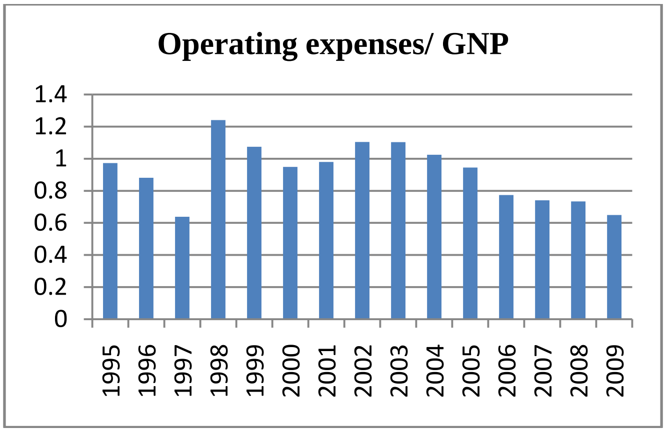

Chart 4 : Variation of the operating expenses/ GNP between 1995 and 2009

According to this chart, we observe that this ratio has known a disturbance from one year to the other (increase and then a decrease). The increase in this ratio is explained by an increase in operating expenses. This situation is undesirable because it leads to an increase in costs. While in the contrary case, the decrease in this ratio is explained by an increase in the GNP and a decrease or stability of the total operating expenses. This situation is considered beneficial for the bank. According to this ratio, between 2005 and 2009, we find that our bank is in a beneficial situation in.

The difference between the two measures of profitability ROA and ROE is that the first is interested in the overall value of the Bank, in other words the economic profitability, whereas the second allows to appreciate the performance, from the point of view of the shareholders.

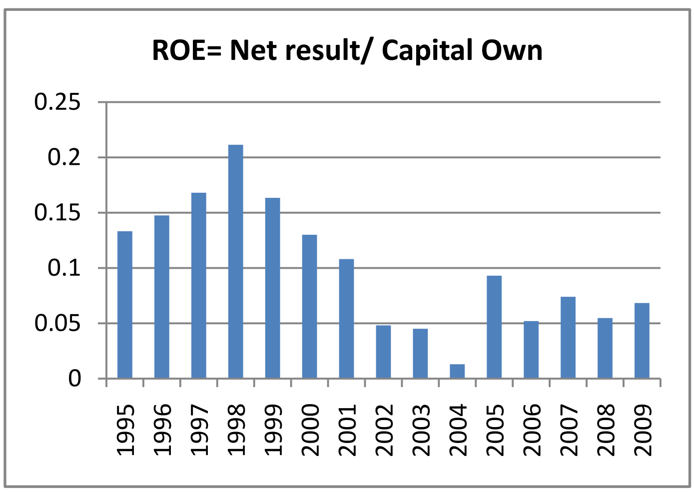

Chart 5 : Variation of ROE between 1995 and 2009

According to this figure, we find that the variable ROE is marked by a significant decline in 2004 which reached a level of 0.01 Because of the serious weakness of the net result during the exercise of this year.

During the remaining period, the Bank has begun to recover its position and to increase the profitability of its own capital to achieve 0.09 in 2005.

We find that the results of ROA and ROE are in agreement with the study of Rhoades (1993) on 898 The merger transactions for which despite the fact that the acquiring banks were more efficient than their targets (often conditions of success in mergers), the study has not resulted in any gain in efficiency.

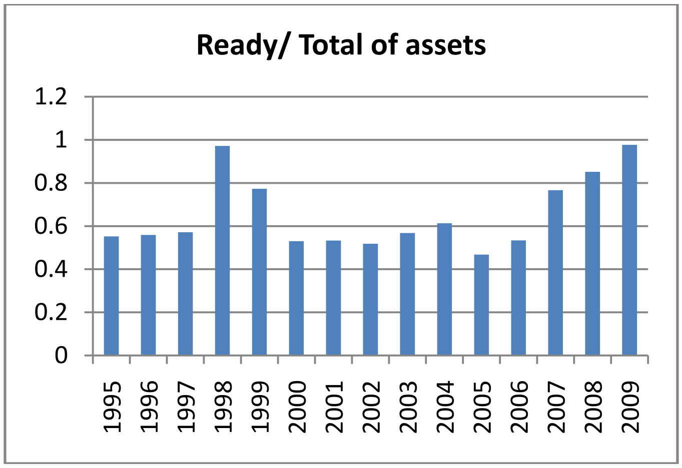

Chart 6 : Variation of loan in relation to the total active between 1995 and 2009

This ratio has experienced a remarkable increase in 1998 and 2009 which reflects an increase in the value of the financial burden.

After the merger, this ratio remains almost constant between 2000 and 2006, which leads to a stabilization of the value of the financial burden. But, the remaining period has experienced an increase, which shows the increase in the financial burden. The increase in loans is explained by the improvement of the credibility of the Bank through the transaction of fusion.

The increase in the ratio loan compared to total assets is consistent with the comments of Rhoads (1998) which stipulates that there is a multitude of advantages that the Bank can draw from a merger.

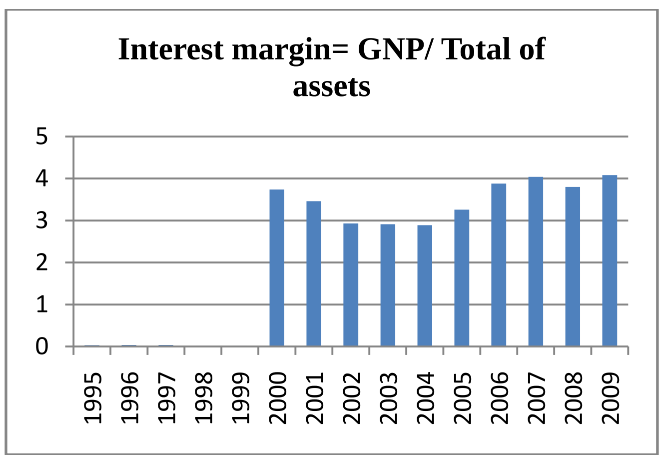

Chart 7 : Variation of the general productivity between 1995 and 2009

Before the merger, the interest margin is very low. Then, we observe that after 2000, this ratio rises, which shows the increase of the overall productivity of our bank.

Therefore, the transaction of amalgamation positively influences the overall productivity of the STB. The increase of this last is reflected by the attention given by the Bank to the control of costs.

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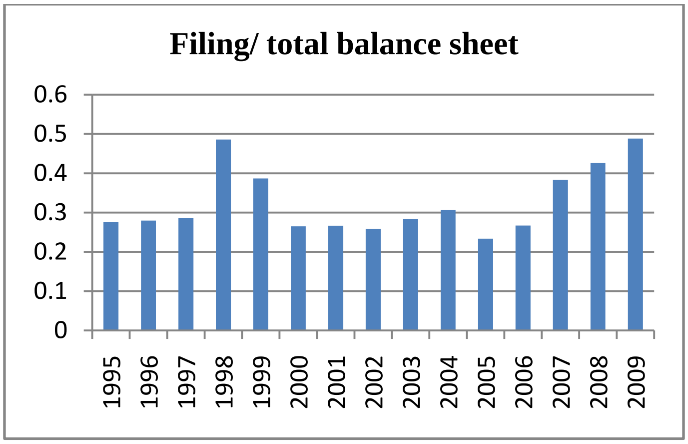

Chart 8 : Variation in the ratio of collection of deposit between 1995 and 2009

During the last two years, we note that the ratio of collection of deposit rises to reach, in 2009, 0.48, i.e. almost half of the total of the balance sheet is in the form of a deposit. In this framework, we can say that the Bank STB is a bank deposit through the importance of filing in its financial structure.

Indeed, following the merger, the combined bank may have a basis of deposits and credits more diversified.

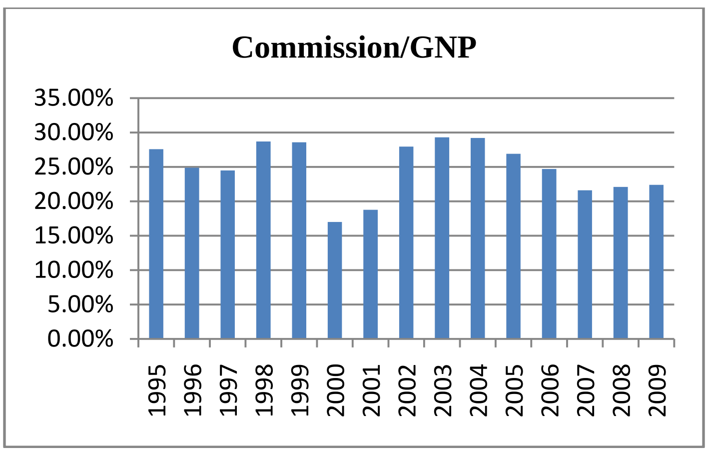

Chart 9 : Variation of the Commission in relation to the product net banking income between 1995 and 2009

According to this figure, this ratio has experienced a notable decline in 2000 which is the first year of fusion. This decline reached 17% which is expressed by the increase in the net banking income. But, it does not hide the fact that the commissions have approximately a quarter of the product net banking income for the Bank STB.

The increase in commissions is explained by the improvement of its trading activities because of the increase in its share of the market.

Analysis by test of equality of the hopes: two observations of different variances

The ratio of R1 (Total Expenses / total of active)

Test of equality of expectations

	Variable 1	*Variable 2*
Statistical t	-2,2904	
Critical value of T (bilateral)	2,1788	

We note that the t statistic is greater in absolute value to the critical value of t, which means that the ratio of R1 (Total Expenses / total of active) is significant. Therefore, we will reject the null hypothesis (H0).

Indeed, we can say that the averages are not equal between the two periods. Therefore, there is a difference between the performance of the STB, measured by this ratio, before and after the merger of the so-called bank. This coefficient is negative, which reflects the decrease of the latter after the merger, the transaction of fusion creates the reduction of total expenses.

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The ratio of R2 (Total Expenses / product of exploitation)

Test of equality of hopes: two observations of different variances

	Variable 1	Variable 2
Statistical t	-0,10403768	
Critical value of T (bilateral)	2,30600413	

According to this table, we observe that the t statistic is less than the critical value of t, which means that the ratio of R2 (Total Expenses / product of exploitation) is not significant, and therefore we will accept the null hypothesis (H0).

Which is to say that the medium are equal before and after the transaction of fusion. Therefore, the performance of the Bank STB, measured by this ratio, remains constant before and after the merger and absorption.

The ratio of R3 (ROA)

Test of equality of expectations

	Variable 1	Variable 2
Statistical t	2,3412	
Critical value of T (bilateral)	2,1603	

In this case, the value of t is greater in absolute value to the critical value of t, which indicates that the ratio of R3 (ROA) is significant, indeed we will reject the null hypothesis (H0). Therefore, the averages are not equal.

The economic performance of the Bank STB, measured by this ratio, is affected by the operation of fusion. We observe that the t statistic is positive. Therefore, this ratio is negatively influenced by the merger. In other words, the economic performance will deteriorate after the merger, therefore the merger affects negatively the performance measured by this ratio.

The ratio of R4 (operating expenses / GNP)

Test of equality of expectations

	Variable 1	Variable 2
Statistical t	0,5399	
Critical value of T (bilateral)	2,4469	

These results show that the t statistic is less than the critical value of t, which reflects that the ratio R4 (operating expenses / GNP) is non-significant and therefore we will accept the null hypothesis (H0).

As well, the averages are equal and there is not a difference between the operating profitability of the Bank STB, measured by this ratio, before and after the merger and absorption of the so-called bank.

The ratio of R5 (ROE)

Test of equality of expectations

	Variable 1	Variable2
Statistical t	5,642	
Critical value of T (bilateral)	2,2621	

The T statistic is greater in absolute value to the critical value of t, which reflects that the ratio R5 (ROE) is significant, as well we will reject the null hypothesis (H0). It is deduced that the averages are not equal and there is a difference between the financial performance of the Bank STB, measured by the ratio between the two periods. The positivity of this coefficient we pushed to conclude that the ratio will deteriorate after the merger.

The ratio of R6 (Commission /GNP)

Test of equality of expectations

	Variable 1	Variable2
Statistical t	1,7437105	
Critical value of T (bilateral)	2,16036865	

These results show that the t statistic is less than the critical value of t, which reflects that the ratio R6 (Commission / GNP) is not significant. We will accept the null hypothesis (H0), averages are thus equal.

Which is to say that the merger does not influence the activities which are sources of commission.

Attijari Bank

- The analysis by ratios:

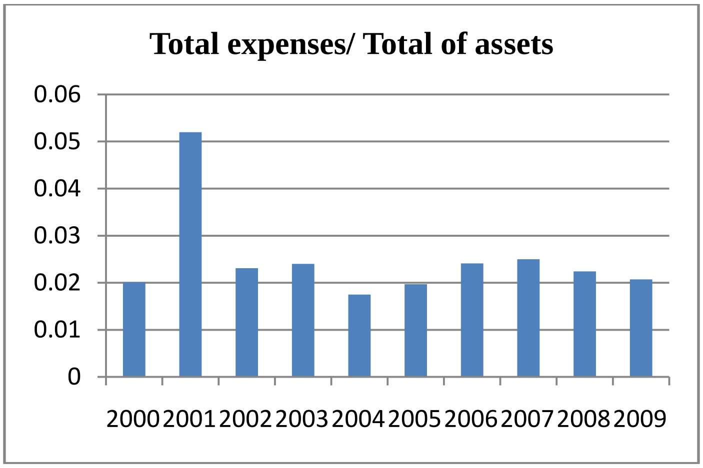


Chart 1 : Variation of total expenses in relation to the total of assets between 2000 and 2009

The ratio of total expenses reported in total of assets has experienced a significant increase in 2001, which shows the increase of total expenses, for this, we are talking about the lack of cost reduction. Similarly, this ratio has reached its minimum in 2004, its value was 0, 0149.

But, there was a decrease of this ratio during the remaining period, which shows the existence of a reduction of the costs because of its strategy of control of costs. After the transaction of acquisition, this ratio has experienced a slight increase because of the increase in total expenses, but during 2008 and 2009 he recorded a slight decrease thanks to the increase in the total of active.

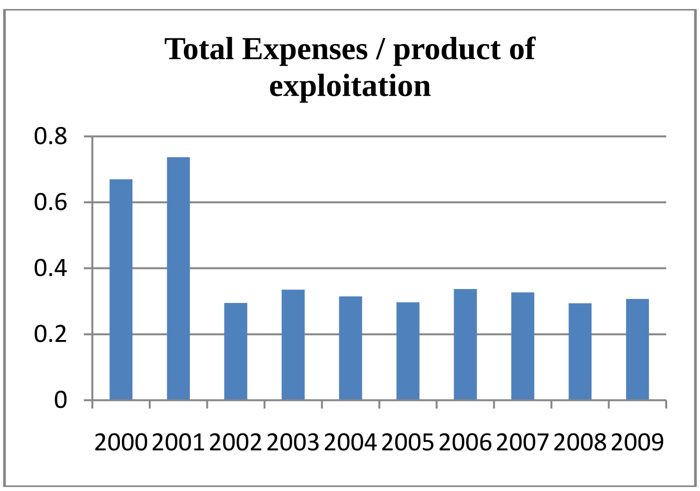


Chart 2 : Variation in the ratio of total expenses in relation to the product operating between 2000 and 2009

The ratio of total expenses in relation to the proceeds of exploitation has experienced an increase in 2001 compared to 2000. While during the remaining period, it has experienced a decrease with almost a stability.

We know that the total expenses increase after the acquisition, then we are going to express the decrease of R2 by the increase in the net banking income.

In 2001, a simultaneous increase in the ratio of R1 and the ratio R2 did not result in efficiency gains. But, the acquisition transaction has resulted in efficiency gains to our bank. This gain is explained by the increase in the ratio of R1 and the decrease in the ratio of R2.

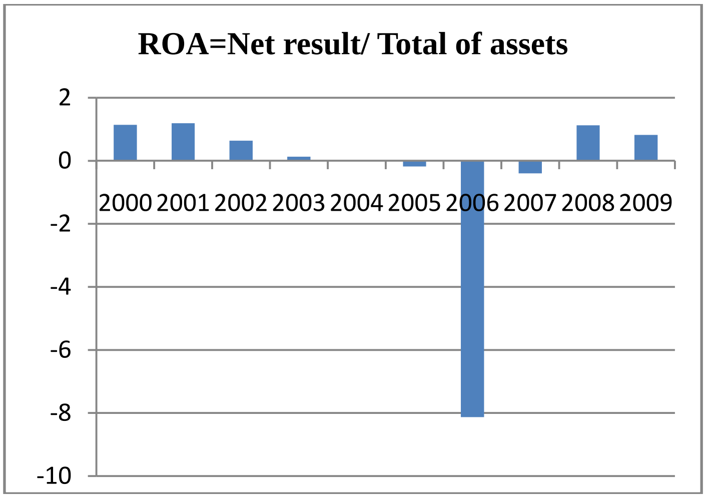
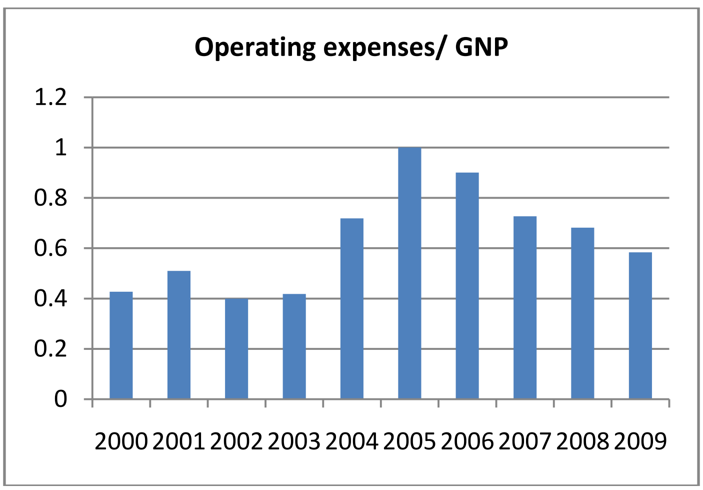


Chart 3 : Variation of the ROA ratio between 2000 and 2009

This figure shows the evolution of the ratio of economic profitability of Attijari Bank; one finds that it decreases during the period from 2004 to 2006 in which this same ratio has made a sudden drop in (8.13%) in 2006, which is the year of acquisition.

Via this graph, we note that the Bank Attijari has experienced a very difficult period before and after the privatization. She has mastered this weakness, and it has operated the growth of its assets to increase its net result and subsequently a increase in the ratio Roa.



Graph 4 : Evolution of the ratio of operating expenses/ GNP between 2000 and 2009

According to this chart, we observe that this ratio has experienced a disturbance during the study period. In 2005, this ratio has experienced a significant increase, there is almost an equality between operating expenses and the GNP.

Whereas during the remaining period, this index has registered a slight decrease from one year to the other up to reach a level of 0.584% in 2009. This decrease is explained by a slight increase in the level of total operating expenses and a significant increase in the GNP.

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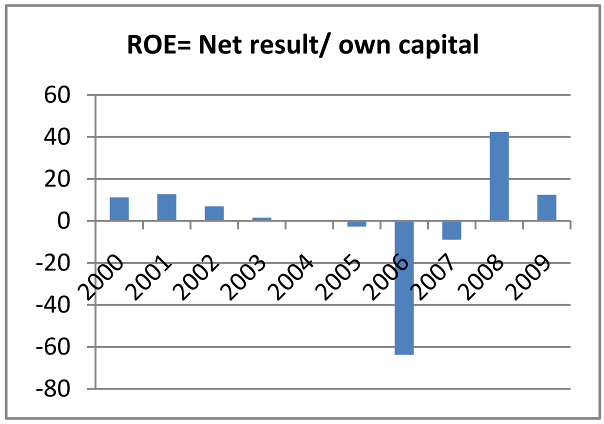


Graph 5 : Evolution of the ratio of ROE

According to this figure, we find that the variable ROE is marked by a significant decline in 2006 which reached a level of -63.8% because of the serious weakness of the net result (RN is negative). Then, the Bank has begun to recover its position by the increase in the capital and to increase the profitability of its own capital to reach 42.4% in 2008.

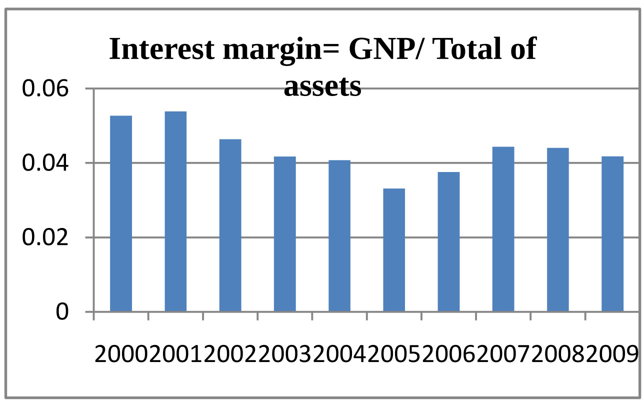
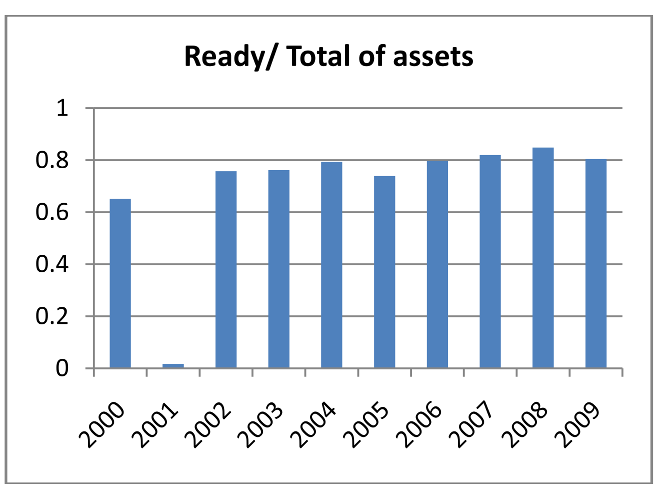


Chart 6 : variation in the ratio of interest margin

The interest margin is less important after that before the acquisition. In 2005 (the year before the merger), it is observed that this ratio has experienced a decline, which reflects a decrease of the overall productivity.

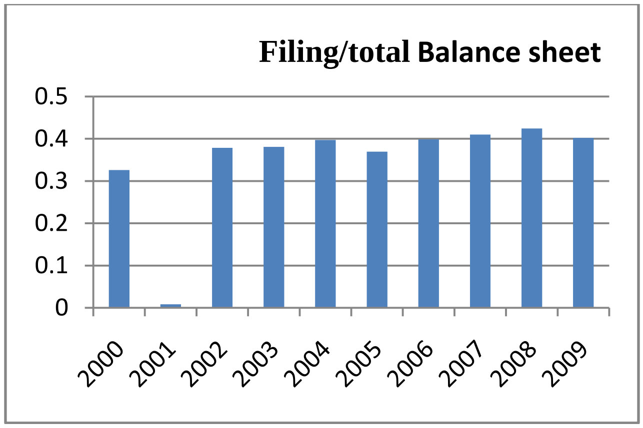
By against during the years of the transaction of acquisition, Attijari Bank has tried to improve its situation and, therefore, the margin of interest begins to improve, which means an increase of productivity, and there is therefore a attention paid by the Bank to the control of costs.



Graph 7 : Evolution of the ratio of loan in relation to the total active between 2000 and 2009

This ratio is very low in 2001; this weakness is explained by an increase in the total of assets and a decrease in total loans of the Bank.

During the years of the operation of acquisition, this ratio has experienced a significant increase, which translates into an increase in the value of the financial burden. We can then say that this situation is not beneficial for Attijari Bank.



Graph 8 : Evolution of the ratio of deposit by report to the total balance sheet between 2000 and 2009

This ratio has experienced a remarkable drop in 2001 compared to 2000. This drop is consistent of the crisis that has known the America following the events of 11 September 2001. Then, we are talking about a lack of confidence of customers toward the banks. After the transaction of acquisition, the Bank tries to improve its situation, and subsequently there was an increase in the total of the deposits.

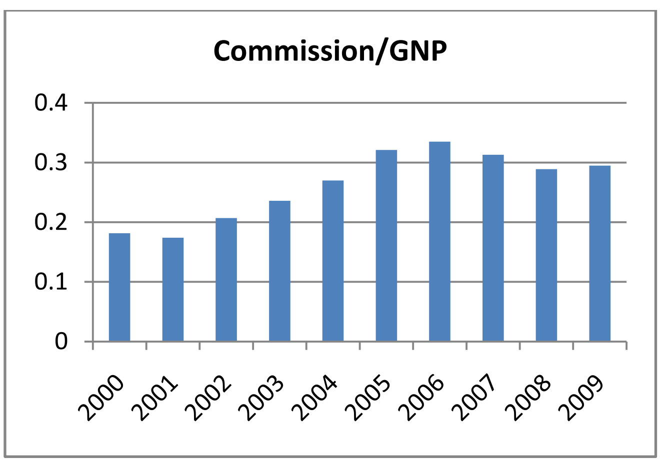


Chart 9 : Variation of the ratio of commission in relation to the net banking income between 2000 and 2009

According to this figure, this ratio has experienced an increase in 2006 (the first year of fusion). This increase is beneficial for our bank saw that the total of the commissions presents approximately one third of the product net banking income for the bank.

Thus we note that the acquisition transaction generates several benefits for the Bank, as examples the increase of its market share and the enlargement of stock exchange transactions and subsequently the increase in commissions.

➢ Analysis by test of equality of expectations

The ratio of total expenses in relation to the total of assets

The test of equality of the hopes Deus observations of variances of different variances

	Variable 1	*Variable 2*
Statistical t	0,56269007	
Critical value of T (bilateral)	2,57058183	

According to this table, we note that the t statistic is less than the critical value of t, which means that the ratio of total expenses in relation to the total of assets is not significant, and subsequently we will admit the null hypothesis (H0).

Therefore, averages are equal and therefore we find that there is no difference between the total expenses of Attijari Bank, measured by this ratio, before and after the merger. As well, the acquisition transaction does not have a remarkable impact on the performance.

The ratio of total expenses in relation to the product of exploitation

The test of equality of the hopes Deus observations of variances of different variances

	Variable 1	*Variable 2*
Statistical t	1,48918511	
Critical value of T (bilateral)	2,57058183	

According to this table, we observe that the t statistic is less than the critical value of t, which means that the ratio of R2 (Total Expenses / product of exploitation) is not significant, and therefore we will accept the null hypothesis (H0).

Which is to say that the medium are equal before and after the transaction of fusion. Therefore, the performance of the Bank STB, measured by this ratio, remains constant before and after the merger and absorption.

The ratio of economic performance ROA

The test of equality of the hopes Deus observations of variances of different variances

	Variable 1	*Variable 2*
Statistical t	0,9695182	
Critical value of T (bilateral)	3,1824463	

We observe that the t statistic is less than the critical value of t which shows that the ratio of the net result in relation to total assets is not significant, and therefore we recognize the null hypothesis (H0), which is to say that the averages are equal.

Therefore, there is no difference between the economic profitability of Attijjari Bank before and after the acquisition.

	Variable 1	*Variable 2*
Statistical t	-1,22665581	
Critical value of T (bilateral)	2,30600413	

The ratio of operating expenses in relation to the product net banking income

The test of equality of the hopes Deus observations of variances of different variances

	Variable 1	*Variable 2*
Statistical t	-1,22665581	
Critical value of T (bilateral)	2,30600413	

According to these results, we note that the t statistic is less than the critical value of t which indicates that the load ratio of exploitation by report to the net banking income R4 (operating expenses / GNP) is not significant, and therefore we accept the null hypothesis (H0), which is to say that the averages are equal.

We find that there is no difference between the operating profitability of Attijjari Bank, measured by this ratio, before and after the merger of the so-called bank. This coefficient is not affected remarkably by the acquisition.

The ratio ROE

Test of equality of expectations

	Variable 1	*Variable 2*
Statistical t	0,41889073	
Critical value of T (bilateral)	3,1824463	

We recall, via this table, that the t statistic is less than the critical value of t, which indicates that the ratio of the roe is not significant, and therefore we will accept the null hypothesis (H0), which is to say that the averages are equal.

Therefore, there is no difference in the level of the financial profitability of Attijari Bank between the two periods of fusion. Therefore, the operation of acquisition affects relatively the profitability of this bank.

We observe that the t statistic is greater in absolute value to the critical value of t, which reflects that this ratio is significant, and subsequently we are going to deny the null hypothesis (H0). Then, the averages are not equal.

We find that there is a difference between the performance of Atttijari Bank, measured by this ratio, before and after the transaction of acquisition.

The negativity of this coefficient reflects the improvement in the level of this ratio during the period of fusion. Therefore, the acquisition transaction has a positive effect on this ratio.

III. Conclusion

At the global level, the banking sector has an effect very vital in the economic growth of the country. The banking firms are an appeal to the reconciliation operations in order to increase their efficiency by report the competing firms, either at national level or international.

On the field of Tunisia, there are a limited number of transactions of merger and acquisition in the banking sector. In this stage, we choose an operation of acquisition of the bank of the South, and a merge operation absorption by STB of BDET and NTDB. Empirically, the transaction for the acquisition of Attijari bank does not differences on the financial profitability of the Bank. By contrast, the Tunisian Bank of banks has experienced a deterioration of the financial profitability after the merger transaction as absorption.

The limits of our work it is the difference between the time periods before and after the transaction of a merger or acquisition because of lack of information.

Finally, we can hang our work point of departure for the study of the factors of success of the operation of acquisition and factors in the failure of the merger.

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The Influence of Governance Mechanisms on the Banking Performance: Comparison between the Model Franco-Italian and the Model Germano-Nippon

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Summary- The goal of this research is to treat the influence of governance mechanisms on the banking performance in two systems of governance universal. There are three models of governance virtually universal. We are going to put the light on the model germano-Nippon and the model Franco-Italian and on the measures of the performance. Then, we will analyze the effects that exercise internal governance mechanisms on the social performance of banks belong to the context germano-Nippon and the context Franco-Italian. To estimate the performance, we retained three performance measures that are ROA, ROE and MTB, and to apprehend the governance we retained the council of administration, its size, its independence and the concentration of capital. In order to study the impact of the internal governance on the banking performance in the context germano-Nippon and the context Franco-Italian. In this framework, we have produced mixed results, which differ from one context to another.

Keywords: *governance, performance, the system of governance germano-Nippon, the system of governance Franco-Italian.*

GJMBR - C Classification : *JEL Code : G29*

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Strictly as per the compliance and regulations of:

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I. Introduction

The banking sector plays an important role dans financial stability. Given the vital role that it plays and its specificities by report to the ordinary firm, the Bank has specific governance mechanisms. Also, each country adapts a governance system adapts to its policies.

Practically, there are three models of the governance system; who are the Anglo-Saxon model, model germano-Nippon and the model Franco-Italian. The laws that guide the functions of the Bank vary from one country to another which causes a difference between the influence of governance mechanisms on the performance of banking. Our research work, we will analyze and compare the influence of the mechanisms of internal governance on the social performance of banks in the context Germano Nippon and the context Franco-Italian.

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II. Review of the Literature

a) *The performance*

The performance is defined by Machesnay (1991) by the degree of achievement of the goal sought. The performance of the Bank is one of the privileges all stakeholders leaders, investors or employees. It is a goal to arrive. Therefore, several researchers have studied the performance of the bank and they find that it is attached to the effective governance mechanisms to achieve good profitability and improve it.

The performance measures

According Amblard (2006), "the measure of performance is an essential dimension in any organization whose existence depends on the efficiency. The concept is however far from one-dimensional ". Therefore, the performance may be economic, financial, social, environmental, etc., ... Therefore, the increase in the number of dimensions generates an increase of the indicators to measure these dimensions.

The bank or any organization seeks to improve their performance, but it must measure the performance to be able to measure the differences between performance through time.

The performance can be measured quantitatively or qualitatively since it has several dimensions. Therefore, the assessment of the performance can be at various levels as social, environmental, economic, scholar and financial.

Also, the effectiveness and efficiency of the Bank can be measured through reports. To measure the effectiveness, we use the report between the result obtained and the objective. To measure the efficiency, we report the result obtained to the means applied.

b) *The Governance*

For Charreaux (1997), the governance is expressed by a set of "organizational mechanisms having for effect to delineate the powers and to influence the decision of the leaders.". In another way, governance it is a power born between the hands of the mechanisms to manage the actions of the leaders in favor the organization. Therefore, in order to maximize the performance, the board of directors is required to confine the powers of leader and guide its strategies in the interest of the firm. More, Zingales (2000) has announced that governance refers to "a set of laws and rules which govern the operation of the firm." In this framework, for having a good operation of the firm, he must have good laws and rules. Therefore, a good governance creates a good operation of the Bank. Therefore, the governance mechanisms are responsible for the operation of the Bank.

The main universal systems of governance

- The system oriented market (the Model Anglo-Saxon)

The system oriented market is characterized by a developed financial market which presents the dynamo of funding systems, discipline of the behaviors of leaders and of the monitoring. This system is applied in the United States and Great Britain. In this context, the banks have a low detention of actions in the firms. Therefore, the banks in a context anglo-saxon play their ordinary roles. In this model, the shareholders have a great importance in the firm.

- The system network oriented (the Model germano-Nippon)

The system network oriented SE differs from the system oriented market by the term universal bank. The system oriented market has of commercial banks and investment banks. Moerland (1995) stipulates that Germany, Japan and a few Latin countries are the paramount countries which practice the system oriented-network which is also named the model germano-Nippon. In this context, these countries promote a banking sector powerful and important to finance the economic agents.

- The intermediate system (the Model Franco-Italian)

The intermediate system is also named the model Franco-Italian is strongly practiced within France and Italy. The hybrid system is characterized by the presence of the State in shaping the governance. Then, the system Franco-Italian is located between the systems markets and network systems. This median system is characterized by the intervention of the State.

c) *Few empirical studies concerning the impact of governance on the banking performance*

The influence of internal mechanisms of governance on the banking performance remains little study. Moreover, we will deal with the impact of the Council of Administration and of the ownership structure on the performance.

❖ The impact of the Board of Directors on the Bank performance

Moreover, we will deal with the impact of size of the Council on the performance and the impact of the Duality on the performance.

The impact of the size of the Board of Directors on the Bank performance

Hasndres and Vallelado (2008) find that the function between the size of the Board of Directors and the banking performance is not linear and its curve takes the form of a U overthrown.

Adams and Mehran (2003) postulate that the banks that have boards of directors of large size have performance more raised that banks with advice from smalls sizes.

It is a good idea to check the conclusions of these studies by the following hypothesis:

H11: The size of the board of directors has a positive impact on the performance of the banks in a context germano-Nippon.

H12: The size of the board of directors has a negative impact on the performance of the banks in a context Franco-Italian.

The impact of the presence of institutional investors to the Council on the banking performance

Similarly, Agrawal and Knoeber (1996) find that the institutional investors looking to stay in the board of directors in order to monitor the more possible the affairs of the manager. Subsequently, their presence in the Council of Administration allows you to vote dans the decisions of recruitment, remuneration and revocations of managers and the policy of the dividends. Without forgetting, its privilege access to internal information of the bank and its power to have clarification about the banking actions.

Carleton et al. (1998) and the tip (2000) see that the representatives of institutional investors to the Council, sometimes, affect the decisions of leaders in order to optimize the benefits of their holdings and thus advance the performance of the Bank.

Nevertheless, the arguments presented above concerning their efficiencies in the control and their positive roles in the improvement of the performance incentive to install the following hypothesis:

H21: There is a positive impact of the presence of institutional investors to the Council on the banking performance in a context germano-Nippon.

H22: There is a positive impact of the presence of institutional investors to the Council on the banking performance in a context Franco-Italian.

The impact of the Duality of direction on the banking performance

The Duality of directions also called the cumulation of C posts is to say one man has two positions that are of general director and president of the Council. For a rooting strategy, the function CEO of a bank would be able to benefit from its privileges. Then, the leadership team can take root when there is a poor monitoring.

Boyd (1995) has concluded that the duality of functions positively affects the performance. On the ground American, Pi and Timme (1993) noted that the cumulation of steering functions and monitoring within the banks generates a low profitability of assets (ROA). This conclusion is consolidated by Rechner and Dalton (1991). These researchers are interested in the banks and found that the duality affects weakly, positively and significantly the performance. Therefore, we note that the duality positively influences the economic performance of the Bank.

The hypothesis that arises:

H31: There is a positive impact of the Duality on the banking performance in the context Germano Nippon.

H32: There is a negative impact of the Duality on the banking performance in the context Franco-Italian.

- ❖ The impact of the ownership structure on the banking performance

Moreover, we will deal with the impact of the Mechanism ownership structure on the performance.

The impact of the concentration of capital on the banking performance

The concentration of capital and the nature of the shareholders (as institutional investors, foreign shareholders and the State,…) swaying between be positively or negatively correlated with the banking performance. Spong et al. (1996) inspire, with 143 U.S. banks from 1990 to 1994, that the concentration of capital positively affects the banking performance. Therefore, according to these results we can point out that there is a positive correlation between the concentration of capital and the performance of banking.

Crespí et al. (2004) stipulate that the increase in the participation of the majority shareholders causes an increase in the measured performance by ROA for some Spanish banks during the period 1989-2000. This researcher confirms the idea of the existence of a positive relationship between the concentration of capital and the performance of banking.

Caprio et al. (2006) show, at the base of its study on 244 banks from 44 countries, that the concentration of ownership positively affects the banking performance such that, at the international scale, most banks have a structure of concentrated ownership and that the majority shareholder is a family or the State. In this framework, we note that at the international level the performance of banking is positively affected by the concentration of capital.

On the ground in Argentina, Pinteris (2002) find a negative report but not statistically significant between the concentration of ownership and the performance of banking.

The hypothesis that arises is:

H41: There is a positive impact of the concentration of capital in the hands of five majority shareholders on the banking performance in a context germano-Nippon.

H42: There is a negative impact of the concentration of capital in the hands of five majority shareholders on the banking performance in a context Franco-Italian.

The impact of the share ownership of institutional investors on the banking performance

Berger and Bonaccorsi di Patti (2003) stipulate, at the base of his study concerning 695 U.S. commercial banks between 1990-1995, that the large institutional investors generate consequences of monitoring that decrease the agency costs and increase the performance.

Empirically, McConnel and Servaes (1990) prove that there is a positive relationship between the share ownership of institutional investors and the stock market performance. Therefore, there is a positive correlation between the stock market performance and the shareholding of the institutional investors.

By contrast, Barclay and Holderness (1991) and Shleifer & Vishny (1997) postulate that the performance and the efficiency of the firms depend on the behavior of institutional investors and of the activity of their integration within the governance. These researchers found that the behavior of institutional investors depends on purpose of their integration. Subsequently, this mechanism of governance can negatively affect the performance.

Paquerot (1997) think that the increase of the amounts invested by the institutional investors make these latter in dependence of the leaders. This dependence is certified by the event, in this situation, the risks of loss of annuities and of the quasi-rents may compel them to the support. Therefore, the purpose here is to achieve a minimum yield authorizing to prepare their risks. The hypothesis that arises is:

H51: There is a positive impact of the capital held by institutional investors on the banking performance in a context germano-Nippon.

H52: There is a negative impact of capital held by institutional investors on the banking performance in a context Franco-Italian.

III. The Methodology

In this work we have studied the impact of governance mechanisms on economic performance, financial, Fellow of thirty banks belong to the German system-Nippon and thirty banks belong to the system Franco-Italian. The collection of data was performed via the annual publications (the balance sheet, the stock data, the result state) between 2004 and 2013. To measure the governance, we used the council of administration, its size and its independence, and the concentration of capital. For the performance, we will use the measures that have been used in previous studies.

In order to study the impact of the internal governance on the financial performance, economic in the ten years between 2004 and 2013. The models below are inspired to the article of EYA Noubbigh (2010). The report between the governance and the performance measures will be measured via the following models:

Equation 1

$$ROA = \alpha + \beta1 \ln BOASIZit + \beta2\ DUALit + \beta3TOP5it + \beta4\ INSTSIZit + \beta5\ INSTit + \beta6 \ln SIZEit + \varepsilon it$$

Equation 2

$$ROE = \alpha + \beta1 \ln BOASIZit + \beta2\ DUALit + \beta3TOP5it + \beta4\ INSTSIZit + \beta5\ INSTit + \beta6 \ln SIZEit + \varepsilon it$$

Equation 3

$$MTB = \alpha + \beta1 \ln BOASIZit + \beta2\ DUALit + \beta3TOP5it + \beta4\ INSTSIZit + \beta5\ INSTit + \beta6 \ln SIZEit + \varepsilon it$$

The table of dependent and independent variables

The dependent variables	Formula of measurement	The independent variables	Meaning	Formula of measurement
ROA	Profits/Total of assets	LNBOASIZ	The size of the Council	The logarithm of the total number of directors within the Council.
ROE	Net result/own funds	DUA	The duality	1: Separation 0: duality
MTB	Capitalization of capital/own capital	TOP 5	The percentage of the capital held by the five majority shareholders	The percentage
		INSSIZ	The number of institutional investors members to the Council	Logarithm of the number of institutional investors members to the Council.
		INS	The percentage of the capital held by institutional investors	The percentage
		SIZ	The size of the bank	The natural logarithm of the total of the assets of the Bank.

a) *Analysis and interpretation of results*

In what follows, we will deal with the results of the effect of governance on the performance on the two systems.

❖ The impact of governance on the performance in the banks of the system Franco-Italian

In what follows, we will interpret and analyze the regression results derived from the output of the E-views.

The model estimates

In a first step, we proceeded to a regression in the block of our samples in applying the method of ordinary least squares OLS.

The following table relates the regression model relating to the fixed effect of governance on the economic performance ROA of banks of the context Franco-Italian.

➢ Analysis of the economic profitability ROA

The test of homogeneity

Test effects	Statistics	D.f.	Prob.
Cross-section F	16.04	(13.1)	0.00
Cross-section Chi-square	141.76	13	0.00

Calculated F = 16.04, F0.05 tabulated = 3.112

We observe that F calculated is higher than F tabulated, then we accept the hypothesis H1. Therefore, our model is heterogeneous and it is necessary to perform the test of Hausman to determine if the fixed effect or random.

The test of specification Hausman

Summary Test	Chi-Sq. Statistics	Chi-Sq. D.F.	Prob.
Cross-section random	47.02	7	0.0

According to the calculation of the test of Hausman, we note that Qh is greater than the fractile of the Act of KHI- two in the ROA model and therefore we find the estimate to a fixed effect, therefore reject the hypothesis H0. The estimation of the model ROA by the panel set.

Table 3 : Estimation of ROA by the fixed panel

Variable	Coefficient	Prob.
Constant	0.381234	0.0447
Size of the Council	0.000519	0.9857
Duality	0.046850	0.2693
The majority share-holders	-0.063205	0.6068
Number of Institutional Investors	0.100156	0.0002
Capital held by the Inv. Ins.	9.54E-05	0.0061
Size of the bank	-0.025049	0.0075
R-squared	0.718456	

The significance of the variables of the model ROA

The size of the Bank has a negative impact on the economic performance. In another way, the increase in the size of the Bank generates a decrease of the economic performance of the Bank of hybrid model.

The capital held by institutional investors and the number of institutional investors within the Council have a positive influence on the economic performance of the banks of our sample. This is confirmed by Whidbee (1997).

According to the table, the number of institutional investors in the Council has a positive influence on economic performance Roa. Similarly, Agrawal and Knoeber (1996) find that the institutional investors looking to stay in the board of directors in order to monitor the more possible the affairs of the manager.

The explanatory power of the model

R^2 is strong, then the model is persistent.

➢ Analysis of the financial profitability ROE

The test of homogeneity / heterogeneity

Test effects	Statistic	D.f.	Prob.
Cross-section F	2.101	(13,118)	0.0187
Cross-section Chi-square	28.947	13	0.0067

Calculated F = 2.101 tabulated F = 3.112

We observe that F is calculated at less than F tabulated so the model is homogeneous and subsequently we will choose the model estimated by the OLS method. Therefore, our interpretations will be based on the model estimated by the OLS method without individual effect.

Table 5 : The estimate of ROE by OLS

Variable	Coefficient	Prob.
Constant	0.066554	0.6916
Size of the Council	-0.016911	0.0858
Duality	0.092208	0.0079

The majority shareholders	0.118249	0.2817
Many of the Investors ins.	-0.003971	0.8635
Capital held by Inv. Ins.	-8.82E-07	0.9769
Size of the bank	-4.13E-05	0.9960
Correlation Coefficient	0.021587	

The significance of the variables of the model ROA

The variable size of the board of directors is negative and statistically significant at threshold 10%, which implies that a Council of small size generates an increase in the financial performance of the banks of the hybrid model of governance.

The duality of functions The functions positively affects the financial performance. That is confirmed by Dedman and Lin (2002).

The explanatory power

We note that R2 is low, then this model is not too persistent.

- Analysis of the stock market performance

The following table shows the effect of the internal governance on the stock market performance during ten years.

Equation 3

$$MTB = \alpha + \beta 1 \ln BOASIZit + \beta 2\ DUALit + \beta 3 TOP5it + \beta 4\ INSTSIZit + \beta 5\ INSTit + \beta 6 \ln SIZEit + \varepsilon it$$

In this framework, we will go to the test of homogeneity/ heterogeneity of Fischer

Test effects	Statistics	D.f.	Prob.
Cross-section F	13.71	(13,119)	0.0
Cross-section Chi-square	165.93	13	0.0

Calculated F = 16.8 is greater than the tabulated F = 3.112

The calculation of the test of specification Fischer leads that F calculated is higher than F tabulated, where the model is heterogeneous and therefore we are going to perform the test of Hausman.

The test Hausman

Summary Test	Chi-Sq. Statistics	Chi-Sq. D.F.	Prob.
Cross-section random	22.74	7	0.0019

We note that Qh is greater than the fractile of the Act KHI-two at the threshold of 5 per cent, so we reject the null hypothesis (H0). Then the model to individual effect fixed.

Table 8 : The estimate of the MTB by the fixed effect

Variable	Coefficient	Prob.
Constant	4.446715	0.0000
Size of the Council	0.380315	0.0055
Duality	0.169767	0.5698
The majority shareholders	0.706853	0.3015
Number of Institutional Investors	-0.488284	0.0004
Capital held by the Inv. Ins.	4.28E-05	0.7115
Size of the bank	-0.214286	0.0000
Correlation Coefficient	0.713362	

The significance of the variables

The size of the Council of the Council of Administration and the stock market performance are positively correlated. Therefore, the increase in the size of the Board of Directors improves the stock market performance of banks saw that the increase in the number of members of the board of directors creates a diversification and a multiplicity of knowledge and experiences. This result is confirmed by Haniffa and Hudaib (2006).

The variable the number of institutional boards of directors has a negative impact on the stock market performance of banks. This result is confirmed by Barclay and Holderness (1989).

The size of the Bank and the stock market performance are negatively correlated. Therefore, the Bank would be more creative value when it is small in size.

The explanatory power of the model

We note that the coefficient of determination is strong (71.33%). This implies that our model is persistent.

❖ The impact of governance on the performance in the banks of the system germano-Nippon

Moreover, we are going to interpret and analyze the regression results derived from the output E-views.

➢ Analysis of the financial profitability ROE

The test of homogeneity

Test effects	Statistics		Prob.
Cross-section F	1.564046		0.1300

Calculated F = 1.56 F0.05 tabulated = 3.112

We observe that F is calculated at less than F tabulated, then we accept the hypothesis H0. Therefore, our model is homogeneous and therefore we choose the model estimated by the OLS method.

Table 10 : The estimate of ROE by OLS

Variable	Coefficient	Prob.
Constant	0.054956	0.1033
Size of the Council	-0.016911	0.0858
Duality	0.092208	0.0079
The majority shareholders	0.106100	0.0013
Number of Institutional Investors	0.046280	0.6749
Capital held by the Inv. Ins.	-0.041961	0.5598
Size of the bank	0.000611	0.9449
Correlation Coefficient	0.129906	

The significance of the variables of the model ROE

The evolution of the return on the assets (as a percentage of the asset) and its potential determinants is represented as follows.

The variable duality of functions has a positive and statistically significant coefficient on the threshold 5%. This result is explained that an accumulation of position control with the position of decision causes an increase in the performance of the banks. That is confirmed by Dedman and Lin (2002) emphasized that the separation of the functions does not generate a progress of the performance. Therefore, the hypothesis H21 is accepted.

In addition, the variable size of the board of directors is correlated negatively and significantly (the threshold 10%) with financial performance. Therefore, we can see that the increase in the size of the Board of Directors will result in a deterioration of the performance.

The variable "capital held by the majority shareholders" is positively and significantly related with the financial performance (ROE). Therefore, the presence of the majority shareholders within the Council of Administration positively affects the financial performance of banking. This is confirmed by Joh (2003) and Holderness (2003). Therefore, the hypothesis H41 is accepted.

The explanatory power

We note that R 2 (R-Squared = 0.14) is low, then this model is not too persistent.

➢ Analysis of the economic profitability ROA

The test of homogeneity

Test effects	Statistics	D.f.	Prob.
Cross-section F	2.579506	(10.92)	0.0084

Calculated F = 2.579506, F 0.05 tabulated = 3.112

We observe that F is calculated at less than F tabulated, then we accept the hypothesis H0. Therefore, our model is homogeneous and therefore we choose the model estimated by the OLS method.

Table 12 : The estimate of ROA by OLS

Variable	Coefficient	Prob.
Constant	0.053532	0.0096
Size of the Council	-0.002325	0.0284
Duality	-0.911149	0.0002
The majority shareholders	-0.002097	0.2626
Number of Institutional Investors	-0.020217	0.0014
Capital held by the Inv. Ins.	-0.003364	0.6627
Size of the bank	-0.000422	0.7272
Correlation Coefficient	0.305761	

The significance of the variables of the model ROA

According to this model, the two variables the size of the Board of Directors and the number of institutional investors present to the board of directors have a significant effect and negative impact on the economic performance of the banks of our sample.

We note that the variable size of the Board of Directors recognizes a significant negative coefficient. This result is explained that the increase in the size of the Board of Directors creates conflicts in the taking of decisions, and subsequently a decrease in economic performance.

The variable duality is negatively related and significantly with the economic performance (ROA). Therefore, the separation of the functions of control and direction positively affects the economic performance of banks. Same case concerning the variable "institutional investors", it is negatively and significantly related to the economic performance. That is to say the presence of institutional investors within the Council of Administration negatively affects the economic performance.

The variable INSSIZ reflects the presence of institutional investors to the boards of administration and monitoring. According to the table, this variable has a negative influence and significant work on the economic performance Roa.

The explanatory power

We note that R 2 (R-Squared = 0.30) is low, then this model is not too persistent.

➢ Analysis of the stock market performance MTB

We are going to do the test of homogeneity / heterogeneity of Fischer.

Test effects	Statistics	Prob.
Cross-section F	9.004337	0.0000

The calculation of the test of specification Fischer leads that F calculated is higher than F tabulated, where the model is heterogeneous and therefore perform the test of Hausman.

The test of Hausman

Summary Test	Chi-Sq. Statistics	Chi-Sq. D.F.	Prob.
Cross-section random	14.338635	7	0.045

We note that Qh is greater than at fractile of the Act KHI-two at the threshold of 5 per cent, so we reject the null hypothesis (H0). Then the model to individual effect fixed.

The stock market performance estimated by the method of least-squares to individual effect fixed.

Table 15 : The estimate of the MTB by the fixed effect

Variable	Coefficient	Prob.
Constant	0.047411	0.0001
Size of the Council	0.000516	0.0055
Duality	0.003281	0.0657
The majority shareholders	-0.009246	0.0197
Number of Institutional Investors	-0.011622	0.0004
Capital held by the Inv. Ins.	-0.003979	0.1791
Size of the bank	-0.00298	0.4760
Correlation Coefficient	0.692699	

The significance of the variables of the MTB

The variable size of the board of directors is positively correlated with the stock market performance. Therefore, the hypothesis H11 is accepted.

The variable duality presents a positive coefficient. This is confirmed by Dedman and Lin (2002). Therefore, the hypothesis H21 is accepted.

The variable that contains the number of institutional advice has a negative impact on the stock market performance of banks. This result is confirmed by Weinstein and Yafeh (1998). In another way, an increase in the number of institutional investors on the boards of directors will cause a decrease in the stock market performance since these investors are going to vote for the decisions that promote their own interest by discriminating against the stock market profitability of the Bank. The presence of institutional investors to the board of directors has a negative relationship with the performance of the Bank.

The explanatory variable Top 5 presents a negative and significant coefficient. Then, the concentration of capital has a negative impact on the stock market performance, therefore the stock market performance and the concentration of capital are negatively correlated.

The explanatory power

In our case, R2 is strong this leads us to conclude that our model is persistent.

❖ A comparison between the results

Moreover, we will compare the effects of governance on the performance on the two models of governance (hybrid model and model network oriented).

Table 16 : A comparison between the banks of two models of banking Governance

	The model network oriented			The Hybrid Model		
	ROE	ROA	MTB	ROE	ROA	MTB
Size of the Council	-	-	+	-		+
Dual	+	-	+	+		
Top 5	+		-			
Inssiz		-	-		+	
Ins					+	-
Siz					-	-

According to this table, we note that the concentration of capital in the hands of the five majority shareholders has no impact on the financial performance, economic and trading of banks of the governance model hybrid. By contrast, in the banks of the model network oriented, this variable has a positive impact on the financial performance and a negative impact on the stock market performance.

Also, the percentage of the capital held by institutional investors has no impact on the economic performance on the two models. But, this variable has a negative impact on the economic performance and a Fellow of the banks of the model network-oriented. By contrast, this variable has a positive impact on the economic performance of banks of the hybrid model.

For the variable size of the bank, it is not correlated with the stock market performance, financial and economic of the banks of the model network-oriented. But, this variable is negatively correlated with the stock market performance and economic development of the banks of the hybrid model.

In the banks of the model network oriented, the duality of functions has a positive effect on the financial performance and stock market and a negative impact on the economic performance. In against part, the duality of functions has a positive impact only on financial performance.

The size of the board of directors has a negative impact and significant impact on the financial performance of the banks of two models. In addition, the size of the board of directors has a significant and positive impact on the stock market performance of banks of the two models. But the impact of the size of the Board of Directors on the economic performance is balance between negative on the banks of the model network oriented and neutral on the banks of the hybrid model.

IV. Conclusion

The aim of our study is to treat the influence of internal mechanisms of governance on the banking performance in the context Franco-Italian and the context germano-Nippon. In this framework, we can emphasize that the mechanisms of governance have a significant impact on the performance, although the meaning of this impact remains undetermined. Since, the empirical results show mixed results, which differ according to the extent of the performance restraint and the context.

The dimensions of the financial performance, economic and stock market are affected by the mechanisms of governance in a different way in most of the results, in addition to its influences can be in the opposite direction of a context germano-Nippon to a context Franco-Italian.

The model Franco-Italian is characterized by the intervention of the State to shape the governance by against the model germano-Nippon is characterized by a banking system powerful and a financial market tightened.

The differences between the two systems are explained by the cultural differences, the institutional infrastructure, the financial development and the policies of the country, etc.

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Evaluation of Portfolio Performance of the Investment Corporation of Bangladesh's Mutual Funds

By Abu Bakar Seddeke & Mahbubur Rahman

Abstract- The number of mutual funds that were professionally managed is on the rise. Consequently, the importance of evaluating the performance of mutual funds has also increased. Investors prefer investing in such stocks that have performed better compared to other alternatives since investors always like to choose fund managers on a comparative basis. This study has endeavoured to address this issue by measuring the performance of mutual funds managed by ICB (Investment Corporation of Bangladesh) through Treynor Index, Sharpe Index, Jensen Alpha, and Fama Decomposition. This study has found that the performance of ICB mutual funds is satisfactory in the context of mutual funds sector of Bangladesh. However, there remain several shortcomings in managing the portfolios by the portfolio managers of ICB. Much of the underperformance of ICB mutual funds is attributable to the bureaucratic systems and structural rigidity of ICB.

Keywords: ICB mutual funds, portfolio performance, tryenor index, sharpe index, jensen alpha, fama decomposition, net selectivity.

GJMBR - C Classification : JEL Code : G39

EVALUATIONOFPORTFOLIOPERFORMANCEOFTHEINVESTMENTCORPORATIONOFBANGLADESHSMUTUALFUNDS

Strictly as per the compliance and regulations of:

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Abu Bakar Seddeke [α] & Mahbubur Rahman [σ]

Abstract- The number of mutual funds that were professionally managed is on the rise. Consequently, the importance of evaluating the performance of mutual funds has also increased. Investors prefer investing in such stocks that have performed better compared to other alternatives since investors always like to choose fund managers on a comparative basis. This study has endeavoured to address this issue by measuring the performance of mutual funds managed by ICB (Investment Corporation of Bangladesh) through Treynor Index, Sharpe Index, Jensen Alpha, and Fama Decomposition. This study has found that the performance of ICB mutual funds is satisfactory in the context of mutual funds sector of Bangladesh. However, there remain several shortcomings in managing the portfolios by the portfolio managers of ICB. Much of the underperformance of ICB mutual funds is attributable to the bureaucratic systems and structural rigidity of ICB.

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I. Introduction

Over the last few decades the debate on the ability of mutual funds to outperform the market remains unsettled. Many early researchers on the performance of mutual fund outlined the difficulty of outperforming the market rather mutual funds frequently perform inferior to the market (Angelidis, Giamouridis, and Tessaromatis, 2014; Fama, 1965; Sharpe, 1966; Jensen, 1968). Some later studies have reported favouring mutual funds, but most of the average funds still fail to exhibit above-normal performance (Treynor and Black, 1973; Blake and Timmermann, 1998; Haslem, 2003). However, the debate on the ability of mutual funds to outperform the market has further steered by the introduction of the methodology of measuring and comparing the performance of mutual funds for better investment decisions. In Bangladesh, the mutual funds sector is subtle compared to the capital market of the country. In many countries, mutual fund assets constitute close to 50% of market capitalisation, but mutual funds asset is less than 3% of total capital market in Bangladesh (ICB, 2016).The investors of Bangladesh are being offered with small and inadequate investment opportunities, mutual funds in particular. Although the investment opportunities are scarce in Bangladesh, Investment Corporation of Bangladesh (ICB) has come up to create new investment opportunities by issuing mutual funds in the capital market. As a state-owned investment bank, ICB played a critical role in accelerating the pace of industrialization and developing a vibrant capital market. ICB helped organizations and individuals to support their equity needs through its mutual funds. Although there remains much debate concerning the performance measurement of mutual funds, this study endeavoured to address this issue by measuring the performance of mutual funds managed by ICB through Treynor Index, Sharpe Index, Jensen Alpha, and Fama Decomposition. This study endeavoured to analyse the portfolio performance of mutual funds of ICB in particular based on composite portfolio measures. However, this study intended to identify the superior selection ability of ICB in constructing the portfolio of all the eight mutual funds as a fund manager.

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II. Literature Review

In financial market, measurement of portfolio performance is crucial. Portfolio performance measurement helps an investor to make better investment decisions and lower its investment risk. However, measurement of portfolio performance is not a new phenomenon rather it has begun in the early 1950s. At that time, investors measured portfolio performance based on the returns of individual securities without considering the risk associated with the individual securities (Khedmatgozar, Kazemi, and Hanafizadeh, 2013). After the introduction of "Modern Portfolio Theory" by Markowitz in 1952 investors and portfolio managers are benefitted by the framework provided by Markowitz (1952). The framework proposed by Markowitz (1952) entails that investors should be compensated for taking additional risk. Later in 1959, Markowitz also developed the Capital Asset Pricing Model (CAPM) which provided a risk-inclusive portfolio evaluation process (Francis and Archer, 1979; Prigent, 2007; Zhao, 2014).

The CAPM model has got popular attraction because it offered a simple framework which predicts the risk of a portfolio and measures the relationship between risk and expected return (Brown and Wu, 2016). The empirical literature on portfolio management particularly focused on measurement of portfolio performance. Many researchers have developed several measurement techniques and models. Treynor and Black (1973) developed an index which measures the risk-adjusted performance of a portfolio. Treynor's Index is a useful measurement technique to measure the excess return of a portfolio per unit of risk. Beta measures the risk; the higher the beta score goes, the higher the excess return per unit of risk generated by the portfolio.

Sharpe (1966) developed a ratio to measure the risk-adjusted return of a portfolio. The Sharpe Index later became the industry standard for measuring the risk-adjusted return from a portfolio. The index is the average return earned more than the risk-free rate per unit of volatility. The performance of a portfolio associated with the risk-taking activities can be isolated when mean return subtracts the risk-free rate (Webster, 2014). The calculation of Sharpe ratio for such a portfolio containing zero risks is very simple as the ratio will be exactly equal to zero. The higher the Sharpe ratio, the more attractive the risk-adjusted return from the portfolio.

Further development of portfolio performance measurement techniques has resulted in Jensen's Alpha, which is another risk-adjusted performance measure. Jensen's Alpha represents the average return on a portfolio over and above that predicted by the CAPM given the portfolio's beta and the average market return. However, these measurement techniques have been widely used to measure the performance of portfolios. Empirical studies also considered studying these measurement techniques and their effectiveness in measuring mutual fund performance. For example, the study performed by Tykvová (2006) entails that average mutual funds had no ability to identify and select undervalued stocks and a negative ability to time the market while a few mutual funds exhibit consistency in identifying and selecting undervalued stocks. The study has utilised the Jensen's Alpha measurement to measure the financial performance of mutual funds.

The factor that controls returns can be monitored in the study of Brown and Wu (2014) and has found that these factors explain the persistence in portfolio performance of mutual funds. This study has utilised the Sharpe Index and Jensen Alpha to measure mutual fund performance. However, the study of Brown and Wu (2014) failed to explain the persistence prevailing in the significant underperformance of the worst mutual funds. Treynor's Index has used in the study performed by Haque (2014) where the survivorship bias in mutual funds has demonstrated. The study concluded that mutual funds performed significantly worse compared to the market at an aggregate level. However, the study carried out by Wu and Brown (2014), and Arora (2015) have also demonstrated that mutual funds failed to perform well compared to the market and also fails to exhibit above-normal performance.

However, the debate on the ability of mutual funds to outperform the market has further steered by the introduction of the methodology of measuring and comparing the performance of mutual funds for better investment decisions. Angelidis, Giamouridis, and Tessaromatis (2014) have examined the effectiveness of benchmarks to weight small mutual funds. The study concluded with a cautious note concerning the use of benchmark because it tracks the calculation of Jensen's Alpha by weighing small mutual funds. The study of Kuhle (2012) further suggested that calculations and measurements that are unique to the period or type of fund or choice of benchmark should not be used to make generalised conclusion concerning the performance of mutual funds.

MacIsaac (2014) has measured the mutual funds' performance considering the Jensen Alpha measurement. The study has concluded that mutual funds performed comparatively better than other industries. However, the study conducted by Khedmatgozar, Kazemi, and Hanafizadeh (2013) found that selection of benchmark, composition of mutual fund portfolio, survivability, and non-CAPM return-generating factors may stress the performance measurement procedure. However, the measurement techniques i.e. Sharpe Ratio, Treynor Index, Jensen Alpha, and so forth are not free from criticisms. Although the measurement techniques, used in this study, have some limitations, these techniques have been investigated by many notable researchers and this study has also considered these techniques to evaluate the mutual funds' performance of ICB.

III. Methodology

This study aimed at applying theoretical knowledge of finance and applying the data and information obtained from ICB and related sources to evaluate the performance of ICB's Mutual Funds. ICB is the pioneer in the mutual funds industry of Bangladesh and one of the best performing investment banks. For these reasons ICB mutual funds have been selected for this study. However, to make the analysis and to conduct this study, all necessary data have been collected from both primary and secondary data sources. Primary data have been gathered from the official database and authorised personnel of ICB. Conversely, secondary data have been collected from annual reports of ICB mutual funds, Planning and Research Division of ICB, online journals, books, and the internet.

This study has used time series data on ICB mutual funds. The performance measurement used in this study is based on the162-monthly closing price of ICB mutual funds of DSE from July 2001 to December 2014. DGEN has been used as the benchmark index for the period concerned of this study. This study has considered the 364-days Treasury bill rate as the risk-free rate for the concerned period. The risk-free rate (T-bill rate) that has been used in this study is 5.5%.

Necessary trading data on ICB mutual funds, DGEN, and T-bill rates have been collected from DSE Data Library. All the data were analysed quantitatively; composite portfolio measure and composition analysis have been carried out to gauge the performance of ICB mutual funds. This study particularly focused on risk and return analysis of the mutual funds. The risk and return analysis was aided by beta coefficients measurement, r-squared measurement, and standard deviations of returns of mutual funds. Based on these risk and return analysis this study considered composite portfolio performance measurement analysis. The composite portfolio performance measurement has been carried out by using Treynor's Index, Sharpe Ratio, and Jensen Alpha. This study has further considered Fama's Decomposition analysis to identify the portfolio performance of ICB mutual funds. This study has also examined portfolio composition analysis. The portfolio composition analysis has been performed based on the most dominating portion of stocks (at least 50% of the portfolio) of the respective mutual funds of ICB.

IV. Empirical Analysis and Findings

a) Analysis of Return

Both portfolio managers and analysts start their analysis of stocks or portfolios with the calculation of return. More specifically, the arithmetic mean is the frequently used measurement tool to calculate portfolio return. However, the arithmetic mean, in this case, means simply the average annual return of the mutual fund. Arithmetic mean tells how well a stock performs over aperiod. However, Table 1 provides the monthly and annualised returns of ICB mutual funds, DGEN, and DSE20. Analysis of returns of ICB mutual funds clearly exhibits its outperformance compared to the market return. ICB mutual funds outperformed the market as they have higher monthly and annualised return than the return of the market.

Table 1 : Monthly and Annualized Returns of ICB Mutual Funds, DGEN, and DSE20

Name	Monthly Return	Annualized Return
1st ICB	0.95100%	11.41196%
2nd ICB	1.19795%	14.37540%
3rd ICB	1.13450%	13.61401%
4th ICB	1.13341%	13.60096%
5th ICB	1.32519%	15.90226%
6th ICB	1.47064%	17.64768%
7th ICB	1.13344%	13.60126%
8th ICB	1.15732%	13.88784%
DGEN	1.18275%	14.19297%
DSE20	0.22430%	2.69162%

b) Analysis of Risk

Investment means it will certainly have some risk although the degree of risk may differ. However, the term 'risk' refers to the possibility of losing principal and any earning or failure to make money from an investment. However, risk can be measured by several means, but this study has considered standard deviation, beta coefficients, and R-squared to gauge the risk of ICB mutual funds. These measurement techniques have been used historically to measure risk and are major components of modern portfolio theory. However, Table 2 exhibits the standard deviation of eight mutual funds of ICB along with DGEN and DSE20. Standard deviation is used to measure the dispersion of data from its mean. This study has applied standard deviation on the annualised return to measure volatility or risk. In the case of mutual funds, standard deviation tells how much return deviates from expected return from the stock.

Table 2 : Standard Deviation of ICB Mutual Funds, DGEN, and DSE20

Name	Standard deviation
1st ICB	20.69204%
2nd ICB	23.98384%
3rd ICB	22.70051%
4th ICB	22.60077%
5th ICB	22.82556%
6th ICB	33.31826%
7th ICB	23.31629%
8th ICB	24.45745%
DGEN	7.94533%
DSE20	9.95535%

Table 2 exhibits the standard deviations of ICB mutual funds which have been measured based on annualised return. It indicates that the ICB mutual funds have a higher risk compared to the market. Total risk of each mutual fund of ICB is significantly high compared to market risk.

However, another risk measurement technique i.e. beta coefficients have been used to measure the volatility or systematic risk of returns of ICB mutual funds. Beta coefficients have measured by using following formula (Amenc and Le Sourd, 2003):

$$\beta = \frac{Cov(p,m)}{Var_m}$$

Where, $Cov(p,m)$ indicates covariance between individual mutual fund's return and market return while $Varm$ indicates variance of market return. The beta coefficients of ICB mutual funds have been presented in Table 3. From this table, it could be observed that the beta coefficients of ICB mutual funds are well below to the market. This means the calculated betas of considered mutual funds have low biasness to the market.

Table 3 : Beta Coefficients of ICB Mutual Funds and DGEN

Name	Beta
1st ICB	0.290333469
2nd ICB	0.353755095
3rd ICB	0.257675094
4th ICB	0.336138189
5th ICB	0.415684339
6th ICB	0.529488738
7th ICB	0.254526598
8th ICB	0.464035555
DGEN	1

R-squared is another measurement that has been used in this study to represent the percentage of a fund portfolio's movements that have been explained by movements in a benchmark index. DGEN has been regarded as the benchmark index for ICB mutual funds. The values of R-squared usually range between 0 and 100 while a value between 85 and 100 for a mutual fund indicates a performance record that isclosely correlated to the benchmark index. However, R-squared has been measured using following formula (Bacon, 2008):

$$r^2 = \left[\frac{\Sigma(R_m - \overline{R_m})(R_p - \overline{R_p})}{(n-1)\sigma_m \sigma_p}\right]^2$$

The results of R-squared have presented in Table 4. The table indicates that the movement of returns of ICB mutual funds could not be explained by the returns from the benchmark index. In such cases, it is recommended that the investors of mutual funds avoid actively managed funds with high R-squared values.

Table 4 : R-squared of ICB Mutual Funds

Name	R-squared
1st ICB	8.633849%
2nd ICB	5.927977%
3rd ICB	4.785532%
4th ICB	8.295044%
5th ICB	7.956083%
6th ICB	2.463026%
7th ICB	2.188619%
8th ICB	9.476383%

c) Composite Portfolio Performance Measures

The composite portfolio performance measurement has been carried out by using Treynor's Index, Sharpe Ratio, and Jensen Alpha. This study further considered Fama's Decomposition analysis to identify the portfolio performance of ICB mutual funds. This study has also examined portfolio composition analysis. The portfolio composition analysis has been performed based on the most dominating portion of stocks (at least 50% of the portfolio) of the respective mutual funds of ICB.

i. *Treynor Measures*

Treynor measure has been the first measurement of composite portfolio performance that includes risk. The objective of Treynor's measure is to find a performance measure that could be applied to all investors regardless of their personal risk preference. According to Treynor's measure, there are two components of risk; risk arising from the fluctuations in the market and the risk produced by the fluctuations of individual securities. However, the Treynor's measure or the reward-to-volatility ratio of this study is defined by (Christopherson, Cariño, and Ferson, 2009):

$$T = \frac{\overline{R_t} - \overline{RFR}}{\beta_i}$$

Where, $\overline{R_t}$refers to the average rate of return for portfolio iduring specified period; $\overline{RFR}$refers to the average rate of return on a risk-free investment during the specified time period; and βi refers to the slope of the fund's characteristics line during that time period. The numerator of Treynor's measure identifies the risk premium while the denominator corresponds with the risk of the portfolio. Table 5 presents the Treynor's measure of ICB mutual funds along with DGEN.

Table 5 : Treynor's Measure for ICB Mutual Funds and DGEN

Name	Yearly Return	Risk-free Return	Beta	Treynor Measure
1st ICB	11.4%	5.5%	0.29	0.20
2nd ICB	14.4%	5.5%	0.35	0.25
3rd ICB	13.6%	5.5%	0.26	0.32
4th ICB	13.6%	5.5%	0.34	0.24
5th ICB	15.9%	5.5%	0.42	0.25
6th ICB	17.6%	5.5%	0.53	0.23
7th ICB	13.6%	5.5%	0.25	0.32
8th ICB	13.9%	5.5%	0.46	0.18
DGEN	14.2%	5.5%	1	0.09

From the above table, it can be said that the Treynor's measure of all the ICB mutual funds has outperformed the market as each of the mutual funds had a value higher than the market. 7thICB mutual fund exhibits highest Treynor's measure.

ii. *Sharpe Ratio (Index)*

The Sharpe Index is known as there ward-to-variability ratio which is used to measure the excess return (i.e. risk premium) per unit of total risk in an investment asset. The Sharpe Index is similar to the Treynor's measure, but it considers standard deviation of the portfolio rather than the slope of the fund's characteristics line (i.e. systematic risk). However, the Sharpe Index or the reward-to-variability ratio of this study is defined by (Connor, Goldberg, and Korajczyk, 2010):

$$S = \frac{\overline{R_t} - \overline{RFR}}{\sigma_i}$$

Table 6 : Sharpe Index for ICB Mutual Funds and DGEN

Name	Yearly Return	Risk-free Return	Beta	Sharpe Index
1st ICB	11.4%	5.5%	0.29	0.29
2nd ICB	14.4%	5.5%	0.35	0.37
3rd ICB	13.6%	5.5%	0.26	0.36
4th ICB	13.6%	5.5%	0.34	0.36
5th ICB	15.9%	5.5%	0.42	0.46
6th ICB	17.6%	5.5%	0.53	0.36
7th ICB	13.6%	5.5%	0.25	0.35
8th ICB	13.9%	5.5%	0.46	0.34
DGEN	14.2%	5.5%	1	1.10

The output of Sharpe Index has been presented in Table 6. According to the figures reported in this table the Sharpe Index clearly indicates that neither of the ICB mutual funds exhibits superior risk-adjusted return compared to the market. That is, neither of the ICB mutual funds has outperformed the market.

iii. *Jensen Measure*

The Jensen measure is another measurement technique used to measure the excess return that a portfolio generates over its expected return. Jensen measure is alternatively known as Jensen Alpha. However, the Jensen measure or the reward-to-volatility ratio of this study is defined by:

$$\sigma_p = \overline{R_p} - [\,\overline{RFR} + \beta_p(\overline{R_m} - \overline{RFR})]$$

Where, $\overline{R_p}$ refers to the average rate of return for portfolio during specified time period; $\overline{RFR}$refers to the average rate of return on a risk-free investment during specified time period; βp refers to the slope of the fund's characteristics line during that time period; and $R\overline{m}$refers to the expected return on market portfolio of risky assets.

The output of Jensen measure has been presented in Table 7. From this table, it can be observed that all the ICB mutual funds have managed to generate positive excess return adjusted for market risk. Among the eight mutual funds 6th ICB mutual fund exhibits the highest value of Jensen Alpha. "Therefore, it may be said that 6th ICB mutual fund is the best performing mutual fund while 1st ICB mutual fund is the least performing."

Table 7 : Jensen Alpha for ICB Mutual Funds

Name	DGEN	Yearly Return	R_f	β	Jensen Alpha
1st ICB	14.19%	11.41%	5.5%	.29	0.0340
2nd ICB	14.19%	14.38%	5.5%	.35	0.0581
3rd ICB	14.19%	13.61%	5.5%	.26	0.0588
4th ICB	14.19%	13.60%	5.5%	.34	0.0519
5th ICB	14.19%	15.90%	5.5%	.42	0.0679
6th ICB	14.19%	17.65%	5.5%	.53	0.0755
7th ICB	14.19%	13.60%	5.5%	.25	0.0590
8th ICB	14.19%	13.89%	5.5%	.46	0.0436

iv. *Fama Decomposition*

Fama's Decomposition is used to finely breakdown the portfolio performance. The overall performance of a portfolio has measured by Fama's Decomposition i.e. excess return from a portfolio. Alternatively, overall performance will be equivalent to the total of portfolio risk and selectivity. Here, the selectivity component represents the portion of the portfolio's actual return beyond that available to an unmanaged portfolio with same systematic risk.

v. *Fama's Decomposition of Risk*

Fama's Decomposition of Risk of this study is defined by:

$$RP_{Risk} = \beta_p(R_m - RFR)$$

Where, $RPRisk$ refers to the portion of portfolio's excess return due to risk taking; βp refers to systematic risk of the portfolio; Rm refers to the expected return on market portfolio of risky assets; and RFR refers to the average rate of return on a risk-free investment during the time period.

However, Fama's Decomposition of Risk is presented in Table 8. From this table, it can be observed that 6th ICB mutual fund exhibits highest excess return due to risk taking.

Table 8 : Fama's Decomposition of Risk for ICB Mutual Funds

Name	R_m	R_f	β_p	RP_{Risk}
1st ICB	14.19%	5.49%	0.29	2.53%
2nd ICB	14.19%	5.49%	0.35	3.08%
3rd ICB	14.19%	5.49%	0.26	2.24%
4th ICB	14.19%	5.49%	0.34	2.93%
5th ICB	14.19%	5.49%	0.42	3.62%
6th ICB	14.19%	5.49%	0.53	4.61%
7th ICB	14.19%	5.49%	0.25	2.22%
8th ICB	14.19%	5.49%	0.46	4.04%

vi. *Fama's Decomposition of Selectivity*

The portion of excess return that cannot explain the portfolio beta and market risk premium refers to selectivity. However, Fama's Decomposition of Selectivity of this study is defined by:

$$RP_{Selectivity} = RP_{Total} - \beta_p(R_m - RFR)$$

Where, $RPSelectivity$ refers to the portion of portfolio's excess return due to superior security selection; $RPTotal$refers to total excess return the of the portfolio; and βp, Rm, and RFR are as same as they were in Fama's Decomposition of Risk.

However, Fama's Decomposition of Selectivity is presented in Table 9. From this table, it can be seen that 6th ICB mutual fund exhibits the highest selectivity due to superior security selection.

Table 9 : Fama's Decomposition of Selectivity for ICB Mutual Funds

Name	R_p	R_f	RP_{Risk}	RP_{Total}	$RP_{Selectivity}$
1st ICB	11.4%	5.5%	2.5%	5.9%	3.4%
2nd ICB	14.4%	5.5%	3.1%	8.9%	5.8%
3rd ICB	13.6%	5.5%	2.2%	8.1%	5.9%
4th ICB	13.6%	5.5%	2.9%	8.1%	5.2%
5th ICB	15.9%	5.5%	3.6%	10.4%	6.8%
6th ICB	17.6%	5.5%	4.6%	12.2%	7.5%
7th ICB	13.6%	5.5%	2.2%	8.1%	5.9%
8th ICB	13.9%	5.5%	4.0%	8.4%	4.4%

vii. *Fama's Decomposition of Diversification*

Fama's Decomposition of Diversification measures the difference between the return that should be earned according to the CML and the return that should be earned according to the SML. However, Fama's Decomposition of Diversification of this study is defined by:

$$RP_{Diversification} = (R_m - RFR)\left(\frac{\sigma_p}{\sigma_m} - \beta_p\right)$$

Where, βp, Rm, and RFR are as same as they were in Fama's Decomposition of Risk; σp refers to the standard deviation of the specific mutual fund; and σm refers to the standard deviation of the market.

However, Fama's Decomposition of Diversification is presented in Table 10. From this table, it could be observed that 6th ICB mutual fund exhibits the highest diversification.

Table 10 : Fama's Decomposition of Diversification for ICB Mutual Funds

Name	R_m	R_f	β_p	σ_p	σ_m	$RP_{Diversification}$
1st ICB	14.19%	5.49%	29.03%	20.69%	7.95%	20.14%
2nd ICB	14.19%	5.49%	35.38%	23.98%	7.95%	23.19%
3rd ICB	14.19%	5.49%	25.77%	22.70%	7.95%	22.62%
4th ICB	14.19%	5.49%	33.61%	22.60%	7.95%	21.83%
5th ICB	14.19%	5.49%	41.57%	22.83%	7.95%	21.38%
6th ICB	14.19%	5.49%	52.95%	33.32%	7.95%	31.89%
7th ICB	14.19%	5.49%	25.45%	23.32%	7.95%	23.32%
8th ICB	14.19%	5.49%	46.40%	24.46%	7.95%	22.75%

viii. *Fama's Decomposition of Net Selectivity*

Fama's Decomposition of Net Selectivity measures how much of the risk premium comes from the ability to select stocks. Alternatively, Net Selectivity is used to measure how well a portfolio manager performed at earning return through the portfolio's systematic risk and how well a portfolio manager carried out at diversifying unsystematic risk. However, Fama's Decomposition of Net Selectivity is presented in Table 11.

Table 11 : Net Selectivity for ICB Mutual Funds

Name	$RP_{Selectivity}$	$RP_{Diversification}$	Net Selectivity
1st ICB	3.40%	20.14%	-16.74%
2nd ICB	5.81%	23.19%	-17.39%
3rd ICB	5.88%	22.62%	-16.74%
4th ICB	5.19%	21.83%	-16.64%
5th ICB	6.79%	21.38%	-14.59%
6th ICB	7.55%	31.89%	-24.34%
7th ICB	5.90%	23.32%	-17.43%
8th ICB	4.36%	22.75%	-18.39%

From this table, it can be observed that all the mutual funds of ICB have negative Net Selectivity. From this finding, it can be inferred that the portfolio managers of ICB fail to diversify away the unsystematic risk properly through their portfolio selection ability.

V. Conclusion

In light of these analysis above, this study has endeavoured to understand the operations and management of Investment Corporation of Bangladesh. Investment Corporation of Bangladesh (ICB) has come up to create new investment opportunities by issuing mutual funds in the capital market. As a state-owned investment bank, ICB played a critical role in accelerating the pace of industrialization and developing a capital vibrant market. ICB helped organizations and individuals to support their equity needs through its mutual funds. Although there remains much debate concerning the performance measurement of mutual funds, this study endeavoured to address this issue by measuring the performance of mutual funds managed by ICB through Treynor Index, Sharpe Index, Jensen Alpha, and Fama Decomposition. The findings reported in this study clearly indicate that there remain several shortcomings in managing the portfolios by the portfolio managers of ICB. Although there are some shortcomings but the area of operations and scope of activities have been narrowed down with the creation of Capital Market Development Program (CMDP).

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Efficiency of Islamic Financial Institutions

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Abstract- Islamic finance is an ethical finance because it encouraged investment in sectors socially responsible. It prohibits investment in the illicit sectors and supports the distribution of profits and losses. In this study, we investigated the efficiency of 21 Islamic banks around the world over a period of five years ranging from 2010 to 2014. We use in this context the ESOP, ROAE, Ooi, CTI, denies understanding overall profitability and the method of wrapping the data (DEA) to calculate efficiency scores.

Keywords: efficiency, Islamic banks, ratio analysis, DEA.

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EFFICIENCYOFISLAMICFINANCIALINSTITUTIONS

Strictly as per the compliance and regulations of:

Efficiency of Islamic Financial Institutions

Sirine Gha [α] & Nejia Nekâa [σ]

Summary- The Islamic finance constitutes an ethical finance saw that it encourages on investment in sectors socially responsible. It prohibits the investment in the areas of illicit and supports the distribution of profits and losses. In this study, we have studied the efficiency of 21 Islamic banks on a global scale in a period of 5 years from 2010 to 2014. We use in this context the following ratios ESOP, ROAE, Ooi, CTI, denies apprehending the overall profitability and the method of the wrapping of the data (DEA) to calculate the scores of efficiency.

Keywords: efficiency, Islamic banks, analysis by ratios, DEA.

Abstract- Islamic finance is an ethical finance because it encouraged investment in sectors socially responsible. It prohibits investment in the illicit sectors and supports the distribution of profits and losses. In this study, we investigated the efficiency of 21 Islamic banks around the world over a period of five years ranging from 2010 to 2014. We use in this context the ESOP, ROAE, Ooi, CTI, denies understanding overall profitability and the method of wrapping the data (DEA) to calculate efficiency scores.

Keywords: efficiency, Islamic banks, ratio analysis, DEA.

I. Introduction

Nevertheless, the Islamic finance remains for centuries; it has really begun its activity in 1963 with the birth of the First Islamic bank "Al MITGHAM". Other banks have been emerged in the 1970s with the occurrence of the organization of the Islamic Conference (OIC) namely Al Social Nassar Bank in 1971 and the Bank of Dubai in 1975 to count today more than 500 banks. Indeed, the Islamic finance is supported on the chariaa and therefore it prohibits the Riba, the gharare, the maysire and maintains the sharing of profits and losses. Thus, the Islamic finance is interested only to grant the means available to their jobs. In addition, the Islamic finance has exposed the interest of several researchers. Some have focused on the efficiency of Islamic banks; while others focused to a comparison between the Islamic banks and traditional banks.

Indeed, the efficiency is the reasonable use of available resources in order to achieve the targets set out in advance. In other words, it is the ability to achieve the goals collected while minimizing the means employed. To judge the stability of a firm, it is necessary to judge its productive performance and situate it in relation to its competitors. It is, therefore, to study the efficiency of this last and to examine the manner with which it manages its resources. Subsequently, the efficiency of a company is a topical theme, whatever the size or sector of activity. This is justified by the fact that the improvement of this efficiency involves various strengths to know: reduction of costs, improvement of the quality of product and services offered, gain a competitive advantage, and conquer new markets.

As well, there is a continuum of studies dealing with the efficiency and the performance of Islamic banks. And therefore the findings are mixed: sometimes in favor earlier to the disadvantage of the Islamic banking system.

In this framework, as an important pillar in the process of economic development, a fundamental question is exposed on the determination of level of efficiency or productivity of the Islamic banking sector. And therefore, we ask the following question: Islamic banks are -they technically efficient?

To answer this question, it is necessary, in a first time; throw a glance on the review of the literature concerning the efficiency of Islamic banks and to appeal to the different approaches of measures of technical efficiency in a second time.

II. Review of the Literature

Islamic banks are composed of a compliance board to the Chariaa whose role is to monitor the activities of the bank and to ratify its financial transactions based on the principles of the Islamic jurisprudence. As much, according to Iqbal (1997), a bank is so-called Islamic if some foundations are respected namely the prohibition of the interest (the Riba), the prohibition of excessive risk (Al-Gharar), the distribution of profits and losses, the support of real assets and the prohibition of activities illegitimate. These specificities of Islamic banks have captivated the reflection of researchers checking to study if in respecting the provenances of Islam, these financial institutions are they efficient.

The main products of Islamic banks are presented in the following table:

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Table 1 : The main products of Islamic Banks

Financial products	Characteristics
Moudharaba	A contract in which one of the Parties (the possessing of capital appointed rabal evil) provides the capital to another party (the contractor appointed Moudharib) which ensures the necessary work to use these funds.
Mousharaka	A contract for the participation of two or more parties in the capital and the management of a same case, it is a partnership with allocation of losses and profits.
Mourabaha	A contract of purchase and resale with a profit margin prefixed in advance, that is to say that the bank buys a supplier a tangible property at the request of its client, the well is resold to the customer at a price equal to the cost of purchase plus a margin.
Ijarah	A leasing contract or lease by which a bank buys a well for the completion of a project and the rents to a company for an amount and a maturity agreed.
Al-Istisnaa	Brings together the Moustasnii (invest isseur) and the Sanii (Contractor manufacturer) for the execution of a property for a fee payable in advance. The two parties will agree on the price and the time of delivery.
The Bai al-Salam	This technique is to pay in advance of goods predetermined. And the financial pays the price of the asset in advance for a delivery date deferred.
Qard-Hasan	It is a loan without interest often supported to a guarantee, granted by the Bank to its customers in order to cope with circumstances distinctive (death, marriage, child education….).
The Sukuks	Are an Islamic commitment backed by a tangible assets. They indicate a right of debt during a specified period and they are attached to investment funds where the risk and yields assistants are predefined.

In effect, the Bank Literature Analysis Two types of efficiency: the efficiency of scale and technical efficiency. First of all, the efficiency of scale is defined according to Yudistira (2004) as "the ratio between the cost and the volume of production of a bank". Similarly, Farell (1957) has distinguished between technical efficiency and allocative efficiency. With respect to technical efficiency, discerning its origin in the theoretical work of fundamental Debreu (1951), Koopmans (1951) and Farrell (1957), it is to seek the optimal output that can create according to a certain level of inputs. In other words, it is to achieve a certain level of output with a minimum of inputs. While a firm is called allocativement efficiently if it uses the programs of productions are less expensive and which ensure the profit the most high that is to say that it uses the inputs of production in the optimum proportions taking into account their market price.

On the empirical plan, a diversity of work are centralized on the study of the efficiency of Islamic banks based on multiple methods including the method of financial ratios, traditional non-parametric method (analysis of wrap data (DEA)) and the method parametric (analysis of the stochastic border (SFA)).

For the method non-parametric DEA has been developed by Farell (1957) in his article "The Measurent of productive efficiency". The DEA allows you to determine the maximum of inputs to inject into a mechanism of production beyond which the profit fall. It consists of user the mathematical programming to build a border in fractions (part-wise surface) based on a set of data of the production units. Of this fact, the efficiency of a unit of production is calculated by report to this border in fragments.

As to the stochastic approach, named yet" model to errors composed", is developed by Aigner, Lovell and Schmidt (1977), Meeusen and Van den Broek (1977). It decomposes the error term into two components: On the one hand, a component of inefficiency by report to the border that follows an asymmetrical distribution defined positively to a production function, and on the other hand, a component of random error representing the measurement errors and the exogenous shocks that follows a symmetrical distribution Normal.

In this context, based on the method of financial ratios traditional, Samad (2004), Hassan and Bashir (2005), Bader et al. (2008), Olson and ZOUBI (2008), Srairi and Kouki (2012), Beck et al. (2013) have assessed the efficiency of Islamic banks.

On the other hand, Sufian & Noor (2009) have studied the efficiency of Islamic banks in 16 countries of Asia, the Middle East and North Africa (MENA) for a period of 6 years from 2001 to 2006 using the method DEA. They concluded that the Islamic banks of the MENA region are more efficient than those Asian. As well, nor Hayati et al. (2011) have analyzed the efficiency of Islamic banks in 25 countries for the period from 2003 to 2009. They have noticed that the banks located in high-income countries are more efficient than their counterparts.

Still, in relying on the DEA, Al-Khasawneh et al. (2012) have appreciated the efficiency of a set of Islamic banks and conventional residing in North Africa. These authors have noticed that the Islamic banks are more efficient in terms of income. In the same furrow, Brown (2003) has analyzed the efficiency of Islamic banks in 19 countries in Asia, the Middle East and North Africa for the period 1998-2001. It was found that the Islamic banks Iranian, Yemeni and Brunei Darussalam are more efficient that the Islamic banks in Indonesia and Sudan. In their turn, Qureshi & Shaikh (2012) have found the efficiency of the Islamic banking sector in Pakistan during the period 2003-2008 and exposed that Islamic banks must be encouraged so that they can access the border efficiency.

Abdus Samad and Hassan (2000) are interested in the study of the efficiency of Islamic banks by putting the emphasis on the profitability, liquidity, and say banks by comparison to a group of banks conventional. They have guessed the results in favor of Islamic banks in terms of liquidity. On their part, Majid et al. (2003), at the base of the stochastic approach to border of cost, have studied the efficiency of Islamic banks in Malaysia during the period 1993-2000. They have concluded a lack of significant difference between the efficiency of Islamic banks and those conventional.

Similarly, according to the DEA, Hasan (2007) has shown that the Islamic banks Malaysian women are less efficient than conventional banks on the period ranging from 1995 to 2001. In effect, Johnes et al. (2009) have found that at the basis of the analysis by the ratios, Islamic banks are more efficient in terms of profit in relation to those conventional. In addition, Mokhtar et al. (2006) have studied the performance of Islamic Banks Malaysian women on a period of 7 years from 1997 to 2003 using the method SFA. They have noticed that the performance of Islamic banks has experienced a considerable growth but without reaching the level of the performance of conventional banks. Based on the same method, Pramuka (2011) has assessed the efficiency of Islamic banks in Indonesia for a period from 2003 to 2009 and has spread that the Islamic banks full part are more efficient than the banks to Islamic ATMS.

III. Framework of the Study

a) Presentation of the sample

The necessary information is collected via the annual reports of Islamic Banks sample of our study: six banks represent the Africa (Tunisia, the Sudan, Egypt, Senegal, Tanzania and the Nigiria), seven belong to Asia (Bangladesh, Malaysia, Pakistan, Brunei, Indonesia, Sri Lanka and Thailand), three in Europe (Switzerland, the United Kingdom and Turkey), and finally five located in Middle East (Saudi Arabia, Kuwait, Qatar, Dubai and the Emirates-Arabes-United). These data relate to a period of study extending from 2010 to 2014.

b) Research Methodology

In order to understand the efficiency of Islamic banks, we use jointly the analysis by the financial ratios and the method DEA.

- The method of financial ratios: According to Farell (1957), in order to assess the average productivity of banks, the founding chronic centralised on the analysis of the efficiency of the banks have had recourse to certain ratios to know the market share (Smirlock, 1985 and Evanoff & Fortier, 1988), ratios of profitability, efficiency, liquidity, etc... And this is to differentiate between conventional banks and Islamic banks (Olson & Zoubi, 2008) or either to compare the efficiency of different Islamic Banks (Qureshi & Shaikh, 2012).

The variables of the method of financial ratios are summarized in the following table:

Table 2 : Overview of the variables

Variable	Meaning	Definition
Size of the bank	Control Variable	Natural logarithm of the total of assets
Esop (Return on average asset)	Profit Efficiency	Net result/average total assets
ROAE (Return on average equity)		Net result/equity capital
OOI (other operating income)	Income efficiency	Other operating revenue/average total assets
Itcs (cost to income ratio)	Cost efficiency	Overhead/GNP
Denies (ratio Cost)		Other costs that interests/average total assets

- The method of DEA allows exploring the level of efficiency of a bank, over time, using the resources to achieve an output well determined. As well, prior to resorting to the DEA for the study of the efficiency of Islamic banks in our sample, we begin first of all by the exposure of our variables are summarized in the following table:

Table 3 : The variables in the DEA method

Inputs		Outputs	
Variable	Definition	Variable	Definition
T. Deposits	Total deposits and short-term financing: it is payments on the bank account (the deposits of the clientele and the amounts of the accounts of investment).	T. Loans	Total appropriations: C is the total of investments from the financial products Musharaka, Mourabaha Moudharaba, …etc.
F. Assets	Fixed Assets	Income	Total income: are products of banking operations, the income from the banking services and the commissions on these services and the revenues originating from financing and investment banking activities.
T. Exepenses	Total expenditures	O.E. Assets	Other profitable assets

IV. Interpretation of Results

a) *Analysis by the ratios*

The method of analysis by the ratios aims to clarify the level of the performance of a bank according to its capacity to operate revenues and to control costs.

To this effect, we use the test of Spearman correlation coefficient and the descriptive statistics in order to judge the performance of Islamic Banks object of our study.

- Correlation between variables

Table 4 : Correlation table

		Esop	Roae	Ooi	Itcs	The NTE
Esop	Correlation	1.0000				
Roae	Correlation	0.6285***	1.0000			
	Prob	0.0000				
Ooi	Correlation	-0.3573***	0.0670	1.0000		
	Prob	0.0002	0.4968			
Itcs	Correlation	0.1403	0.1222	-0.0392	1.0000	
	Prob	0.1535	0.2144	0.6915		
The NTE	Correlation	0.2700***	0.1753*	0.1828*	0.2140**	1.0000
	Prob	0.0053	0.0737	0.0619	0.0284	

* level 10%

** Level 5 and 10%

*** Level 1%, 5% and 10%

Based on the test results of the Spearman correlation coefficient, we see a relationship significantly negative between the performance of the average assets invested (ESOP) and efficiency income (OOI). While, the correlation between Efficiency Profit (measured by the performance of the own funds ROAE) and the efficiency income is significantly positive. However, concerning the ratio of efficiency cost (ITC) and the efficiency profit (ESOP and ROAE) are positively and significantly correlated. While, for the ratio denies this relationship is not significant. Thus, our results certify the idea obtained by Qureshi and Shaikh (2012) who have concluded a significant positive correlation between scores of efficiency and the two ratios of profit (ESOP and ROAE).

- Rank of banks according to the mean and standard deviation of the Ratios

Table 5 : Rankings of banks

Rank	According to the Average					According to the standard deviation				
Banks	ROAA	ROAE	OOI	CTI	NTE	ROAA	ROAE	OOI	CTI	NTE
Affin Bank (Malysie)	9	8	1	1	17	12	8	15	12	11
Al-I NMA Bank (Saudi Arabia)	2	9	1 2	10	21	15	18	18	15	17
Albaraka Sudan	8	10	13	7	12	14	17	21	18	12
Albaraka Tunisia	1	2	3	3	4	20	20	14	19	14
Albaraka Turkey	5	3	2	17	14	17	21	12	17	9
Albaraka (Egypt)	21	20	17	13	16	1	2	2	10	10
Amana (Tanzania)	13	18	7	19	13	2	3	4	5	1
Amana (Sri Lanka)	17	15	10	21	7	10	16	7	7	15
Bank Islam Brunei Darussalam	4	7	6	14	3	8	15	5	13	6
Bank Muamalat (Indonesia)	6	1	19	16	20	16	14	10	10	19
Islamic Bank of Senegal	3	5	16	15	8	6	6	3	6	2
Boubyan Bank (Kuwait)	15	13	9	5	15	5	9	16	4	13
Dar Al-Islamic Trust (Switzerland)	12	12	8	18	19	7	10	6	3	3
Dubai Islamic Bank	7	6	18	20	16	9	13	17	1	16
Emirates Islamic Bank	16	14	5	11	6	11	7	13	9	8
Emirates Global Islamic Bank Limited (Pakistan)	18	19	14	6	5	13	11	9	2	4
European Islamic Investment Bank (United Kingdom)	19	16	11	2	11	3	12	1	11	5
Islamic Bank Bangla-desh Limited	10	4	4	4	1	19	5	20	14	20
Islamic Bank of Thailand	14	21	20	12	2	17	4	19	8	7
Lotus Halal Capital Investments (Nigiria)	19	21	21	8	18	4	1	8	20	21
Qatar International Islamic Bank	11	11	15	9	9	18	19	11	21	18

Has the basis of the results of this table, we discern that the overall situation of the banks, the subject of our sample, is generally in degradation during the period of study with a few improvements relatively low. This is justified in large part by the consequences of the subprime crisis which has slightly affected the Islamic banks than those conventional.

However, despite the consequences of this situation, various banks including Albaraka Turkey, Dubai Islamic Bank, Islamic Bank of Senegal and Bank Muamalet Indonesia have experienced an improvement of indicators of their performance (ESOP, ROAE, OOI) while the ratios of efficiency cost (ITCS and denies) have experienced a decrease. By contrast, Albaraka Egypt, Amana Tanzania, Saudi Arabia Al-Inma, Dar Al-Islami Trust Switzerland, Emirates Global Islamic Bank Limited Pakistan, European Investment Bank United Kingdom, Boubyan Bank Kuwait, Lotus Halal Capital Investments Nigiria, Islamic Bank of Thailand and Islamic Bank Bangladesh Limited have been marked by a decrease in the ESOP and ROAE and an increase in other ratios. While, Affin Babk Malaysia and Bank Islam Brunei

Darussalam have been characterized by an improvement of these different ratios of profit, revenue and cost.

In effect, based on the classification by ratios of different banks, we note that Albaraka Tunis, Al-Inma Saudi Arabia, Islamic Bank of Senegal, Bank Islam Brunei Darussalam, Albaraka Turkey and Bank Muamalat Indonesia have captured the first rows in term of average of ratios profit, income and cost. As well, the banks of Nigiria, U.K., Tanzania, Egypt, Kuwait, Bangladesh, Qatar and Sudan occupy the last row in terms of efficiency benefit, revenue, and cost.

In addition, we can see that the banks having spent the first ranks in terms of profit are those which have managed to combine efficiency with income cost efficiency. Yet, the barriers of the overall efficiency of the Islamic financial institutions are justified by an institutional environment and culture not favorable to the development of Islamic banks, lack of the spirit of competitiveness, the lack of experience in the marketing of products and services appropriate to the Chariaa and/or poor management of costs.

b) The method of wrapping the data (DEA)

The DEA method is a technique of "benchmarking" where the scores of efficiency shall inform on the margin for improvement of efficiency in terms of the consumption of inputs and production of output. Therefore, the DEA is a tool to aid in the decision. It is, again, to a non-parametric method. She has known an exponential success since its appearance. Of this fact, Emrouznejad et al (2008) stipulate that more than 4000 research articles relating to this method have been published in scientific journals. As well, the approach DEA measure the efficiency based on a set of outputs and inputs. It is to measure the efficiency of a unit of decision by calculating the relative difference between the point representing its values of inputs and outputs observed by report to a hypothetical point on the border of production. In other words, the border of production is appreciated by a envelope curve formed segments of the right assembling the entities efficient. And therefore, all the points examined are placed on or under the Border of production.

In effect, the term efficiency refers to an optimal situation; that is to say a level of maximum output for a given level of input or a level of input minimum for a given level of output. In addition, the technical efficiency (TE) measure the ability to create the maximum amount of goods with a certain level offered to factors of production. In other words, it is the ability to use the minimum of factors of production in order to produce a given quantity of goods. In addition, technical efficiency defines the set of output and input in physical terms. And therefore three main types are to discern. First of all, the efficiency cost where the outputs are moderate in physical terms and the inputs in physical terms and monetary policy. Then, a efficiency income according to which the outputs are measured in physical terms and monetary policy and the inputs in physical terms. And finally, a profit efficiency where the outputs and inputs are expressed in physical terms and monetary policy.

In turn, the DEA method decomposes the technical efficiency in: Efficiency pure technique (TPE) and the efficiency of scale (SE), which is determined according to a model with yields of scale variables (increasing returns to scale or decreasing). Technical Efficiency pure relates to the inefficiency linked to a management perfectible; that is to say that a company is called inefficient if its management is perfectible and, therefore, the company is poorly managed. Whereas, the efficiency of scale refers to the inefficiencies linked to a size not optimal; that is to say a company is called inefficient if it has not reached its optimal size. In contrast, the yields of scale can be either croissants, called IRS so it is an economy of scale, either decreasing, designated DRS and it is in this case a diseconomy of scale.

In the light of the following table, we have determined the scores of efficiency via an Option DEA Where t=5 (the number of periods), p=3 (the width of the window) and W=3 (the number of windows).

Table 6 : The scores of efficiency

	Banks	Country	TE	TPE	SE	Return to scale
B1	Dubai Islamic Bank	Dubai	77.2%	81.7%	94.4%	DRS
B2	European Islamic Investment Bank	United Kingdom	18.8%	92.3%	20.4%	DRS
B3	Boubyan Bank	Kuwait	58.4%	66.8%	87.5%	DRS
B4	Islamic Bank of Senegal	Senegal	16.7%	84.3%	19.8%	DRS
B5	Islamic Bank Bangladesh Limited	Bangladesh	16.9%	75.1%	22.5%	DRS
B6	Albaraka	Sudan	54.3%	98%	55.4%	DRS
B7	Albaraka	Tunis	61.3%	90.5%	67.7%	DRS
B8	Lotus Halal Capital Investments	Nigiria	22.5%	100%	22.5%	DRS
B9	Affin Bank	Malaysia	6.4%	72.4%	8.9%	DRS
B10	Albaraka	Egypt	87%	88.8%	97.9 %	DRS

B11	Overall Emirates Islamic Bank Limited	Pakistan	80.2%	87.3%	91.9%	IRS
B12	Amana	Tanzania	100%	100%	100%	-
B13	Bank Islam Brunei Darussalam	Brunei	100%	100%	100%	-
B14	Dar Al-Islami Trust	Switzerland	100%	100%	100%	-
B15	Bank Muamalat	Indonesia	100%	100%	100%	-
B16	Amana	Sri Lanka	35.5%	100%	35.5%	IRS
B17	Al- Inma Bank	Saudi Arabia	97.72%	100%	97.72%	IRS
B18	Qatar International Islamic Bank	Qatar	100%	100%	100%	-
B19	Albaraka	Turkey	41.1%	61%	67.3%	IRS
B20	Emirates Islamic	Emirates	99.7%	100%	99.7%	DRS
B21	Islamic Bank of Thailand	Thailand	100%	100%	100%	-
Average			65.41%	90.39%	72.36%	

Note: TE = Technical Efficiency (model constant: CRS)
TPE = Technical Efficiency pure (model variable: VRS)
SE= efficiency of scale = Te / TPE
VRS: a model of constant returns to scale and it is appropriate in cases where the banks operate at their optimum size (Charnes et al 1978).
DRS: A Performance Model of variable scale and it is appropriate if the banks have not reached their optimal size (Banker et al 1984).

The score of the technical efficiency average pure during the whole period of the study is to the order of 90.39% which means that the Islamic banks of our sample would have been able to create the same quantity of output operated with only 90.39% of worn inputs where a loss of 9.61% of resources. As well, we note that the average scores PTE exceed those of TE; this is explained by the fact that the PTE are the TE excluding any inefficiencies of scale. This conclusion is confirmed by that of Niazi (2003). Still a technical efficiency of 65.41% means that in total the Islamic banks can reduce all inputs of 34.59%. Similarly, a value of technical efficiency of pure 90.39% implies that a better management allows you to reduce the consumption of input of 9.61%.

Yet, for the banks of Pakistan and Turkey, in improving the way in which the banks are managed, respectively 12.7% and 39% of inputs can be saved. And by adjusting the size of the banks, the consumption of inputs can be reduced respectively of 8.1% and 32.7%. Similarly, for the Bank of Emirates, she is well managed since its technical efficiency pure reached a level of 100%. Of this fact, it cannot improve its efficiency pure. Therefore, the margin for improvement is located in an adjustment of its size in saving 0.3% of inputs. The same case for the banks of Dubai, Nigiria, Sri Lanka and Saudi Arabia who display a technical efficiency of pure 100%.

In addition, in order to better identify the nature of the returns to scale and to explain the inefficiencies of scale if it exists, we have used on the same database another model NIRS (Non-Increasing Returns to Scale). Of this fact, if the CRS score is equal to the Score VRS, then the Bank operates with constant returns to scale (CRS), in other words, an increase of inputs is worth a corresponding increase of outputs (it is the case of Qatar International Bank, Amana Tanzania, Bank Islam Brunei Darussalam, Dar Al-Islam Switzerland and Bank Muamalat Indonesia).

Whereas, if the score CRS is different from the VRS score, therefore the Bank operates with yields of scale variables (VRS) which means that an increase in inputs should be an unequal increase of outputs. And therefore, the yields of scale can be croissants (IRS: increasing returns to scale) if the increase in outputs exceeds the inputs, or descending (DRS: decreasing returns to scale) in the case where the increase in outputs does not exceed that of the inputs. Thus, to determine if it is of IRS or DRS, we supported on a comparison of scores to VRS NIRS scores. Of this fact, according Coelli et al. (1998), if the VRS score is equivalent to the Score NIRS, the Bank operates with decreasing returns to scale DRS. By contrast, if the score VRS is different from the NIRS score, the Bank operates with increasing returns to scale IRS.

Thus, we have compared the contribution of scores of technical efficiency pure (PTE) to the efficiency of scale is for the determination of technical efficiency (TE), we discern a domination of the technical inefficiency pure in report to the inefficiencies of scale for the following banks: "AL Baraka Tunisia", "Albaraka Sudan", "European Islamic Investment Bank United Kingdom", "Islamic Bank of Senegal", "Islamic Bank Bangladesh Limited" and "Affin Bank Malaysia". This justifies a inefficient management of these banks concerning the exploitation of these resources despite the fact that they operate on a scale relatively optimal.

In effect, these inefficient banks throughout the period and operate with decreasing returns to scale. As to "Emirates Global Islamic Bank Limited Pakistan", "Emirates Islamic" and "Al-Inma Saudi Arabia", they are also inefficient on the entire period but operate with increasing returns to scale. Whereas, "Qatar National Islamic Bank", "Islamic Bank of Thailand", "Bank Muamalat Indonesia", "Dar Al-Islam Swiss Trust", "Bank Islam Brunei Darussalam" and "Amana Tanzania " prove efficient. Yet, Srairi and Kouki (2012) stipulate that small banks tend to operate in CRS or IRS with banks of large size extend to operate in CRS or DRS. This conclusion is adequate to our achievements as the banks of our sample operating in IRS are of small sizes (depending on the natural logarithm of the total active) from banks of large size operating in DRS.

V. Conclusion

Islamic finance is today an important growth across the world and is becoming more and more necessary as a competitor of the finance the so-called "conventional". It is for this reason, this paper represents a study of the efficiency of a sample of a few Islamic banks on a global scale. This study is interested in 21 Islamic banks whose data have been gathered at the basis of the annual reports of the banks over a period extending from 2010 to 2014. Our conclusions are based on the outputs of two methods: the method of financial ratios and to the method DEA.

This work would allow practitioners, through the evaluation of the performance of the Islamic banking sector to undertake the necessary corrective action in the event of under-performance and contribute to a better allocation of financial resources; and the results that are derived could thus constitute a tool to help the decision making for the monetary authorities having recently introduced products and islamic banking.

In the light of the method of analysis by the ratios, we discern Albaraka Tunis, Al-Inma Saudi Arabia, Islamic Bank of Senegal, Bank Islam Brunei Darussalam, Albaraka Turkey and Bank Muamalat Indonesia has monopolized the first positions in term of average of ratios ROAE, ITCS and NTE. As much, the banks of Nigiria, U.K., Tanzania, Egypt and Kuwait must their first ranks in terms of efficiency in terms of standard deviation. With regard to the banks of Bangladesh, Qatar and Sudan have dedicated the last row in terms of efficiency benefit, revenue, and cost.

Similarly, the test of Spearman correlation has allowed us to find that the analysis by the ratios and the DEA lead to concordant results. As well, these two methods are complementary.

In effect, the method DEA presents interesting outcomes: the majority of banks in our sample are technically inefficient, with an average loss of 9.61% of inputs to the production of the same level of output to the exception of "Qatar International Islamic Bank", "Islamic Bank of Thailand", "Bank Muamalat Indonesia", "Dar Al-Islam Swiss Trust", "Bank Islam Brunei Darussalam" and "Amana Tanzania". Of course, the results and conclusions acquired at the end of this work are approvable only for the sample and the period in question. However, this work may constitute a starting point for other subsequent studies in what it would be advisable to introduce other variables of efficiencies.

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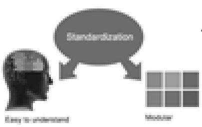

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Institutional Fellow of Open Association of Research Society (USA)-OARS (USA)

Global Journals Incorporation (USA) is accredited by Open Association of Research Society, U.S.A (OARS) and in turn, affiliates research institutions as "Institutional Fellow of Open Association of Research Society" (IFOARS).

The "FARSC" is a dignified title which is accorded to a person's name viz. Dr. John E. Hall, Ph.D., FARSC or William Walldroff, M.S., FARSC.

The IFOARS institution is entitled to form a Board comprised of one Chairperson and three to five board members preferably from different streams. The Board will be recognized as "Institutional Board of Open Association of Research Society"-(IBOARS).

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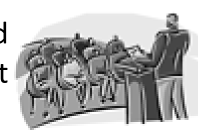
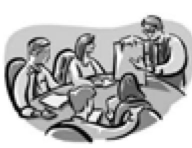
The IBOARS can initially review research papers of their institute and recommend them to publish with respective journal of Global Journals. It can also review the papers of other institutions after obtaining our consent. The second review will be done by peer reviewer of Global Journals Incorporation (USA) The Board is at liberty to appoint a peer reviewer with the approval of chairperson after consulting us.
The author fees of such paper may be waived off up to 40%.



The Global Journals Incorporation (USA) at its discretion can also refer double blind peer reviewed paper at their end to the board for the verification and to get recommendation for final stage of acceptance of publication.



The IBOARS can organize symposium/seminar/conference in their country on behalf of Global Journals Incorporation (USA)-OARS (USA). The terms and conditions can be discussed separately.

The Board can also play vital role by exploring and giving valuable suggestions regarding the Standards of "Open Association of Research Society, U.S.A (OARS)" so that proper amendment can take place for the benefit of entire research community. We shall provide details of particular standard only on receipt of request from the Board.

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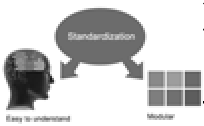
We shall provide you intimation regarding launching of e-version of journal of your stream time to time. This may be utilized in your library for the enrichment of knowledge of your students as well as it can also be helpful for the concerned faculty members.



After nomination of your institution as “Institutional Fellow” and constantly functioning successfully for one year, we can consider giving recognition to your institute to function as Regional/Zonal office on our behalf.
The board can also take up the additional allied activities for betterment after our consultation.

The following entitlements are applicable to individual Fellows:

Open Association of Research Society, U.S.A (OARS) By-laws states that an individual Fellow may use the designations as applicable, or the corresponding initials. The Credentials of individual Fellow and Associate designations signify that the individual has gained knowledge of the fundamental concepts. One is magnanimous and proficient in an expertise course covering the professional code of conduct, and follows recognized standards of practice.

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Note :

"

- In future, if the board feels the necessity to change any board member, the same can be done with the consent of the chairperson along with anyone board member without our approval.
- In case, the chairperson needs to be replaced then consent of 2/3rd board members are required and they are also required to jointly pass the resolution copy of which should be sent to us. In such case, it will be compulsory to obtain our approval before replacement.
- In case of "Difference of Opinion [if any]" among the Board members, our decision will be final and binding to everyone.

"

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The paper should be in proper format. The format can be downloaded from first page of 'Author Guideline' Menu. The Author is expected to follow the general rules as mentioned in this menu. The paper should be written in MS-Word Format (*.DOC,*.DOCX).

The Author can submit the paper either online or offline. The authors should prefer online submission.Online Submission: There are three ways to submit your paper:

(A) (I) First, register yourself using top right corner of Home page then Login. If you are already registered, then login using your username and password.

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1. General,

2. Ethical Guidelines,

3. Submission of Manuscripts,

4. Manuscript’s Category,

5. Structure and Format of Manuscript,

6. After Acceptance.

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The recommended size of original research paper is less than seven thousand words, review papers fewer than seven thousands words also.Preparation of research paper or how to write research paper, are major hurdle, while writing manuscript. The research articles and research letters should be fewer than three thousand words, the structure original research paper; sometime review paper should be as follows:

Papers: These are reports of significant research (typically less than 7000 words equivalent, including tables, figures, references), and comprise:

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(f) Results should be presented concisely, by well-designed tables and/or figures; the same data may not be used in both; suitable statistical data should be given. All data must be obtained with attention to numerical detail in the planning stage. As reproduced design has been recognized to be important to experiments for a considerable time, the Editor has decided that any paper that appears not to have adequate numerical treatments of the data will be returned un-refereed;

(g) Discussion should cover the implications and consequences, not just recapitulating the results; conclusions should be summarizing.

(h) Brief Acknowledgements.

(i) References in the proper form.

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Metric SI units are supposed to generally be used excluding where they conflict with current practice or are confusing. For illustration, 1.4 l rather than 1.4 × 10-3 m3, or 4 mm somewhat than 4 × 10-3 m. Chemical formula and solutions must identify the form used, e.g. anhydrous or hydrated, and the concentration must be in clearly defined units. Common species names should be followed by underlines at the first mention. For following use the generic name should be constricted to a single letter, if it is clear.

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Keywords are the key that opens a door to research work sources. Keyword searching is an art in which researcher's skills are bound to improve with experience and time.

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References

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20. Use good quality grammar: Always use a good quality grammar and use words that will throw positive impact on evaluator. Use of good quality grammar does not mean to use tough words, that for each word the evaluator has to go through dictionary. Do not start sentence with a conjunction. Do not fragment sentences. Eliminate one-word sentences. Ignore passive voice. Do not ever use a big word when a diminutive one would suffice. Verbs have to be in agreement with their subjects. Prepositions are not expressions to finish sentences with. It is incorrect to ever divide an infinitive. Avoid clichés like the disease. Also, always shun irritating alliteration. Use language that is simple and straight forward. put together a neat summary.

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24. Never copy others' work: Never copy others' work and give it your name because if evaluator has seen it anywhere you will be in trouble.

25. Take proper rest and food: No matter how many hours you spend for your research activity, if you are not taking care of your health then all your efforts will be in vain. For a quality research, study is must, and this can be done by taking proper rest and food.

26. Go for seminars: Attend seminars if the topic is relevant to your research area. Utilize all your resources.

27. Refresh your mind after intervals: Try to give rest to your mind by listening to soft music or by sleeping in intervals. This will also improve your memory.

28. Make colleagues: Always try to make colleagues. No matter how sharper or intelligent you are, if you make colleagues you can have several ideas, which will be helpful for your research.

29. Think technically: Always think technically. If anything happens, then search its reasons, its benefits, and demerits.

30. Think and then print: When you will go to print your paper, notice that tables are not be split, headings are not detached from their descriptions, and page sequence is maintained.

31. Adding unnecessary information: Do not add unnecessary information, like, I have used MS Excel to draw graph. Do not add irrelevant and inappropriate material. These all will create superfluous. Foreign terminology and phrases are not apropos. One should NEVER take a broad view. Analogy in script is like feathers on a snake. Not at all use a large word when a very small one would be sufficient. Use words properly, regardless of how others use them. Remove quotations. Puns are for kids, not grunt readers. Amplification is a billion times of inferior quality than sarcasm.

32. Never oversimplify everything: To add material in your research paper, never go for oversimplification. This will definitely irritate the evaluator. Be more or less specific. Also too, by no means, ever use rhythmic redundancies. Contractions aren't essential and shouldn't be there used. Comparisons are as terrible as clichés. Give up ampersands and abbreviations, and so on. Remove commas, that are, not necessary. Parenthetical words however should be together with this in commas. Understatement is all the time the complete best way to put onward earth-shaking thoughts. Give a detailed literary review.

33. Report concluded results: Use concluded results. From raw data, filter the results and then conclude your studies based on measurements and observations taken. Significant figures and appropriate number of decimal places should be used. Parenthetical remarks are prohibitive. Proofread carefully at final stage. In the end give outline to your arguments. Spot out perspectives of further study of this subject. Justify your conclusion by at the bottom of them with sufficient justifications and examples.

34. After conclusion: Once you have concluded your research, the next most important step is to present your findings. Presentation is extremely important as it is the definite medium though which your research is going to be in print to the rest of the crowd. Care should be taken to categorize your thoughts well and present them in a logical and neat manner. A good quality research paper format is essential because it serves to highlight your research paper and bring to light all necessary aspects in your research.

Informal Guidelines of Research Paper Writing

Key points to remember:

- Submit all work in its final form.
- Write your paper in the form, which is presented in the guidelines using the template.
- Please note the criterion for grading the final paper by peer-reviewers.

Final Points:

A purpose of organizing a research paper is to let people to interpret your effort selectively. The journal requires the following sections, submitted in the order listed, each section to start on a new page.

The introduction will be compiled from reference matter and will reflect the design processes or outline of basis that direct you to make study. As you will carry out the process of study, the method and process section will be constructed as like that. The result segment will show related statistics in nearly sequential order and will direct the reviewers next to the similar intellectual paths throughout the data that you took to carry out your study. The discussion section will provide understanding of the data and projections as to the implication of the results. The use of good quality references all through the paper will give the effort trustworthiness by representing an alertness of prior workings.

Writing a research paper is not an easy job no matter how trouble-free the actual research or concept. Practice, excellent preparation, and controlled record keeping are the only means to make straightforward the progression.

General style:

Specific editorial column necessities for compliance of a manuscript will always take over from directions in these general guidelines.

To make a paper clear

· Adhere to recommended page limits

Mistakes to evade

- Insertion a title at the foot of a page with the subsequent text on the next page
- Separating a table/chart or figure - impound each figure/table to a single page
- Submitting a manuscript with pages out of sequence

In every sections of your document

· Use standard writing style including articles ("a", "the," etc.)

· Keep on paying attention on the research topic of the paper

· Use paragraphs to split each significant point (excluding for the abstract)

· Align the primary line of each section

· Present your points in sound order

· Use present tense to report well accepted

· Use past tense to describe specific results

· Shun familiar wording, don't address the reviewer directly, and don't use slang, slang language, or superlatives

· Shun use of extra pictures - include only those figures essential to presenting results

Title Page:

Choose a revealing title. It should be short. It should not have non-standard acronyms or abbreviations. It should not exceed two printed lines. It should include the name(s) and address (es) of all authors.

Abstract:

The summary should be two hundred words or less. It should briefly and clearly explain the key findings reported in the manuscript--must have precise statistics. It should not have abnormal acronyms or abbreviations. It should be logical in itself. Shun citing references at this point.

An abstract is a brief distinct paragraph summary of finished work or work in development. In a minute or less a reviewer can be taught the foundation behind the study, common approach to the problem, relevant results, and significant conclusions or new questions.

Write your summary when your paper is completed because how can you write the summary of anything which is not yet written? Wealth of terminology is very essential in abstract. Yet, use comprehensive sentences and do not let go readability for briefness. You can maintain it succinct by phrasing sentences so that they provide more than lone rationale. The author can at this moment go straight to shortening the outcome. Sum up the study, with the subsequent elements in any summary. Try to maintain the initial two items to no more than one ruling each.

- Reason of the study - theory, overall issue, purpose
- Fundamental goal
- To the point depiction of the research
- Consequences, including definite statistics - if the consequences are quantitative in nature, account quantitative data; results of any numerical analysis should be reported
- Significant conclusions or questions that track from the research(es)

Approach:

- Single section, and succinct
- As a outline of job done, it is always written in past tense
- A conceptual should situate on its own, and not submit to any other part of the paper such as a form or table
- Center on shortening results - bound background information to a verdict or two, if completely necessary
- What you account in an conceptual must be regular with what you reported in the manuscript
- Exact spelling, clearness of sentences and phrases, and appropriate reporting of quantities (proper units, important statistics) are just as significant in an abstract as they are anywhere else

Introduction:

The **Introduction** should "introduce" the manuscript. The reviewer should be presented with sufficient background information to be capable to comprehend and calculate the purpose of your study without having to submit to other works. The basis for the study should be offered. Give most important references but shun difficult to make a comprehensive appraisal of the topic. In the introduction, describe the problem visibly. If the problem is not acknowledged in a logical, reasonable way, the reviewer will have no attention in your result. Speak in common terms about techniques used to explain the problem, if needed, but do not present any particulars about the protocols here. Following approach can create a valuable beginning:

- Explain the value (significance) of the study
- Shield the model - why did you employ this particular system or method? What is its compensation? You strength remark on its appropriateness from a abstract point of vision as well as point out sensible reasons for using it.
- Present a justification. Status your particular theory (es) or aim(s), and describe the logic that led you to choose them.
- Very for a short time explain the tentative propose and how it skilled the declared objectives.

Approach:

- Use past tense except for when referring to recognized facts. After all, the manuscript will be submitted after the entire job is done.
- Sort out your thoughts; manufacture one key point with every section. If you make the four points listed above, you will need a least of four paragraphs.

- Present surroundings information only as desirable in order hold up a situation. The reviewer does not desire to read the whole thing you know about a topic.
- Shape the theory/purpose specifically - do not take a broad view.
- As always, give awareness to spelling, simplicity and correctness of sentences and phrases.

Procedures (Methods and Materials):

This part is supposed to be the easiest to carve if you have good skills. A sound written Procedures segment allows a capable scientist to replacement your results. Present precise information about your supplies. The suppliers and clarity of reagents can be helpful bits of information. Present methods in sequential order but linked methodologies can be grouped as a segment. Be concise when relating the protocols. Attempt for the least amount of information that would permit another capable scientist to spare your outcome but be cautious that vital information is integrated. The use of subheadings is suggested and ought to be synchronized with the results section. When a technique is used that has been well described in another object, mention the specific item describing a way but draw the basic principle while stating the situation. The purpose is to text all particular resources and broad procedures, so that another person may use some or all of the methods in one more study or referee the scientific value of your work. It is not to be a step by step report of the whole thing you did, nor is a methods section a set of orders.

Materials:

- Explain materials individually only if the study is so complex that it saves liberty this way.
- Embrace particular materials, and any tools or provisions that are not frequently found in laboratories.
- Do not take in frequently found.
- If use of a definite type of tools.
- Materials may be reported in a part section or else they may be recognized along with your measures.

Methods:

- Report the method (not particulars of each process that engaged the same methodology)
- Describe the method entirely
- To be succinct, present methods under headings dedicated to specific dealings or groups of measures
- Simplify - details how procedures were completed not how they were exclusively performed on a particular day.
- If well known procedures were used, account the procedure by name, possibly with reference, and that's all.

Approach:

- It is embarrassed or not possible to use vigorous voice when documenting methods with no using first person, which would focus the reviewer's interest on the researcher rather than the job. As a result when script up the methods most authors use third person passive voice.
- Use standard style in this and in every other part of the paper - avoid familiar lists, and use full sentences.

What to keep away from

- Resources and methods are not a set of information.
- Skip all descriptive information and surroundings - save it for the argument.
- Leave out information that is immaterial to a third party.

Results:

The principle of a results segment is to present and demonstrate your conclusion. Create this part a entirely objective details of the outcome, and save all understanding for the discussion.

The page length of this segment is set by the sum and types of data to be reported. Carry on to be to the point, by means of statistics and tables, if suitable, to present consequences most efficiently.You must obviously differentiate material that would usually be incorporated in a study editorial from any unprocessed data or additional appendix matter that would not be available. In fact, such matter should not be submitted at all except requested by the instructor.

Content

- Sum up your conclusion in text and demonstrate them, if suitable, with figures and tables.
- In manuscript, explain each of your consequences, point the reader to remarks that are most appropriate.
- Present a background, such as by describing the question that was addressed by creation an exacting study.
- Explain results of control experiments and comprise remarks that are not accessible in a prescribed figure or table, if appropriate.
- Examine your data, then prepare the analyzed (transformed) data in the form of a figure (graph), table, or in manuscript form.

What to stay away from

- Do not discuss or infer your outcome, report surroundings information, or try to explain anything.
- Not at all, take in raw data or intermediate calculations in a research manuscript.
- Do not present the similar data more than once.
- Manuscript should complement any figures or tables, not duplicate the identical information.
- Never confuse figures with tables - there is a difference.

Approach

- As forever, use past tense when you submit to your results, and put the whole thing in a reasonable order.
- Put figures and tables, appropriately numbered, in order at the end of the report
- If you desire, you may place your figures and tables properly within the text of your results part.

Figures and tables

- If you put figures and tables at the end of the details, make certain that they are visibly distinguished from any attach appendix materials, such as raw facts
- Despite of position, each figure must be numbered one after the other and complete with subtitle
- In spite of position, each table must be titled, numbered one after the other and complete with heading
- All figure and table must be adequately complete that it could situate on its own, divide from text

Discussion:

The Discussion is expected the trickiest segment to write and describe. A lot of papers submitted for journal are discarded based on problems with the Discussion. There is no head of state for how long a argument should be. Position your understanding of the outcome visibly to lead the reviewer through your conclusions, and then finish the paper with a summing up of the implication of the study. The purpose here is to offer an understanding of your results and hold up for all of your conclusions, using facts from your research and generally accepted information, if suitable. The implication of result should be visibly described. Infer your data in the conversation in suitable depth. This means that when you clarify an observable fact you must explain mechanisms that may account for the observation. If your results vary from your prospect, make clear why that may have happened. If your results agree, then explain the theory that the proof supported. It is never suitable to just state that the data approved with prospect, and let it drop at that.

- Make a decision if each premise is supported, discarded, or if you cannot make a conclusion with assurance. Do not just dismiss a study or part of a study as "uncertain."
- Research papers are not acknowledged if the work is imperfect. Draw what conclusions you can based upon the results that you have, and take care of the study as a finished work
- You may propose future guidelines, such as how the experiment might be personalized to accomplish a new idea.
- Give details all of your remarks as much as possible, focus on mechanisms.
- Make a decision if the tentative design sufficiently addressed the theory, and whether or not it was correctly restricted.
- Try to present substitute explanations if sensible alternatives be present.
- One research will not counter an overall question, so maintain the large picture in mind, where do you go next? The best studies unlock new avenues of study. What questions remain?
- Recommendations for detailed papers will offer supplementary suggestions.

Approach:

- When you refer to information, differentiate data generated by your own studies from available information
- Submit to work done by specific persons (including you) in past tense.
- Submit to generally acknowledged facts and main beliefs in present tense.

Please carefully note down following rules and regulation before submitting your Research Paper to Global Journals Inc. (US):

Segment Draft and Final Research Paper: You have to strictly follow the template of research paper. If it is not done your paper may get rejected.

- The **major constraint** is that you must independently make all content, tables, graphs, and facts that are offered in the paper. You must write each part of the paper wholly on your own. The Peer-reviewers need to identify your own perceptive of the concepts in your own terms. NEVER extract straight from any foundation, and never rephrase someone else's analysis.

- Do not give permission to anyone else to "PROOFREAD" your manuscript.

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- To guard yourself and others from possible illegal use please do not permit anyone right to use to your paper and files.

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Topics	Grades		
	A-B	**C-D**	**E-F**
Abstract	Clear and concise with appropriate content, Correct format. 200 words or below	Unclear summary and no specific data, Incorrect form Above 200 words	No specific data with ambiguous information Above 250 words
Introduction	Containing all background details with clear goal and appropriate details, flow specification, no grammar and spelling mistake, well organized sentence and paragraph, reference cited	Unclear and confusing data, appropriate format, grammar and spelling errors with unorganized matter	Out of place depth and content, hazy format
Methods and Procedures	Clear and to the point with well arranged paragraph, precision and accuracy of facts and figures, well organized subheads	Difficult to comprehend with embarrassed text, too much explanation but completed	Incorrect and unorganized structure with hazy meaning
Result	Well organized, Clear and specific, Correct units with precision, correct data, well structuring of paragraph, no grammar and spelling mistake	Complete and embarrassed text, difficult to comprehend	Irregular format with wrong facts and figures
Discussion	Well organized, meaningful specification, sound conclusion, logical and concise explanation, highly structured paragraph reference cited	Wordy, unclear conclusion, spurious	Conclusion is not cited, unorganized, difficult to comprehend
References	Complete and correct format, well organized	Beside the point, Incomplete	Wrong format and structuring

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