ABSTRACT

This paper aims to investigate whether the bank-specific determinants affect the profitability of Jordanian Islamic banks. In order to answer the question of the study, and achieve its objectives, the unbalanced panel data linear regression model has been used to analyze the cross-section time series data to determine the internal determinants of Islamic banks profitability. Utilizing bank level data, the study examines two alternative measures of profitability of Islamic banks between 2000 and 2010. A variety of internal and external banking determinants were used to predict profitability. In general, our analysis of determinants of Islamic banks’ profitability confirms previous findings. Controlling with industry-specific and macro-economic environment, the results indicate that well-capitalized banks, well-efficient management and higher credit risk lead to higher return on assets. Another finding is that the credit risk, the efficiency of managements, and efficient management of operating expenses positively and significantly affects the profit margin of Jordanian Islamic Banks. The results also indicate that the impact of internal determinants of profitability is significantly different among Jordanian Islamic banks.

Key words: Bank-Specific Determinants, Islamic Banks, Profitability, Jordan

1. INTRODUCTION

Before the emergence of Islamic Banks several key factors made their appearance an inevitable fact. Some of these factors are the challenges of banking usury colonialism in Islamic countries, leading scholars of Islamic economics to focus on the practical application of the idea of Islamic banks. Also the Islamic banking industry has received increasing attention, as the importance of the role played by Islamic Banks has increased in the last decade after a global financial crisis, whereas Islamic banks were more resilient than traditional banks in the face of the crisis because Islamic banks do not adopt the speculation and focus on real banking investment. This evident through the increasing number of Islamic banks, the increasing value of their assets and the increasing of the demand for investment in Islamic financial instruments.

The Governor of Central Bank of Jordan at the Eighteenth Meeting of the Council of the Islamic Financial Services and the ninth meeting of the Assembly of the Council noted that the Islamic finance industry has reached currently to about 1 trillion U.S.D and has grown between 15 and 20% per annum and is expected to continue to grow up to 2 trillion U.S. dollars in the next few years. He added that this extraordinary growth in Islamic finance is not only limited to the Islamic World but also included most countries of the world, whereas there are now hundreds of Islamic financial institutions operating in over 40 countries around the world, and that many of the major banks have opened paths for Islamic finance.

Islamic Banks Began in Jordan three decades ago, and currently there are four Islamic Banks in Jordan with total assets of approximately 12.3% of the total assets of the Jordanian Banking Industry. These Banks possess about 14.1% of the total deposits of the Banking Industry and 17% of the total credit granted by the banking industry.

Achieving the maximum profit is one of the main objectives of the Islamic Banks, through maximizing the wealth of the owners of the Islamic Bank by achieving high returns on investments. This is not the target objective for the owners of the Bank only, but to the depositors as well, because they share their money on the basis of revenue sharing, and therefore increasing the returns on the funds would benefit the depositors as well. So, the study seeks to answer the following question: What are the Bank-specific determinants that affect the profitability of Islamic banks in Jordan?

This study aims to identify the factors that affect the profitability of Islamic Banks in general and Islamic Banks in Jordan in particular, with a particular focus on Bank-specific determinants, to help Islamic banks to improve their profitability by identifying the factors that affect it, and thus improving its competitive position with other traditional banks in order to promote the Islamic Banking Industry.

Accordingly, this study is of particular importance that stems from: First, the importance of the subject under study in terms of the increasing significant role played by Islamic banks locally and globally. Second, the importance of identifying the factors that positively and negatively affect the profitability of Islamic Banks in Jordan to enable their management to focus on the positive effects and mitigate the negative effects to maximize the wealth of the owners and the depositors of the banks; Third, this study is a complement and addition to the literature that examined the factors affecting the profitability of banks in general and Islamic Banks in particular.

The rest of the paper is organized in the following manner. Section 2 discusses the existing literature on Islamic banks profitability. Section 3 discusses the data, methodology and the estimation method. Section 4 presents the empirical results. Section 5 conclusions.
2. LITERATURE REVIEW

The identification of the factors that affect the profitability of traditional banks is one of the most important topics that interested the researchers in the field of banks, whereas the researchers could identify a set of internal and external determinants that affect statistical significance in the profitability of traditional banks. For Islamic banks, the researchers studied the impact of internal and external determinants of Islamic banks profitability, and these studies were able—despite the fact that they are limited—to determine some theories of the profitability of Islamic banks. These studies include Asma et al. (2011) which aimed to study the determinants of profitability of Islamic banks in Malaysia. The effect of a set of internal determinants where examined including Capital Adequacy, credit risk, liquidity of the bank, the bank’s size and management of expenses. The study has concluded that the bank's size is the only variable which statistically effects the profitability of Islamic banks in Malaysia.

Asma et al., (2011) aimed to study the determinants of profitability of Islamic banks in Malaysia. The effect of a set of internal determinants where examined including Capital Adequacy, credit risk, liquidity of the bank, the bank's size and management of expenses. The study has concluded that the bank's size is the only variable which statistically affects the profitability of Islamic banks in Malaysia.

A study by Izhar and Asutaya (2007) aimed to identify the determinants of profitability of Islamic banks in Indonesia. The study has concluded that the service activities (Non-interest earning) have no statistically significant effect on the profitability of Islamic banks in Indonesia. The result of this study has upheld the statistically significant positive relationship between inflation and profitability of Islamic banks.

Nor and Ahmad, (2004) sought to test the factors affecting the credit risk of Islamic banks in Malaysia. It has concluded that the management efficiency, risky assets ratio, and the volume of the assets of Islamic banks have a statistically significant effect on the credit risk of Islamic banks.

Bashir (2003) aimed to analyze the impact of internal variables and the economic environment on the performance of Islamic banks in the Middle East. The study has concluded a statistically significant positive relationship between the capital and the profitability of Islamic banks. The study also concluded that Islamic banks owned by foreigners are able to achieve profits more than the locally owned banks. The study also found that the impact of inflation is positive and statistically significant on the profitability of Islamic banks in the Middle East.

Hassan and Bashir (2003) examined the impact of Islamic banks’ factors on their profitability. The study found a positive statistically significant effect for the capital adequacy and loans activities ratio on the profitability of Islamic banks.

In his study, Haron (1996) aimed to identify some of the internal and external determinants of profitability of Islamic banks. His study concluded that the three types of deposits (current, savings, and investment) besides capital adequacy, liquidity and total expenses have a statistically significant effect on the profitability of Islamic Banks, and in his 2004 study, Haron concluded that the internal variables of the Islamic banks have a statistically significant effect on the profitability, and the management of Islamic banks in the competitive environment is more efficient compared to its competitors.

This study follows the previous studies, completes and differs from them in many aspects: First, this study seeks, as well to study the determinant factors of Islamic banks in Jordan, to examine whether the determinants differ in terms of statistical significance among the Islamic banks in Jordan. In fact, this has not been performed by any study till now as far as the researcher knows. Second, this study differs from the previous studies in terms of the time of the study and the variables that have been used in the study model and the study population as it is. So, as far as the researcher knows, this is the first study in its kind in Jordan.

3. DATA AND METHODOLOGY

The data used in this study are derived from the Amman Stock Exchange (ASE), Central Bank of Jordan (CBJ) and the Department of Statistics of Jordan (DOS) databases. In order to answer the question of the study, and achieve its objectives, the unbalanced panel data liner regression model has been used to analyze the cross-section time series data to determine the internal determinants of Islamic banks profitability. This has been used due to the recent establishment, and the small number of Islamic banks in Jordan.

Table 1 lists the variables used in this study, notation, and the expected effect of the determinants based on the literature. Two indicators were used to express the Bank's profitability which are the profit margin (BTP/TA) and return on assets (ROA). BTP/TA can be defined as a percentage of the profits remaining after fulfillment of all obligations and before paying taxes. Profit margin can be calculated by dividing earnings before taxes on total assets, as this percentage reflects the management's ability to achieve a return of the deposits and to avoid financial insolvency. ROA reflects the bank’s ability to generate revenue through the exploitation of sources of finance and investments, assets return index can be calculated by dividing the net profit on total assets.

Independent variables consist of the bank-specific determinants (internal determinants) and external determinants (Control variables) of the factors that can affect the profitability of Islamic banks. The bank-specific determinants are the variables related to properties of the bank and directly affected by administrative decisions of the bank. External determinants are considered as determinants which are not related to the management of the bank and do not fall under the direct control of the bank's management, rather they reflect the economic and legal environment in which the bank operates. A set of control variables (external determinants) have been used in the study model to control the impact of internal determinants on the profitability of the Islamic banks, and are divided into: the industry-specific determinants, and macro-economic determinants.
Table 1. Definition, notation and expected effect of the explanatory variables of Islamic bank profitability

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measure</th>
<th>Notation</th>
<th>Expected effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profitability</td>
<td>Net profit before tax / assets</td>
<td>ROA</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Net profit before tax / total assets</td>
<td>BTP/TA</td>
<td>+</td>
</tr>
<tr>
<td>Capital adequacy</td>
<td>Book value of Equity / Assets</td>
<td>CAAD</td>
<td>?</td>
</tr>
<tr>
<td>Credit risk</td>
<td>Loan-loss provision / loans</td>
<td>CRRI</td>
<td>-</td>
</tr>
<tr>
<td>Liquidity</td>
<td>Loan / Total deposits</td>
<td>LIQ</td>
<td>+</td>
</tr>
<tr>
<td>Management efficiency</td>
<td>Investments / Total deposits</td>
<td>ASUT</td>
<td>-</td>
</tr>
<tr>
<td>Size</td>
<td>ln(total assets)</td>
<td>ln(TOAS)</td>
<td>?</td>
</tr>
<tr>
<td>Expenses Management efficiency</td>
<td>ln(operating expenses)</td>
<td>ln(OPEX)</td>
<td>?</td>
</tr>
<tr>
<td>Non-interest earning</td>
<td>Non-interest earning / assets</td>
<td>NIEA</td>
<td>+</td>
</tr>
<tr>
<td>Market concentration</td>
<td>Largest 3 banks concentration ratio</td>
<td>CONC</td>
<td>?</td>
</tr>
<tr>
<td>Banking-Industry Size</td>
<td>Total assets of banks / GDP</td>
<td>BIS</td>
<td>+</td>
</tr>
<tr>
<td>Inflation</td>
<td>Consumer prices</td>
<td>INF</td>
<td>?</td>
</tr>
<tr>
<td>Economic growth</td>
<td>Real GDP growth rates</td>
<td>RGDP</td>
<td>+</td>
</tr>
</tbody>
</table>

3.1. Bank-specific determinants

Capital Adequacy: It is a ratio used by the organizers of the banking industry to control banks’ ability to withstand a certain amount of losses. There are several ways to express the adequacy of capital (CAAD) such as: the ratio of capital to risk, the ratio of capital to total deposits, or the ratio of capital to total assets.

The study of Bourke (1989) concluded that banks with a high level of capitalization are more capable than other banks on the financing from low risks and costs, which will reflect positively on the profitability of these banks. The study of Berger (1995) concluded a positive relationship between capital adequacy and profitability of U.S. Banks.

The study of Anghazo (1997) concluded that banks with high level of capitalization have higher level of profits than the less capitalized banks. In addition, the study of Goddord and Wilson (2004) has concluded that the adequacy of capital for European companies positively affect the profitability of European banks. The study of Kosmidou and Pasiouras (2007) has also supported positive relationship between capital adequacy and profitability of U.S. Banks.

Credit Risk: The credit risk (CRRI) is the most important determinant of bank profitability, and which can be defined as the possibility of losing all or part of the interest, loan asset or both. Theoretically, the increase in the company's exposure to credit risk adversely affects the profitability of the company, and in order to improve profitability, the company shall act to reduce its exposure to credit risk through more effective credit risk management and control.

The study of Athanasoglou, et al. (2008) and the study of Miller and Noulas (1997) concluded that the relationship between credit risk and profitability is an inverse relationship in U.S. banks, but the study of Al-Hashimi (2007) concluded that there is a positive impact of the credit risk on profitability of banks in Africa sub-Saharan.

Risk credit can be expressed by several indicators, including: the ratio of loan-loss provision to total loans, or the ratio of net loans to total assets. In line with Athanasoglou, et al. (2008) we proxy for credit risk with the ratio of Loan-loss provisions to total loans.

Liquidity: the ratio of bank liquidity (LIQ) can be defined as the amount of liquid assets, by which Bank faces the requests for withdrawals and credit. It is expected that it has positive effect on the profitability of Islamic banks.

The studies of Steinherr and Huveneers (1994) and Haron (2004) have concluded a statistically significant relationship between the ratio of bank liquidity and profitability.

Following Haron (2004) we proxy for liquidity with the ratio of granted loans to total deposits.

Management efficiency: Management efficiency (ASUT) will be expressed as the efficiency of the management in Assets Utilization. Assets Utilization is defined as the optimal way in using assets, as Assets Utilization measures the efficiency of the bank in using its resources and is considered an indicator of the efficiency of the management; this variable has been used in the study model to express the efficiency of use of bank deposits to fund lending and investment. Bourke (1989), Maghyrech and Shammout (2004) and Athanasoglou
et al. (2008) have showed the existence of a statistically significant positive relationship between management efficiency and profitability. In line with Sarayri (2010) assets utilization as a proxy of management efficiency has been expressed as the ratio of investments and loans to total deposits.

Bank Size: This variable has been used to study the possibility of the existence of financial benefits resulting from the bank’s size. The results of the studies on the relation between size and profitability are conflicting. The study of Short (1979) has concluded that the bank size is closely linked to capital efficiency because the large banks are more able to have sources of financing with low costs, which will reflect positively on the profitability of the bank, and Smirlock (1985) has concluded the existence of a direct statistically significant correlation between the bank's size and profitability, as well as the study of Genay (1999) which concluded that large-sized Japanese banks are better in performance than small Japanese banks. The study of Demirguc and Huizing (2000) also concluded that the degree of influence of financial variables on the probability of banks depends largely on the size of the bank.

Whereas, other studies such as the study of Athanasoglou et al. (2008) and the study of Miller and Noulas (1997) have concluded that banks have very limited economies of scale benefit, as the increase in the size of the bank leads to small and limited cost reduction. This result was supported by the study of Berger and Hannan (1989) and the study of Boyd and Runkle (1993) as they concluded the existence of an inverse statistically significant relationship between the bank's size and profitability.

Following Flamini et al. (2009) we proxy for the size of the bank (ln(TOAS)) with the nature logarithm of total assets of the bank.

Expenses Management Efficiency: Expenses management efficiency (ln(OPEX)) is the most important determinant of bank profitability, and unless banks can transfer such expenses to the customers, it is expected that the relationship between (ln(OPEX)) - as an inverse proxy of the efficient management of expenses and profitability is an inverse relationship, which means that there is a direct correlation between the efficient management of expenses and profitability.

Sufian and Parman (2009) has concluded that the reduction of operating expenses leads to improve efficiency and profitability. Molyneux and Thorton (1992) has concluded that the relationship of operating expenses with profits is positive, as the study showed that the increase in operating expenses may be the result of increased expenditures on salaries, which represents the salaries of efficient and well-training staff in order to acquire more productive human resources, which is reflected positively on the profitability of the banks.

In line with Flamini et al. (2009) we proxy for expenses management efficient by the nature logarithm of operating expenses as an inverse proxy of the efficient management of expenses.

Non-interest earnings: Since the bulk of the profits of Islamic banks come from non-traditional activities, the proportion of non-interest earnings (NIEA) is expected to positively affect their profitability. In line with Bashir (2003) we proxy for non-interest earnings with the ratio of non-interest earnings to total assets.

3.2. Industry-specific determinants

Concentration: Most of the results of studies on the relationship between the concentration in the banking sector and profitability were significantly mixed: Emery (1971), Bourke (1989), Jeon and Miller (2002) and Dietrich and Wanzennrid (2010) have concluded that there is a positive statistically significant relationship between the concentration ratio of the banking sector and profitability, and that the bank's ability to achieve the profit increases with increasing concentration of the banking industry, as the bank's ability to pay lower interest on deposits, and collect higher interest on loans and investments grow in a more concentrated environment.

On the other hand, the results of the study Bourke (1989), Demirguc-Kunt and Huizing (1999), Staikouras and Wood (2004) and Flamini et al. (2009) did not support the positive relationship between the concentrations of the banking sector and the profitability.

Following Naceur (2003) we proxy for concentration (CONC) using the three banks concentration ratio defined as the ratio of the three largest banks in the banking-industry to the total banking-industry assets.

Banking-industry Size: the size of the Jordanian banking-industry (BIS) was expressed by the ratio of total banking-industry assets to GDP as this variable has been used in the model of the study to reflect the importance of the banking-industry. It is expected that the relationship between the size of the industry and the profitability is positive.

3.3. Macro-economic determinants

Two variables of macro-economic determinants have been used, they are: inflation (INF), and the rate of economic growth (RGDP). For the inflation, there is almost a consensus in the literature which deals with determinants of profitability of traditional banks, that the relationship between inflation and profitability is positive, as the high rates of inflation usually lead to high lending rates, which is reflected positively on the profitability of banks. This finding has been supported by Guru et al. (2002) and Vong and Chan (2006). The same argument is applied to Islamic banks in general. But if the increase in operating expenses is greater than the inflation rates and the Islamic banks could not transfer these costs to the customers, it is expected that inflation negatively affects the profitability of these banks.

The consumer price index published by the Jordanian Department of Statistics has used as a proxy for inflation.

As for the economic growth rate, it is known that the economic situation, where the bank operates greatly affects the growth rate of the bank and its profits. In cases of economic growth, banks with judicious management benefit from this growth and their profits are high. The study of Demirguc-Kun and Maksimovic (1996) has
concluded that banks often take advantage of high economic growth rates to achieve high profits and the effect of economic growth on the profitability of banks is positive and statistically significant. This finding has been supported by the study of Bikker and Hun (2002) and Dietrich and Wanzenried (2010).

3.4. Econometric modeling

In order to determine bank-specific determinants that affect the profitability of Islamic banks of Jordan, using the multi-regression model for unbalanced panel data set, the linear regression model can be estimated as follows:

\[ l_{it} = \alpha + \beta_0 x_{it} + \epsilon_{it} \]  

(1)

Where: \( l_t \) the profitability of Islamic bank \( i \) during period \( t \), measured by either the return on assets (ROA), or the profit margin (BTP/TA). \( \alpha \) is a constant term. \( \beta \) are the coefficients of the multi-regression equation. \( x_{it} \) Bank-specific determinants of Islamic bank \( i \) during period \( t \) number of independent variables. \( \epsilon_{it} \) is the error term.

Adding the external variables which represent the control variables in the model, including industry-specific determinants, and macro-economic determinants, equation (1) can be rewritten as follows:

\[ l_{it} = \alpha + \beta_0 x_{it} + \beta_1 y_{it} + \beta_2 M_{jt} + \epsilon_{it} \]  

(2)

Where: \( l_{it} \) the industry-specific determinants during period \( t \). \( M_{jt} \) macro-economic determinants during period \( t \). \( g, j \) are the number of industry-specific determinants and macro-economic determinants respectively.

Dummy-variables method were used to test the possibility that the impact of the bank-specific determinants on its profitability might be different between banks by multiplying the bank’s dummy-variable by each of the bank’s-specific determinants, this will add 14 more variables to equation 2. Equation 2 can be rewritten as follows:

\[ l_{it} = \alpha + \beta_0 x_{it} + \beta_1 y_{it} + \beta_2 M_{jt} + \beta_3(D_b x_{it}) + \epsilon_{it} \]  

(3)

Where: \( \beta_3 \) is the differential slope coefficient. \( D_b \) the Bank b dummy-variable, and it is equal to 1 if the observation belong to bank b, otherwise equals to 0. D numbers of the dummy-variables which equal to 14.

If one or more of the \( \beta_3 \) coefficient are statistically significant, it means that the impact of the bank-specific determinants on its profitability is significantly different between Islamic banks.

We can rewrite equation 3 using the bank-specific determinants, industry-specific determinants, Macro-economic determinants, in addition to the dummy-variables as follows:

\[ l_{it} = \alpha + \beta_0 x_{it} + \beta_1 y_{it} + \beta_2 M_{jt} + \beta_3 (D_b x_{it}) + \beta_4 (D_b y_{it}) + \beta_5 (D_b M_{jt}) + \epsilon_{it} \]  

(4)

4. EMPIRICAL RESULTS

In Model 1, the bank-specific determinants of the profitability of the Jordanian Islamic banks were tested, with the absence of industry-specific and Macro-economic determinants. In Model 2 we controlled with the Industry-specific and Macro-economic determinants, while in Model 3 differential slope coefficient dummies were used to allow the slope coefficient to vary between banks.

Table 2 (3) reports the estimated coefficient of the panel regression for the three models using the return on assets ROA (BTA/TA) as proxy for profitability. Table 4 lists the variables or parameters that were automatically excluded from the study due to their significant correlation with other variables.

As expected, Table 2 Model 1 shows that there is a statistically significant positive effect, negative effect with the inverse proxy, at the level of significance less than 0.05 for ln(OPEX) on the Jordanian Islamic banks profitability, and a statistically significant positive effect, at a level of significance less than 0.1 for each of the CAAD, ASUT, and ln(TOAS) on the profitability. The study also has found a positive effect with no statistical significance at a level less than 0.10 for both CRRI and NIEA. It should be pointed out that the exclusion of LIQ automatically from all models of the study is due to the high correlation with ASUT as a proxy of the Management Efficiency.

When adding the control variables to the model, the results of the analysis of Model 2 in Table 2 showed that there is statistically significant positive effect at level of significance less than 0.05 for ln(TOAS) and ln(OPEX), and a positive effect at a level of significance less than 0.1 for ASUT, while the results did not show any statistical significance effect for any of the CAAD, CRRI and NIEA.

For Model 3 Table 2, the study showed that CAAD, CRRI, ASUT and NIEA are statistically significant determinants of the Jordanian Islamic banks, and that their effects vary among banks statistically significantly.

The results in Table 3 relate to regressing BTP/TA on the internal and external variables. In line with expectations, Table 3 Model 1 shows that the ASUT, ln(TOAS), ln(OPEX) and NIEA have positively affect the BTP/TA for the Islamic banks at a level of significance less than 0.01, also showed insignificant effect of CAAD and CRRI on the BTP/TA as a proxy for the Jordanian Islamic banks profitability.

As for the Model 2 Table 3, when adding control variables to the Model 1, the results did not change overall. Table 3 Model 3 showed that the CRRI, ln(OPEX), and NIEA statistically significantly affects the BTP/TA, and that their effects statistically significantly vary among Jordanian banks.
### Table 2. Determinants of profitability of Islamic banks (the dependent variable is ROA)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1 Coefficient</th>
<th>Model 2 Coefficient</th>
<th>Model 3 Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-16.607</td>
<td>5.042</td>
<td>21.318</td>
</tr>
<tr>
<td>CAAD</td>
<td>-0.626**</td>
<td>0.409</td>
<td>0.078</td>
</tr>
<tr>
<td>CRRI</td>
<td>-5.1</td>
<td>2.066</td>
<td>19.886</td>
</tr>
<tr>
<td>LQ</td>
<td>0.1</td>
<td>(1.867)</td>
<td>(1.335)</td>
</tr>
<tr>
<td>ASUT</td>
<td>0.21</td>
<td>0.14</td>
<td>0.19</td>
</tr>
<tr>
<td>ln(TDAS)</td>
<td>0.1</td>
<td>(1.296)</td>
<td>(0.820)</td>
</tr>
<tr>
<td>In(OPEX)</td>
<td>0.8</td>
<td>0.85</td>
<td>0.28</td>
</tr>
<tr>
<td>NIEA</td>
<td>0.277**</td>
<td>0.277**</td>
<td>0.118**</td>
</tr>
<tr>
<td>COFC</td>
<td>1.657</td>
<td>1.657</td>
<td>0.191</td>
</tr>
<tr>
<td>BSS</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>INF</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>ROQI</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>D2 CAAD</td>
<td>-1.665</td>
<td>-1.689</td>
<td>-1.038</td>
</tr>
<tr>
<td>D2 CRRI</td>
<td>-0.21</td>
<td>-0.21</td>
<td>-0.118</td>
</tr>
<tr>
<td>D2 ASUT</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>D2 In(OPEX)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>D2 NIEA</td>
<td>0.521</td>
<td>0.490</td>
<td>0.102</td>
</tr>
<tr>
<td>D3 CAAD</td>
<td>17.28</td>
<td>17.28</td>
<td>17.28</td>
</tr>
<tr>
<td>D3 CRRI</td>
<td>-0.15</td>
<td>-0.15</td>
<td>-0.15</td>
</tr>
<tr>
<td>D3 ASUT</td>
<td>5.902</td>
<td>5.902</td>
<td>5.902</td>
</tr>
<tr>
<td>D3 NIEA</td>
<td>6.545</td>
<td>6.545</td>
<td>6.545</td>
</tr>
</tbody>
</table>

Adj R²: 715, 738, 585
D W Statistics: 1.834, 2.002, 2.121
D Regression: 10, 10, 9
Residual: 16, 14, 5
Total: 24, 24, 24
No. Observation: 25, 25, 25
F: 10.951, 7.760, 83.018
Sig F: 0.000, 0.000, 0.000

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### Table 3. Determinants of profitability of Islamic banks the dependent variable is BTP / TA)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1 Coefficient</th>
<th>Model 2 Coefficient</th>
<th>Model 3 Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-21</td>
<td>-1.137</td>
<td>-273</td>
</tr>
<tr>
<td>CAAD</td>
<td>-4.083***</td>
<td>-1.086</td>
<td>-1.364</td>
</tr>
<tr>
<td>CRRI</td>
<td>0.016</td>
<td>0.016</td>
<td>0.016</td>
</tr>
<tr>
<td>LQ</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>ASUT</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>ln(TDAS)</td>
<td>4.815***</td>
<td>4.815***</td>
<td>4.815***</td>
</tr>
<tr>
<td>ln(OPEX)</td>
<td>3.185***</td>
<td>3.185***</td>
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Adj R²: 657, 540, 585
D W Statistics: 2.114, 2.228, 2.341
D Regression: 10, 10, 9
Residual: 16, 14, 5
Total: 24, 24, 24
No. Observation: 25, 25, 25
F: 21.536, 13.590, 105.209
Sig F: 0.000, 0.000, 0.000

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*Table 2. Determinants of profitability of Islamic banks (the dependent variable is ROA)*

*Table 3. Determinants of profitability of Islamic banks the dependent variable is BTP / TA)*
5. CONCLUSIONS

This study aimed to shed light on the impact of internal determinants on the profitability of Jordanian Islamic banks; it has used two alternative measures of profitability and three models to test the effect of internal determinants on the profitability of Islamic banks.

Based on the results of the empirical analysis, the larger: book value of equity to total asset ratio, capital adequacy, and investment to total deposits ratio, management efficiency, leads to more return on assets, and more profit margin in Jordanian Islamic Banks. This finding is consistent with previous studies, and indicates that capital and management efficiency ratios play an strong empirical role in explaining the changes in the profitability of Islamic banks.

Another finding of the study is that the credit risk is associated with significant relationship with Islamic Banks profitability when control variables and differential intercept dummies are introduced in Model 3, indicates that increased exposure to credit risk in Islamic Banks higher its profitability.

The study also finds that bank size, and unexpectedly, non-interest earning and expenses management efficiency do not seem to have a significant impact on the profitability of Jordanian Islamic Banks.

Finally the results of the study have shown in Table 2 (3) that some of the differential slope coefficient are statistically significant, and the coefficient of determination $R^2$ of the Model 1 is 0.713 (0.837), and when controlling with the industry-specific and Macro-economic determinants in Model 2 $R^2$ rose to 0.738 (0.840), then to 0.985 (0.988) in Model 3 by using the Dummy-variables method, indicates that the highest explanatory power for the two alternative measures of profitability regression is for Model 3, concluding that the impact of bank-specific determinants on profitability are different among Jordanian Islamic Banks due to unique features of each bank.

REFERENCES


