



## Measuring Financial Performance Based on CAMEL Rating Model on Islamic Banks in Jordan.

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### Abstract

The main purpose of this study is to evaluate the performance and soundness of three selected Islamic Banks (Jordan Islamic Bank, International Islamic Arab Bank, Jordan Dubai Islamic Bank) operating in Jordan during the period 2010- 2015. The study applied the CAMEL rating analysis and it is found that all Islamic banks in Jordan have adequate capital; their assets and earning ability are in the rise despite the slowdown of economy and the rising tide of regional instability. Such information is very important for all stakeholders who are concerned about the soundness of the banking sector, as any negative results of the banking sector may have far reaching effects on the economy of the country.

**Keywords:** CAMEL Rating Model, Islamic Banks, Jordan

### 1.0 Introduction:

The banking sector is considered to be the major engine of economic growth and represents the kingdom's second – largest contributor to GDP growth. There are 22 local, regional and international banks operating in Jordan. In addition, Jordan is a home for foreign and national Islamic banks which compete with conventional banks in order to increase its market share. Despite the fact that the unique nature of Islamic banking requires special standards such as those set by the Accounting Organization for Islamic

Financial Institutions (AAOIFI) established in 1990, for Shari'ah accounting and the Islamic Financial Service Board established in 2002 for supervisory standards, the researcher tries to find out the performance of Islamic banks in Jordan by applying The CAMEL Rating Model.

The Uniform Financial Institutions Rating System (UFIRS) was implemented in 1979 in U.S banking institutions, and later globally. In 1988, the Basel Committee on Banking Supervision of the Bank of International Settlement (BIS) proposed CAMELS framework for assessing financial institutions (Dash & Das, 2009).

In this study five categories of ratios according to CAMELS model are applied. These categories are:

(C) Capital to assess the safety and stability of a bank. (A) Assets quality) to assess the performing and non-performing loans. (M) Management to assess the efficiency of management.(E) Earnings to assess the profitability and productivity.(L)Liquidity to examine the ability of a bank in meeting short-term obligations.

## 2.0 OBJECTIVE

The aim objective of this study is to analyze the financial performance of national Islamic banks operating in Jordan during the period 2010 – 2015 by applying parameters of CAMEL model which includes capital adequacy, assets quality, management quality, earnings, and liquidity.

## 3.0 METHODOLOGY

This study is descriptive, analytical and empirical based on the published financial statements of national Islamic banks in Jordan. This study covers all national Islamic banks operating in Jordan. The banks included in the study are presented hereunder:

No.	Name of Bank	Date of Establish.	Branches	Assets	Equity
1	Jordan Islamic Bank	1978	62	3,798,9	311,1
2	Islamic International Bank	1998	42	1,808,5	139,8
3	Jordan Dubai Islamic Bank	2010	22	780,1	133,7

In JD Millions

Source: Audited Financial Statements 2015.

This study is based on the financial statements of selected banks. The financial statements have been taken from the official websites; [www.jordanislamicbank.com](http://www.jordanislamicbank.com), [www.iiabank.com.jo](http://www.iiabank.com.jo), [www.jdib.jo](http://www.jdib.jo) .The study covers a six year period (2010- 2015) to measure the performance of selected national Islamic banks in Jordan. CAMEL rating model is used for measuring the performance of selected Islamic banks in Jordan. The researcher would use the ratios that define the respective parameters of CAMEL.The following subsection gives details about the components and ratios of CAMEL Rating System

Parameters	Ratios	Purpose of measurement
Capital Adequacy	Regulatory capital / Risk weighted assets	Safety and financial stability
Assets Quality	Non-performing loans / Total loans	The risk on the exposure of debtors
Management	Salaries & benefits / Average assets	Capability of management
Earnings	Net income / Average assets Net income / Equity	Profitability and productivity
Liquidity	Total deposits / Total assets	Meeting the current obligations

Source: Central Bank of Jordan, Supervision Department.

There are five categories of CAMEL ratings.

Ratings	Description
1	Strong performance
2	Satisfactory performance
3	Performance is flawed to some degree
4	Poor and unsatisfactory performance and needs supervisory concern
5	Very unsatisfactory and remedy is necessary

Source: Central Bank of Jordan, Supervision Department

#### 4.0 Literature Review

Application of the CAMEL rating model in literature has been diverse. Cole and White (2012), provide evidence that banks with adequate capital, good assets quality, high profit and suitable liquidity are less likely to be exposed to failure. Khouaja and Lotfi Boumediene (2014) use CAMEL parameters on 150 commercial banks in different European countries during the period 2003- 2008. The researchers argue that banks prefer to increase profitability and compromise on risk mitigating policies. The authors suggest that this kind of practices makes banks more vulnerable and there is a need to strike a balance between the two objectives. Najjar (2008) analyzed the Al ahli Bank of Jordan and Palestine. The aim of this study was to examine the performance of Al ahli Bank, and used CAMEL model to ensure equitable distribution to shareholders depends on fundamental analysis. Sarker (2005) investigated the CAMEL model for supervision of Islamic banks by the central bank of Bangladesh. The study enabled the supervisors to set a Shariah benchmark to supervise Islamic banks from Shariah perspective. Jaffar & Manarvi (2011) compared the performance of Islamic and commercial banks during the period 2005-2009 and they found that Islamic banks showed better performance in liquidity than the commercial, but the commercial banks were better in management and earning power. Vijaya Kumar & Hammed Sayani (2015) investigated the application of CAMEL model in addition to Z- score model on the GCC Islamic banks during the period 2008- 2014. The study covered 11 banks in different GCC countries. The study suggests that although Islamic banks in the GCC have good parameters over the period of study. However, the impact of the crisis was not so significant that these banks will be in a difficult financial situation. Nurazi & Evans (2005) investigated whether CAMEL parameters could be used to predict bank failure. The results suggested that CAMEL ratios are statistically significant in explaining bank failure.

#### 5.0 Analysis and Findings

##### 5.1 Capital Adequacy

Table 1: Owners' Equity to Total Assets

	2010	2011	2012	2013	2014	2015
JIB	7.2%	7.1%	7.5%	7.8%	7.9%	8.2%
IIAB	11%	8%	8.6%	8.7%	8.3%	7.7%
JDIB	41.2%	32.8%	27.7%	24.4%	19.8%	17.1%

Source: Author's compilation, 2016 based on annual reports of respected banks for the years 2010-2015.

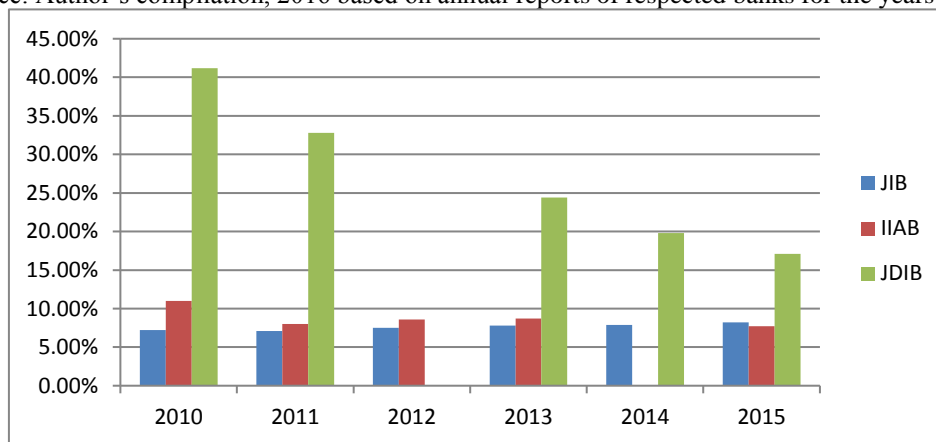


Chart (1)

Table 2: CAR: Regulatory Capital to Risk Weighted Assets

	2010	2011	2012	2013	2014	2015
JIB	14.42%	21.57%	24.48%	19.56%	20.95%	21.11%
IIAB	24.6%	22.8%	25.19%	17.98%	17.91%	17.59%
JDIB	79.85%	50.76%	43.32%	44.78%	44.31%	47.23%

Source: Annual reports of respected banks for the years 2010- 2015

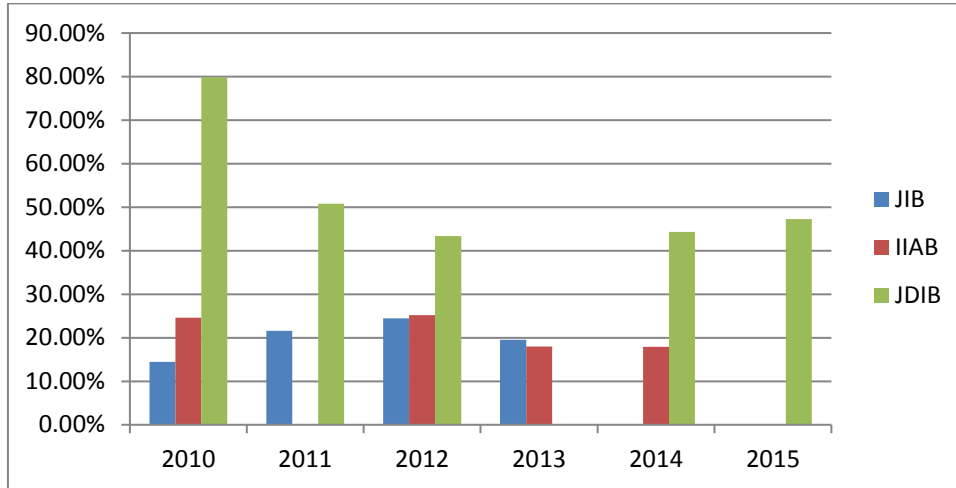


Chart (2)

Capital adequacy is measured by using owners' equity to total assets. From table 1. The capital adequacy ratio is good and increasing over the years except for Jordan Islamic Bank which increased from 7.2% in 2010 to 8.2% in 2015. Besides Jordan Dubai Islamic Bank capital adequacy ratio decreased from 41.2% in 2010 to 17.1% in 2015. The second method of measuring capital adequacy ratio is based on regulatory capital to risk weighted assets. From the above table 2 and charts, the capital adequacy ratio is high for all concerned banks comparing to the measuring standards set by the Islamic Financial Service Board (ISFS) which set the standard at 8%, whereas the minimum (CAR) requirements set by the Central Bank of Jordan is 12%.

## 5.2 Assets Quality

Table 3: Non- Performing Loans to Total Loans

		2010	2011	2012	2013	2014	2015
JIB	NPL	5.63%	7.24%	4.24%	4.82%	4.69%	5.02%
	Coverage Ratio	47.88%	53.44%	57.93%	63.56%	69.80%	72.08%
IIAB	NPL	6.61%	4.32%	4.11%	5.23%	4.69%	4.12%
	Coverage Ratio	52.33%	69.44%	71.33%	74.11%	78.15%	78.63%
JDIB	NPL	0.68%	3.22%	2.29%	3.87%	3.62%	2.43%
	Coverage Ratio	33.24%	16.30%	48.86%	58.02%	60.96%	84.69%

Source: Awraq Investments, Jordan Banking System, October 2nd 2013, December 28<sup>th</sup> 2015.

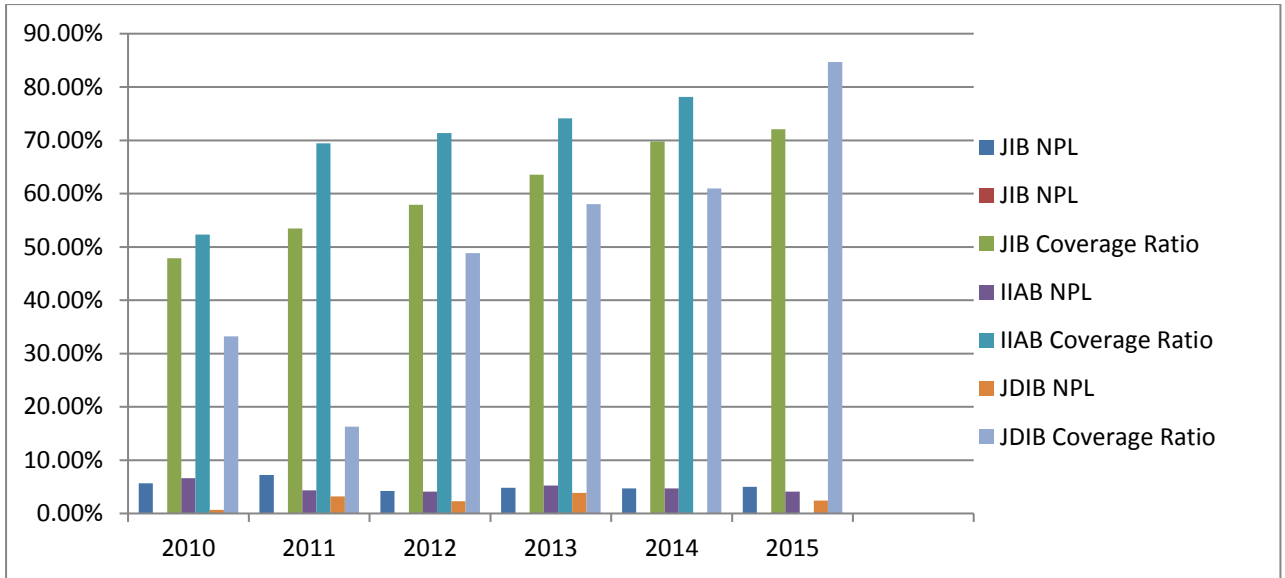


Chart (3)

Low ratio of non-performing loans and high coverage ratio is a good indicator of high assets quality. From the (table 3) a marginal decrease in non-performing loans took place in 2012 which suggests a positive sign of recovery of banks from the impact of financial crisis. The second measure is the coverage ratio which reflects the bank’s ability to absorb losses from non- performing loans. The coverage ratio in Jordan Islamic Bank increased from 47.88% in 2010 to 72.08% in 2015. For the International Islamic Bank from 52.33% to 78.63% and from 33.24% to 84.69% for Jordan Dubai Islamic Bank. The rise in coverage ratio to safe and accepted levels reflects the ability of Jordanian national Islamic banks to absorb any potential losses

### 5.3 Management Efficiency

Table 4: Employees Expenses to Total Assets

	2010	2011	2012	2013	2014	2015
JIB	0.72%	0.82%	0.89%	0.95%	0.87%	0.85%
IIAB	0.64%	0.75%	0.91%	0.99%	0.94%	0.88%
JDIB	1.78%	1.78%	1.51%	1.44%	1.25%	1.11%

Source: Author’s compilation, 2016 based on annual financial reports of respected banks 2010-2015

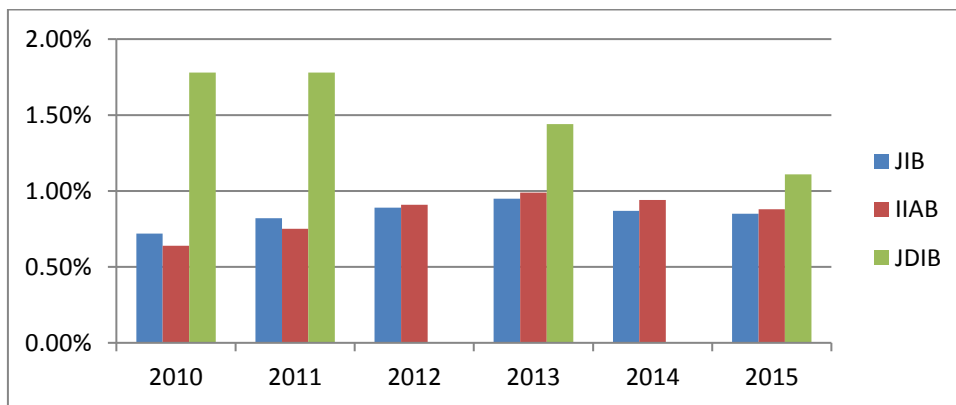


Chart (4)

The management efficiency plays an important role in the success of a bank. One of the factors affecting the profitability is the ratio of employee's expenses to total assets which indicates the management activity. The average management efficiency ratio (table 4) is increasing over the years 2010-2015 except for JDIB where the ratio decreased from 1.78% in 2010 to 1.11% in 2015

**5.4 Earning Ability (a)**

Table 5: Net income to Total Assets (ROA)

	2010	2011	2012	2013	2014	2015
JIB	1.11%	0.97%	1.21%	1.37%	1.26%	1.28%
IIAB	0.64%	0.94%	0.98%	1.16%	0.85%	0.92%
JDIB	-1.70%	1.86%	0.52%	0.29%	0.32%	0.46%

Source: Author's compilation, 2016 based on annual financial reports of respected banks 2010-2015

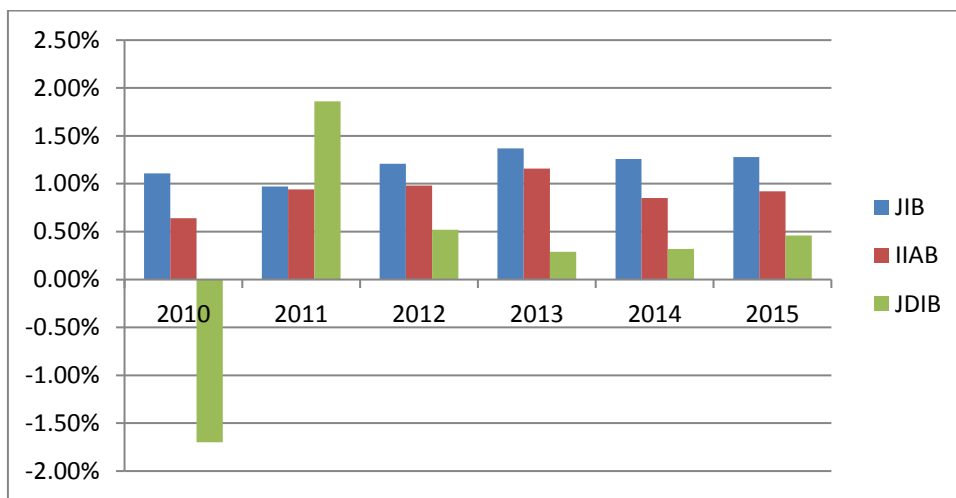


Chart (5)

**5.6 Earning Ability (b)**

Table 6: Net income to Total Equity (ROE) b

	2010	2011	2012	2013	2014	2015
JIB	15%	13.7%	15.9%	17.6%	16%	15.6%
IIAB	8.01%	11.8%	11.43%	13.46%	10.24%	11.89%
JDIB	-3.08%	5.12%	1.76%	1.15%	1.48%	2.48%

Source: Author's compilation, 2016 based on annual financial reports of respected banks 2010-2015

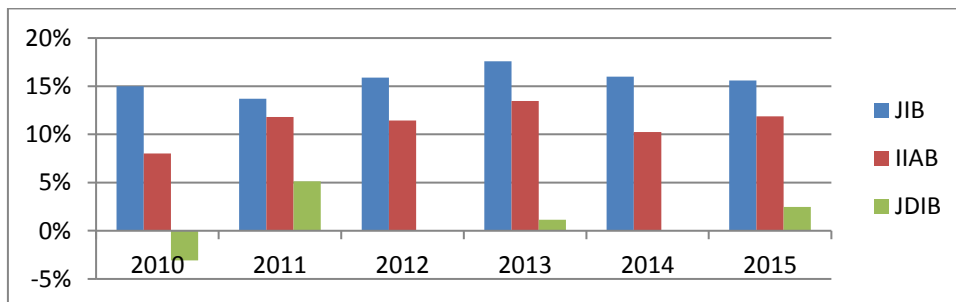


Chart (6)

The researcher employed two performance measures to determine the profitability of the Islamic banks. The first is Return on Assets (ROA) calculated by dividing net income over total assets, from the (table 5) the ratio increased in all three banks. In 2010, JIB, IIAB, and JDIB were 1.11%, 0.64% and -1.70% respectively. But in 2015 the ratio was 1.28% , 0.92%, and 0.46% respectively. The second measure is Return on Equity (ROE) calculated by dividing net income over owners 'equity. The ratio also increased in all three banks as it is shown in (table 6). In 2010, JIB, IIAB, and JDIB were 15%, 8.01% and -3.08% respectively. But in 2015 the ratios were 15.6% , 11.89% and 2.48% respectively.

## 5.7 Liquidity

Table 7: Total Deposits to Total Assets

	2010	2011	2012	2013	2014	2015
JIB	86.9%	89.2%	75.4%	88.8%	88.3%	87.8%
IIAB	67.3%	84.8%	86.9%	85.1%	79.3%	87.3%
JDIB	48.9%	57.6%	64.6%	69.4%	73.5%	78.6%

Source: Author's compilation, 2016 based on annual financial reports of respected banks 2010-2015.

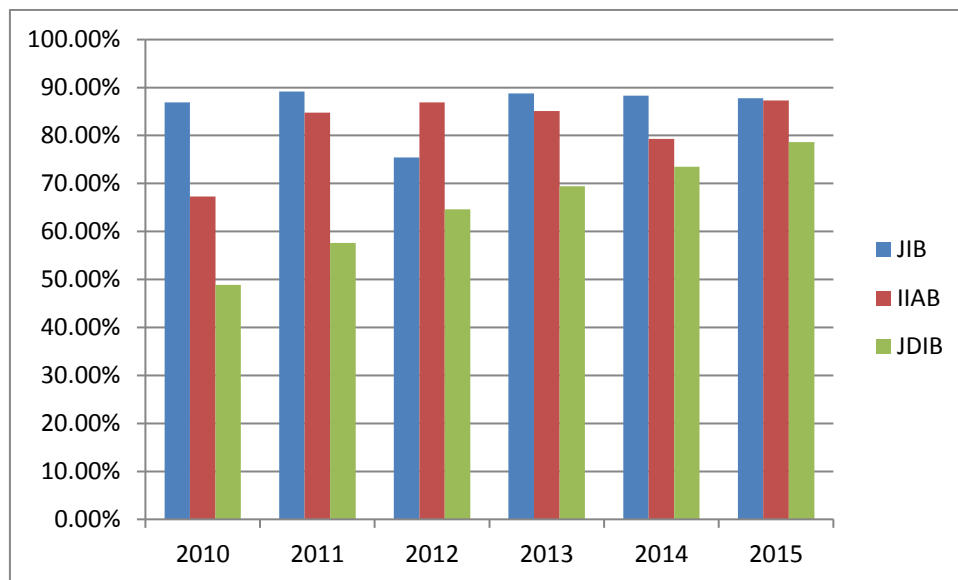


Chart (7)

The liquidity parameter is used to evaluate ability of a bank to meet its obligations and to avoid the risk of insolvency. To evaluate the liquidity of the banks, the researcher used the total deposits to total assets. From the (table 7) all the banks considered in the study reported a high liquidity ratio. This high liquidity ratio can be attributed to the nature of Islamic banking which is based on profit and loss sharing.

Table 8: composite Ratings

	Year	E/A	CAR	NPL	COVR	ME	ROA	ROE	LIQU
JIB	Composite	0.076	0.203	0.053	0.608	0.009	0.012	0.156	0.861
IIAB	Composite	0.087	0.203	0.048	0.707	0.009	0.009	0.111	0.818
JDIB	Composite	0.272	0.21	0.027	0.503	0.034	0.003	0.015	0.654

Source: Researcher's compilation

From the above Table, We observe that the lowest ratio of Equity to Assets belongs to JIB which is 0.076 among other banks covered in this study due to the higher equity capital. Ratio of NPL of the JDIB has recorded the lowest ratio because this Bank had acquired all net assets of Industrial Development Bank in 2011. In regard to the other ratios, all

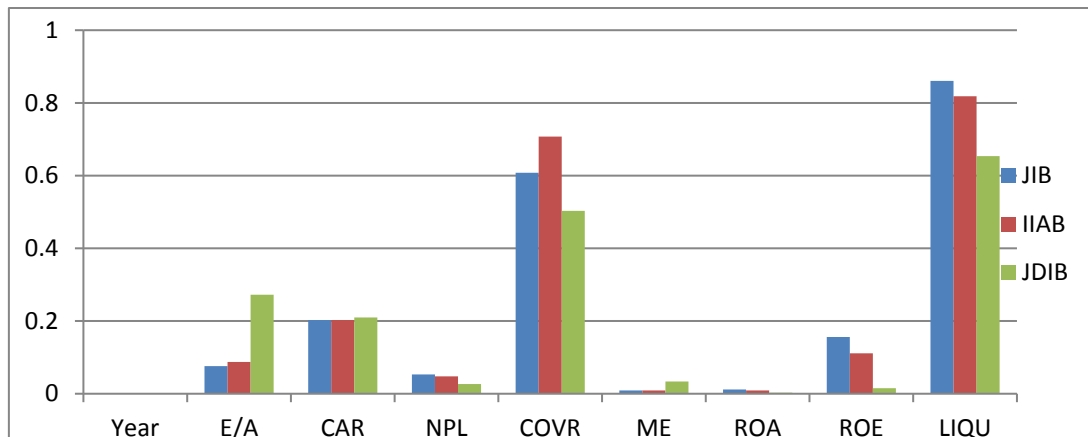


Chart (8)

According to the five categories of CAMEL rating model, rating 1 indicates that the performance is 'strong'. From the above tables and charts, it's found that the performance of the three national Islamic banks operating in Jordan is strong in all categories.

Table 9: Descriptive Statistics

Variable	Min.	Max.	Mean	Std. Dev.
EA	.0710	.4120	.1450	.1043
CAR	.1440	.2520	.2080	.0330
NPL	.0070	.0720	.0426	.0153
COVR	.1630	.8470	.6059	.1708
ME	.0060	.1250	.0168	.0272
ROA	-.0170	.0190	.0081	.0075
ROE	-.0310	.1760	.0942	.0635
LIQU	.4890	.8920	.7776	.1199

According to table 9, the results show that the respected Islamic banks in Jordan have according to CAMEL parameters strong performance which comply with the regulations of central bank of Jordan.

## 6.0 Conclusion

Taking into consideration the role of the banks in the economic development, the banking sector should be given priority in order to attain financial stability. So, efficient banking system helps to reduce the risk of breakdown of the economy. Therefore, the performance of banking system has always been of great interest for all concerned. Central banks regulators keep monitoring and evaluating the performance of all banks to ensure sound banking system based on CAMEL rating model among other methods.



This research has been conducted in order to evaluate the performance of three national Islamic banks in Jordan during the period 2010-2015. The research is based on CAMEL rating model. It shows that all selected Islamic banks' (JIB, IIAB and JDIB) under this model are relatively strong according to CAMEL parameters.

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