Determinants of Financial Performance of Commercial Banks in Jordan: Application of CAMELS Model

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SUMMARY

This study aims to evaluate and analyse the financial performance of the banks listed on the Amman Stock Exchange (ASE) for the period 2016-2020. The study covers 13 commercial banks and excludes the three Islamic banks from the listed banks on the ASE. The study also examines the relationship between CAMELS model components and banks profitability represented by Return on Assets (ROA) and Return on Equity (ROE). All data are collected from the financial statements of the Jordanian commercial banks, the Central Bank of Jordan, previous studies, and the Amman Stock Exchange. Sufficient and adequate analysis is used to analyse the data in this research – Regression Analysis, Coefficient Correlation, and Cluster Analysis using SPSS. The findings show that the Capital Adequacy Ratio, Earning Ability, and Liquidity have a positive but non-statistically significant influence on the financial performance of the Jordanian Commercial banks, as measured by the ratio of ROA and the ratio of ROE. The results also demonstrate that the Asset Quality, Management Efficiency, and Sensitivity to Market Risks all have a negative and non-statistically significant impact on Jordanian Commercial banks financial performance as evaluated by the ROA and the ROE ratios.

Keywords: Financial Performance, CAMELS Model, commercial banks, Ranking, Jordanian Banks, Regression, Cluster
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INTRODUCTION

Banks and other financial institutions play a crucial role in the economy, they are what make financial markets work. Without banks, financial markets would be unable to transfer cash from savers to those with profitable investment possibilities (Mishkin and Serletis 1995). The financial sector is critical in terms of delivering and directing capital investment. In addition to providing short-term financing for businesses day-to-day operations and other short-term cash needs, they are also sources of long-term financing (OECD 2013).

Banking sector problems were a key factor in causing and prolonging the two most severe economic crises in the last century: the Great Depression of 1929 and the Great Recession of 2008. In both situations, insufficient banking sector regulation was thought to have contributed to the crises (Kumhof and Jakab 2016). Therefore, the presence of a strong, tight, and adequate system for analyzing the performance of banks is of indispensable importance in the current era in order to avert any future financial crises that would severely impact local and worldwide economies.

The Jordanian Banking Industry is regulated by the Central Bank of Jordan (CBJ). The CBJ Act was passed in 1959 and the institution itself was established in 1964. The Jordanian government owns the entire capital of the Central Bank, which has been increased in stages, from 1 million to 18 million Jordanian dinars, and despite the government's ownership of its capital, the Central Bank enjoys, according to the provisions of its law, an independent legal personality (Central Bank of Jordan, Fifty seventh annual report 2020). It is the only organisation entitled to issue and regulate banknotes and coins, as well as preserve and

administer the Kingdom's gold and foreign exchange reserves in order to ensure monetary stability.

This study aims to analyse the financial performance of commercial banks listed in the Amman Stock Exchange (ASE) covering the period 2016 to 2020 using the CAMELS model and to study the relationship between the CAMELS model components and profitability represented by Return on Assets (ROA) and Return on Equity (ROE).

The significance of this study is in tying the aspects of the CAMELS model to the profitability of Jordanian Commercial Banks, as the CAMEL/CAMELS model is one of the most significant instruments used by central banks to analyse and manage banks. Furthermore, using SPSS software, this research classifies banks into clusters.

CAMELS Model

The CAMELS model is a rating method to assess a bank's overall health. The model is a rating system used to analyse bank performance according to six different factors (Capital Adequacy, Asset Quality, Management Efficiency, Earning Ability, Liquidity, and Sensitivity to Market Risks). It was first developed and used in the United States in the 1970s by three federal banking supervisors (the Federal Reserve, the Federal Deposit Insurance Corporation, and the Office of the Comptroller of the Currency) and modified in 1997. It applies to every bank and credit union in the United States and it is also enforced by numerous financial supervisory authorities outside the United States (Girija and Nayak 2020).

In 1997, a sixth component, Sensitivity to Market Risk (S), was introduced to the CAMELS rating model to cover pricing and interest rate concerns (IRR). Each component of the CAMEL model is rated on a scale of 1 to 5, with 1 standing for the best and 5 for the worst (National Credit Union Adminstration 2021). The following factors are examined under CAMELS.

- C–Capital Adequacy
- A–Asset Quality
- M–Management Efficiency
- E–Earning Ability
- L–Liquidity
- S-Sensitivity to Market Risk

LITERATURE REVIEW

Many previous studies have examined the CAMELS model, and some of these studies have examined the effect of this model on the performance of commercial banks. Samuel (2018) evaluated the financial performance of three chosen commercial banks in India covering a period of five years from 2011 to 2016. The study concluded that all three banks included in the study had succeeded in maintaining a higher Capital Adequacy Ratio than the prescribed level at 9% and the ratio of non-performing loans to total advances was increasing, which indicates that the management is ineffective in providing loans to customers. All banks showed a somewhat stable ratio for business per employee, the average operating profit ratio was low which indicated that the profitability of banks was not satisfactory, the Liquidity ratio indicated good liquidity of the banks and finally, the research showed that all the banks in the sample had the risk measurement and reporting systems in place to deal with the sensitivities arising from market risk (Samuel 2018).

Misra and Aspal's 2013 study aimed to evaluate the performance and financial safety of the Indian State Bank Group, which includes six banks during the period 2009-2011, with the CAMEL model and using the descriptive analysis and one-way ANOVA analysis. The study came up with results related to the classification of the six banks of the group according to the CAMEL model. Based on its results, the study presented a set of recommendations for banks that achieved low performance according to CAMEL evaluation criteria, including the need to improve the quality of their assets and improve the Capital Adequacy Ratio, in addition to the need to improve Management Efficiency and Profitability (Mishra and Aspal 2012).

The study of Dzeawuni and Tanko (2008) aimed to assess the efficiency of the CAMEL model in measuring general bank performance, to find a relative weight for the importance of the elements of the model, and to determine the best ratios that the supervisory bodies must adopt to assess the efficiency of banks. The study was based on a sample of 11 commercial banks in Nigeria during the period 1997–2005. The results showed the inability of each factor alone in the CAMEL model to measure the overall performance of the bank. The results also showed that the most important factor is Capital Adequacy Ratio, followed by Liquidity, then Profitability, then Asset Quality, and finally Management Efficiency, and therefore the study suggested re-arranging the acronym of the model according to the importance of its components to become CLEAM. Furthermore, the study identified the best ratio for each factor. For example, the best ratio for Capital Adequacy was found to be the ratio of total shareholders' fund to total risk-weighted assets, for Asset Quality the best ratio was the ratio of loan loss provision to total net loans, for Management Quality the best ratio was the ratio of risk-weighted assets to total assets, for Earning Ability the best ratio was the ratio of net profit after tax to total shareholders' fund and finally the best

ratio for Liquidity was the ratio of demand liabilities to the total deposit (Dzeawuni and Tanko 2008).

Mishra and Agarwal (2013) aimed to analyse the financial performance of the banks under study and to undertake the factors leading to financial performance in two nationalised banks (Central Bank of India (CBI) and Indian Bank (IB)), covering the five years of 2008–2012. The study found that the Capital Adequacy Ratio of CBI was better than that of IB, debt-to-equity ratio should be less so IB is holding it less than CBI, Asset Quality CBI is better than IB, in case of management quality Mishra and Agarwal concluded that CBI is managing better than IB, in terms of earning quality IB is performing better and in terms of Liquidity both the banks are comparatively equivalent (Mishra and Agarwal 2013)

Ongore and Kusa (2013) tested the factors affecting the performance of commercial banks in Kenya during the period 2001-2010. The study used three indicators of bank performance: the Return on Assets , the return on Equity, and the interest rate margin, while the independent variables included two groups, the first the elements of the CAMEL model, and the second the macroeconomic factors, including the gross domestic product and the rate of inflation. The study found that the elements of the CAMEL model, with the exception of Liquidity, have a significant impact on the regression analysis. As for the macroeconomic variables, they did not have a statistically significant effect on the indicators of the financial performance (Ongore and Kusa 2013).

Trung (2021) aimed to identify the determinants of Vietnamese commercial banks' performance for the period 2009 to 2020 using the CAMELS model and Tobin's Q ratio. The regression analysis resulted in ten statistically significant variables at 5%, including all CAMELS model components (Capital Adequacy Ratio, Asset Quality, Management, Earnings, Liquidity, Sensitivity, Ownership, Gross Domestic Product, and Inflation Rate) (Trung 2021).

Studies on Jordanian Banks

Al-Abedallat (2019) aimed to assess the performance of Jordanian banks and identify the impact of the components of the CAMELS model on the banks' performance measured by returns on the assets, returns on equity, and net income. The study sample consisted of the top 11 Jordanian banks in terms of capital and assets during the time under consideration (2003-2017). The study concluded that Jordanian banks have Capital Adequacy Ratios above 12%, that Jordanian banks have low ratios of Return on Assets and return on Equity, and that commercial banks have an advantage over Islamic banks in the components of the CAMELS model and performance measures, due to the high level of liquidity, serious reservations in fund investment, and increased income tax in Jordan. The research proposed that the Central Bank of Jordan fully use the CAMELS model in order to analyse the performance of Jordanian banks and to focus more on the performance of Islamic banks (Al-abedallat 2019).

Bashatweh and Al-sheikh (2020) aimed to evaluate the financial performance of 13 commercial banks listed in Amman Stock Exchange in Jordan based on the CAMELS model covering the period of five years, 2014–2018. The study showed that the overall average for the evaluation of CAMELS elements in the Jordanian commercial banks within that period was acceptable (Bashatweh and Al-sheikh 2020).

Bawaneh and Dahiyat (2019) study used the CAMELS rating model to present a comprehensive financial evaluation of commercial banks listed in Amman Stock Exchange (ASE). And this study aimed to study the effect of the CAMELS model on the performance of the banks. The study was based on a sample of 13 commercial banks in Jordan during the period 2012-2018. The results of this study found that there is a significant effect of the CAMELS dimensions of Management Efficiency, Earning Quality, Liquidity, and Risk Sensitivity on the financial performance of commercial banks, but there is no statistically significant effect of the CAMELS dimensions of Capital Adequacy and Asset Quality on the performance of commercial banks (Bawaneh & Dahiyat, 2019).

Kaddumi (2017) aimed to analyse the factors influencing the performance of Jordanian banks using the elements of the CAMELS model for the period 2003–2017. The researcher concluded that banks in Jordan have a Capital Adequacy Ratio of more than 12%. Also, they have an increase in Asset Quality, Management Efficiency, Profit Margins, good Liquidity and high Sensitivity to Market Risk. The Jordanian banks have a lower ratio of profit represented by the Return on Assets and Return on Equity (Kaddumi 2017).

RESEARCH METHODOLOGY

The methodology describes the research path to be followed, the tools to be used, the population and the sample for the study, the analysis tools to be used, and the pattern of conclusions drawn. Considering the objectives that this study seeks to achieve, a standard model has been developed, which tests the impact of the components of the CAMELS model variables on the performance of Jordanian commercial banks represented by Return on Assets and Return on Equity.

Sample of the study

There are 16 banks listed on Amman Stock Exchange (ASE), among these banks, there were 13 Jordanian commercial banks and 3 Islamic banks. Islamic banks are excluded from this research, as Islamic banks do not treat credit facilities as commercial banks do. This study covers a period of five years, 2016–2020.

Data and tools

The study mainly relies on two main sources for data collection: a collection of secondary data from previous research, such as scientific journals, books periodicals, and publications related to the subject of study and primary sources of data, mainly annual reports for the 13 listed Jordanian banks, whose reports can be downloaded from the banks' websites and from the Amman Stock Exchange (ASE) website. For analysis of the data, this research uses proper and adequate tools, including Descriptive statistics, Linear Regression Analysis and Cluster Analysis; to arrive at a conclusion in a scientific way.

The model can be formulated as follows:

$$ROA = \beta_0 + (\beta_1 \times CAR) + (\beta_2 \times A) + (\beta_3 \times M) + (\beta_4 \times E) + (\beta_5 \times L) + (\beta_6 \times S) + \varepsilon \quad (1)$$

$$ROE = \beta_0 + (\beta_1 \times CAR) + (\beta_2 \times A) + (\beta_3 \times M) + (\beta_4 \times E) + (\beta_5 \times L) + (\beta_6 \times S) + \varepsilon \quad (2)$$

where ROA is Return on Assets , ROE is Return on Equity, β^0 is intercept, β^1 β^2 β^3 β^4 β^5 β^6 are coefficients of each independent variable, CAR is Capital Adequacy (Tier I + Tier II capital/Risk-Weighted Assets), A is Asset Quality (Non-Performing Loans to Total Loans), M is Management Efficiency (Operation Expenses to Gross income), E is Earning Ability (Net Interest Margin), L is Liquidity (Liquid Assets to Total Assets), S is Sensitivity to Market Risk (Total Securities to Total Assets) and ε is an Error Term.

RESULTS

This part includes the descriptive statistics of the study variables and the results of the regression analysis to find out the effect of the components of the CAMELS model on the financial performance of Jordanian commercial banks.

Descriptive Statistics

Table 1 shows the CAMELS Model ratings applied to the sample banks over the period 2016-2020.

Table 1
CAMELS rating applied to sample banks 2016-2020.

Name of Bank	C	A	M	E	L	S	ROA	ROE
Arab Bank	13.92%	7.88%	42.78%	2.75%	27.74%	18.91%	1.01%	7.02%
Jordan Ahli Bank	14.66%	8.25%	66.68%	3.09%	14.70%	26.25%	0.52%	4.74%
Bank of Jordan	18.82%	6.40%	45.12%	4.18%	27.65%	12.74%	1.59%	9.70%
Cairo Amman Bank	16.14%	4.94%	60.60%	3.50%	21.22%	25.55%	0.98%	8.20%
Societe Generale De Banque - JORDANIE	18.21%	5.95%	48.04%	1.52%	16.92%	32.42%	0.58%	6.35%
Capital Bank of Jordan	15.99%	9.23%	48.48%	2.70%	18.25%	25.91%	1.23%	9.08%
Invest Bank	16.06%	6.87%	53.06%	3.16%	16.38%	15.78%	1.27%	8.07%
Bank El Eithad	14.16%	4.95%	51.04%	3.34%	19.20%	19.16%	0.92%	9.38%
Arab Jordan Investment Bank	16.08%	1.75%	52.50%	2.40%	20.62%	33.62%	0.86%	8.50%
The Housing Bank for Trading	17.14%	5.95%	42.55%	3.48%	20.36%	24.14%	1.17%	9.12%
Jordan Commercial Bank	12.64%	10.14%	40.26%	2.52%	11.60%	23.86%	0.36%	3.37%
Jordan Kuwait Bank	18.65%	8.61%	51.10%	3.24%	18.21%	17.18%	0.90%	5.45%
Arab Banking Corporation (Jordan)	19.69%	6.26%	54.80%	3.07%	14.23%	27.70%	0.71%	5.02%

Source: Jawarneh, S. (2021).

Table 2 shows the descriptive statistics of study variables. From the table, it can be noted that the average Return on Assets (ROA) for Jordanian commercial banks was about 0.93% during the study period, and this rate ranged from -0.16 % to 1.8%, with a standard deviation of 0.49%, which indicates a clear discrepancy in the Return on Assets between commercial banks. The Average ROA in the

Bashatweh and Al-sheikh (2020) study was 1.14% and 1% in Al-abedallat (2019) study.

The average Return on Equity (ROE) for Jordanian commercial banks during the study period was about 7.23%, and this rate ranged from -0.99% to 12.93%, with a standard deviation of 3.19%, which indicates a clear discrepancy in the Return on Equity among commercial banks. The Average ROE reported in Al-abedallat (2019) was 10%.

As for the elements of the CAMELS model, the average Capital Adequacy Ratio of Jordanian commercial banks during the study period was 16.32%, and the ratio ranged from 11.16% to 22.50%, with a standard deviation of 2.42%. Previous statistics indicated that Jordanian commercial banks enjoy high Capital Adequacy Ratios that exceed the minimum of 12% required by the Central Bank of Jordan, as well as the minimum of 8%. required by the Basel Committee The average Capital Adequacy Ratios in the Al-Abedallat (2019) and Bashatweh and Al-sheikh (2020) studies were 20% and 16.49%, respectively. For Asset Quality, the mean is 6.62% and the ratio ranged from 10.27% to 11.90% with a standard deviation of 2.45%, which reflects good quality of the assets of Jordanian commercial banks in general, but it is noted that some banks suffer from a high ratio, which indicates low quality of their assets. The averages for Asset Quality in Al-Abedallat (2019) and Bashatweh and Al-sheikh (2020) studies were 6% and 6.74%, respectively. For Management Efficiency, the mean is 50.54% and the ratio ranged between 36.15% to 69.28% with a standard deviation of 7.89%, which indicates that the Jordanian commercial banks enjoy similar levels of operating expenses. The average Management Efficiency ratio in Al-Abedallat (2019) and Bashatweh and Al-sheikh (2020) studies were 2% and 60%, respectively; the large variance in the results can be explained by the fact that Al-Abedallat (2019) used operating expense to total assets ratio, while Bashatweh and Al-sheikh (2020) used operating expense to total income as the Management Efficiency indicator. As for Earning Ability, the mean is 3.12% and the ratio ranged from 1.24% to 7.22% with a standard deviation of 1%, which indicates that the Jordanian banks have good Earning Ability. The average Earning Ability ratio in Al-Abedallat (2019) and Bashatweh and Al-sheikh (2020) were 70% and 1.34%, respectively, with Al-Abedallat (2019) using interest margin to gross income, while Bashatweh and Al-sheikh (2020) used ROA as the Earning Ability indicator, which explains the big variance in the results. The average Liquidity ratio for Jordanian banks is 19% and the ratio ranged from 7.78% to 31.97% with a standard deviation of 5.23%, which indicates that Jordanian banks maintain a good and sufficient Liquidity ratio to meet any unexpected needs. The average Liquidity ratio in the Al-Abedallat (2019) and Bashatweh and Al-sheikh (2020) studies were 25% and 11.42%, respectively. The mean Sensitivity to Market Risk of the Jordanian commercial banks during the study period is 23.33%, and the ratio ranged from 9.73% to 34.81%, with a standard deviation of 6.41%, which indicates that about a quarter of the assets of Jordanian commercial banks are exposed to market risks, reflecting their high Sensitivity to Market Risks. The average Liquidity ratio in the Al-Abedallat (2019) and Bashatweh and Al-sheikh (2020) studies were 17% and 22.81%, respectively.

Table 2
Descriptive statistics for study variables during the period 2016–2020, N=65

	Range	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
ROA	1.96	-0.16	1.80	0.9305	0.48589
ROE	13.92	-0.99	12.93	7.2310	3.18703
Capital Adequacy	11.34	11.16	22.50	16.3207	2.42084
Asset Quality	10.27	1.63	11.90	6.6200	2.44656
Management Efficiency	33.13	36.15	69.28	50.5395	7.89293
Earning Ability	5.98	1.24	7.22	3.1234	0.99701
Liquidity	24.18	7.78	31.97	19.0042	5.22896
Sensitivity to Market Risk	25.08	9.73	34.81	23.3250	6.40582

Source: Own work

Linear Regression Analysis

This part aims to test the effect of the components of the CAMELS model on the financial performance of Jordanian commercial banks by using Pooled Data Regression due to its relevance to the nature of the data used in the study. This method

is used if the data includes a time series and cross-sectoral data.

Table 3 shows the outputs of the regression analysis for the two models of the study, and based on this table, it can be noted that the Capital Adequacy Ratio, Earning Ability and Liquidity have a positive but not statistically significant impact at the level of significance of 5% on the Return on Assets (ROA) and on the Return on Equity (ROE), which indicates that higher Capital Adequacy Ratio, higher Earning Ability, and higher Liquidity will help improve the financial performance of the bank. Asset Quality, Management Efficiency, and Sensitivity to Market Risk have a negative but not statistically significant effect at a significance level of 5% on the Return on Assets (ROA) and on the Return on Equity (ROE), which indicates that the lower quality of the banks assets, Management Efficiency and Sensitivity to Market Risk contribute to improving the bank's financial performance.

Return on Equity has a statistically significant negative relationship with Asset Quality at a significance level of 1%, which means a decrease in the ratio of non-performing loans to total advances increases improvement in the bank's financial performance.

R^2 quals 0.400 for the ROA model and 0.343 for the ROE model, which means that 40% and 34.4 % of the total variation in the value of the models, respectively, were attributed to the effect of the CAMELS model variables.

Following the general rule of thumb, a Variance Inflation Factor (VIF) exceeding 4 requires further investigation and exceeding 10 indicates signs of serious multi-collinearity requiring correction or changes in variables. The result of data analysis shows that the VIF of all independent variables is less than 4 so there is no requirement for any changes, and the data are valid for analysis.

Moreover, the Durbin-Watson statistics are used to detect the presence of autocorrelation. The value of this test could help us to find out the existence of problems between the data. The Durbin-Watson results range in value from 0 to 4. A value near 2 specifies non-autocorrelation. A value toward 0 shows positive autocorrelation and a value toward 4 shows negative autocorrelation. The value of Durbin-Watson statistics is 1.5, showing that there is no autocorrelation.

Table 3
Regression analysis results during the period 2016–2020

	Return on Assets				**Return on Equity**			
ANOVA Sig.	0.000				0.000			
R^2	0.400				0.343			
Durbin-Watson	1.554				1.531			
F-statistic	6.450				5.038			
Variables	Coefficient	t-Statistic	Sig	VIF	Coefficient	t-Statistic	Sig	VIF
Constant	0.901	1.264	0.211		11.462	2.342	0.023	
C	0.037	1.779	0.080	1.051	0.009	0.065	0.949	1.051
A	-0.039	-1.607	0.113	1.474	-0.539	-3.201	0.002	1.474
M	-0.011	-1.635	0.108	1.239	-0.075	-1.561	0.124	1.239
E	0.103	1.756	0.084	1.388	0.678	1.691	0.096	1.388
L	0.021	1.728	0.089	1.619	0.096	1.162	0.250	1.619
S	-0.020	-1.911	0.061	1.767	-0.042	-0.599	0.552	1.767

Source: Own work

From the previous analysis, we can formulate the following equations:

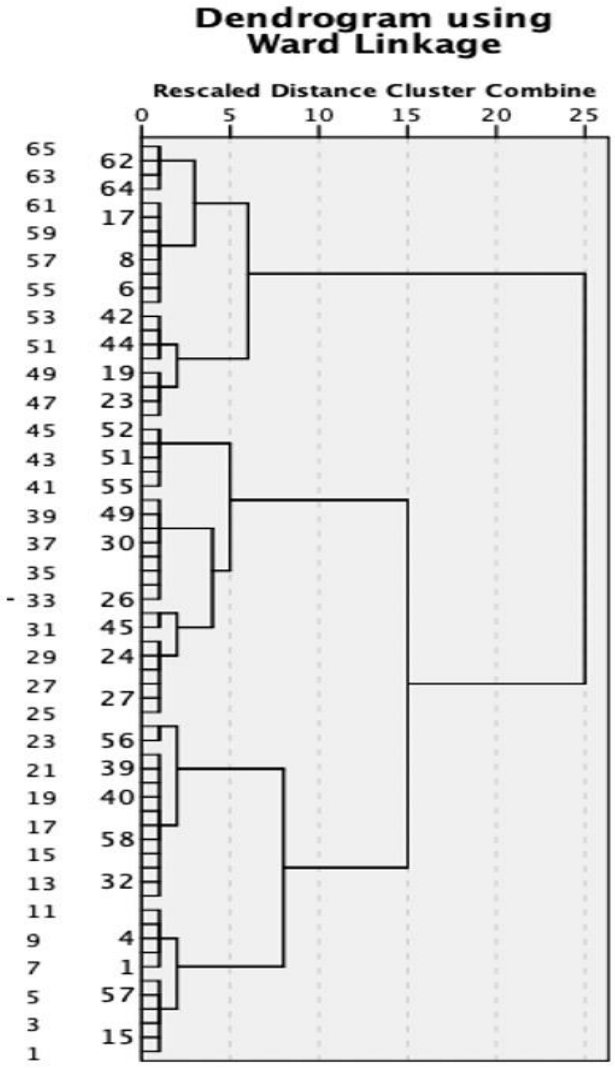
$$ROA = 0.901 + (0.037 \times C) + (-0.039 \times A) + (-0.011 \times M) + (0.103 \times E) + (0.021 \times L) + (-0.020 \times S) + \varepsilon$$

$$ROE = 11.462 + (0.009 \times C) + (-0.539 \times A) + (-0.075 \times M) + (0.678 \times E) + (0.096 \times L) + (-0.42 \times S) + \varepsilon$$

Cluster Analysis

Cluster analysis results allowed us to observe that there are some dissimilarities between the Jordanian banks in terms of banking structure, although they are working under the same authority and the same governing policies. The regulators hope to create a fair and competitive market for all financial institutions. Some of the very important ratios of the Jordanian banking system have proven to be differentiated in many banks. As an example, Arab Bank, Bank of Jordan, Invest Bank, and Jordan

Kuwait bank formed a group (cluster 2) for the period examined. Figure 1 presents cluster results.



Members of Cluster 1
Societe Generale De
Capital Bank of Jordan
The Housing Bank for Trading
Jordan Commercial Bank

Members of Cluster 2
Arab Bank
Bank of Jordan
Invest Bank
Bank El Eithad
Jordan Kuwait Bank

Members of Cluster 3
Jordan Ahli Bank
Cairo Amman Bank
Arab Jordan Investment Bank
Arab Banking Corporation

Source: Own work

Figure 1. Cluster dendrogram and memberships

Common characteristics of clusters

- The average Capital Adequacy Ratio is 16% for Cluster 1, 16.32% for Cluster 2 and 16.64% for Cluster 3.
- The average Asset Quality Ratio is 7.82% for Cluster 1, 6.94% for Cluster 2 and 5.30% for Cluster 3.
- The average Management Efficiency Ratio is 44.83% for Cluster 1, 448.62% for Cluster 2 and 58.65% for Cluster 3.
- The average Earning Quality Ratio is 0.84% for Cluster 1, 1.14% for Cluster 2 and 0.77% for Cluster 3.
- The average Liquidity Ratio is 16.78% for Cluster 1, 21.83% for Cluster 2 and 17.69% for Cluster 3.
- The average Sensitivity to Market Risk Ratio is 26.58% for Cluster 1, 16.75% for Cluster 2 and 28.28% for Cluster 3.

CONCLUSION

Using the features of the CAMELS model, this study attempts to assess the variables impacting the performance of Jordanian commercial banks and determine the aspects that have the greatest impact on their performance. The results indicated that Jordanian commercial banks enjoy high Capital Adequacy Ratios that exceed the minimum of 12 % required by the Central Bank of Jordan and 8% by the Basel Committee. They are also characterised by the good quality of their assets, the efficiency of

their management, and their ability to achieve relatively high-profit margins. The Jordanian commercial banks enjoy good and sufficient Liquidity ratios to meet any unexpected needs; however, there was an increase in their sensitivity to market risks. The results indicate that Capital Adequacy Ratio, Earning Ability, and Liquidity have a positive and not statistically significant impact on the financial performance of banks in Jordan as measured by both the ratio of Return on Assets (ROA) and the ratio of return on Equity (ROE). The results also indicate that the Asset Quality, Management Efficiency, and sensitivity have a negative and not statistically significant impact on the financial performance of banks in Jordan as measured by the ratio of ROA and the ratio of ROE.

The study recommends the Central Bank of Jordan use the CAMELS model when evaluating the financial performance of banks. This can contribute to stakeholders' analysis, which will help stakeholders interested in Jordanian commercial banks to access these analyses and make comparisons between them to facilitate the decision-making process. Also, it can help identify potential weak points in banks.

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