
Impact of capital risk on the application of CAMELS standards in banks listed on the Palestine Stock Exchange

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Abstract: The objective of this research is to identify the impact of capital risks on the application of CAMELS standards in banks listed on the Palestine Stock Exchange. The research relied on the inductive and inference approach, and the financial reports of the banks listed on the Palestine Stock Exchange during the period (2007–2019) as the research tool. The research reached several results: there is a moral lyceum at the level of indication ($\alpha \leq 0.05$) of capital risk on capital adequacy, and profits (capital) (returns) to the banks listed on the Palestine Stock Exchange; there is no moral significance at the level of indication ($\alpha \leq 0.05$) of capital risk on the quality of assets, quality of management, quality of liquidity, liquidity quality, and sensitivity of market risk. It is recommended for the need to pay attention to the analysis of the basic components of CAMELS model by measuring that adequacy of capital, asset quality, management quality, profits, liquidity quality, and sensitivity of market risk to reduce the risk of capital in the banks listed on the Palestine Stock Exchange.

Keywords: capital risk; CAMELS standards; banks; Palestine Stock Exchange; Palestine.

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1 Introduction

Capital risk arises from two main sources: the first is to increase liabilities at a higher rate than the increase in equity, and the second is to achieve annual losses from year to year, and therefore there is a direct correlation between the risk of capital and both the risk of credit, the liquidity risk and the interest rate risk. Bank capital is an important security element in banks, in addition to being a source of financing. The bank is a source of absorption of losses resulting in the loss of owners' funds and part of the depositors' funds, and therefore the loss avoidance process is a goal of managing the bank's portfolio, and also a source of revenue for the protection of shares.

The banking industry has witnessed a series of developments that have been the product of financial innovations, technological advances and liberalisation of financial markets, which have led to increased competition between banks and financial institutions, increased risks to their existence and continuity, and with these risks and their diversity, banking and financial institutions have had to move towards risk management by inventing new financial methods and techniques to reduce them, and risk management must not be an obstacle to the work of banks and the implementation of their objectives. The aim of risk management is not to eliminate risks and to develop care to improve the performance of banks, reduce risk control and early detection and control, as well as to be one of the most important objectives of commercial banks that they seek to achieve, as this is critical to making these banks operate in a relatively safe banking environment and working to achieve the requirements of banking stability, which

represents an advanced level of economic and development objectives (Shara et al., (2019), p.289].

Banks are of great importance in the economies of developed and developing countries alike, due to several reasons, including the large relative size of banks compared to other types of companies, the multiplicity of stakeholders who have a relationship with the bank of shareholders and depositors borrowers, and the integrity of the national economy and the effectiveness of the monetary policy of any country depends on the integrity of the financial system and specifically the banks, and central banks are considered one of the most important supervisory bodies on banks due to the presence of the bond. The law that enables it to exercise the function of oversight, and in this area, central banks usually use a set of regulatory instruments, notably field oversight, office control, and one of the most important office control tools camels model, which assesses the overall position of the bank, identifies its strengths and weaknesses, and defines camels as a comprehensive evaluation tool used by regulatory bodies to assess the financial durability of banking institutions (Rose and Hudgins, 200).

2 Research problem

Based on the above, the problem of research is to answer the following main question: what is the impact of capital risk on the application of CAMELS standards (capital adequacy, asset quality, management quality, returns (profits), liquidity quality, sensitivity to market risks) in banks listed on the Palestine Stock Exchange.

3 Research goals

This study aims to identify the impact of capital risk on capital adequacy, to demonstrate the impact of capital risks on asset quality, the impact of capital risks on management quality, to clarify the impact of capital risk on returns (profits), to highlight the impact of capital risks on liquidity quality, and to see the impact of capital risks on market risk sensitivity.

4 The importance of research

The importance of research is highlighted in terms of the exposure of many developed and developing countries alike to financial crises that differ in their severity and extent, and given that the banking sector is the backbone of economic activity, therefore the safety and stability of this sector means the safety and stability of the national economy, and therefore the current study contributes to measuring the impact of capital risks on the application of CAMELS standards in banks listed on the Palestine Stock Exchange.

5 Research hypotheses

Through the problem of research and its questions, the research hypotheses can be formulated as follows:

- 1 There is a statistically significant effect at the level of indication $\leq 0.05(\alpha)$ capital risk on the capital adequacy of the banks listed on the Palestine Stock Exchange.
- 2 There is a statistically significant effect at the level of significance $\leq 0.05(\alpha)$ capital risk on the quality of assets of the banks listed on the Palestine Stock Exchange.
- 3 There is a statistically significant effect at the level of indication $\leq 0.05(\alpha)$ capital risk on the quality of management of the banks listed on the Palestine Stock Exchange.
- 4 There is a statistically significant effect at the level of indication $\leq 0.05(\alpha)$ capital risk on returns (dividends) for banks listed on the Palestine Stock Exchange.
- 5 There is a statistically significant effect at the level of significance $\leq 0.05(\alpha)$ capital risk on the quality of liquidity of the banks listed on the Palestine Stock Exchange.
- 6 There is a statistically significant effect at the level of significance $\leq 0.05(\alpha)$ capital risk on the sensitivity of market risk to the banks listed on the Palestine Stock Exchange.

6 Measuring research variables

The research employed a set of metrics for its variables, and was based on a set of related studies in accordance with the data disclosed in the Palestine Stock Exchange database, and the following is the explanation of the methods of measuring the variables:

6.1 Measuring the independent variable

Table 1 The independent variable

<i>Variable and pointer</i>	<i>The method of measurement</i>	<i>Icon</i>
Capital risk	The main causes of the inequality in the world are the high risk of a high-risk situation.	X1

6.2 Dependent variable measurement (CAMELS standards application)

Table 2 Dependent variable:

<i>No.</i>	<i>Variable and pointer</i>	<i>The method of measurement</i>	<i>Icon</i>
1	Capital adequacy	Regulatory capital to total assets	Y1
2	Asset quality	Non-performing loans to total loans	Y2
3	Quality management	Bank operating expenses to total assets	Y3
4	Profits(returns)	Return on assets and return on equity	Y4
5	Quality of liquidity	Total loans to total deposits	Y5
6	Market risk sensitivity	Portfolio securities to total assets	Y6

7 Study limits

The limits of research are divided into a set of limits, the most important of which are:

- *Spatial limit*: Banks listed on the Palestine Stock Exchange.
- *Time limit*: A time series of 13 years has been applied, from the financial reports published from 2007 to 2019.
- *Objective limit*: the impact of capital risk on the application of CAMELS standards in banks listed on the Palestine Stock Exchange.

8 Theoretical framework for research

8.1 Capital risk

Capital represents the first line of defence to protect depositors' funds and secure them against any losses that may be suffered by banks, as well as an important element to increase depositors' confidence in the bank and enhance the bank's ability to stay, maintain and compete, and therefore the banks are constantly distressed to increase capital in multiple ways, in order to support the capital and increase it to be sufficient to cover any risks to the bank.

8.2 Capital concept

Bank capital is defined as the bank's net assets, i.e., the difference between the value of the assets and the value of liabilities [Al-Taie, (2010), p.84].

It is also defined as the sum of funds received by the bank or financial establishment that the owners of the project contribute when it is established or formed, taking into account any additions or reductions that may occur at later periods [Al-Husseini and Rahman, (2008), p.81].

As a result of the above, capital can be defined in the opinion of the researcher as: the barrier wall, which would prevent unexpected losses from prolonging depositors' deposits, which are profits generated in previous years, was withheld by the administration and not distributed.

8.3 The concept of capital risk

Risks resulting from insufficient capital to protect the interests of depositors, investors, borrowers and other stakeholders, but in practice it is difficult to determine the adequacy of capital for a single commercial bank or even the banking system as a whole, because the conduct of future depositors and borrowers is not known accurately [Ramadan and Wahada, (2003), p.75]. There is a need for the bank's safety and confidence to be maintained and maintaining the appropriate level of safety, but it does not guarantee that safety alone, but other factors must be met to achieve safety [Al-Badiri, (2003), p.125], and that the requirements for retaining the ownerial capital are positively linked to the level of risk, i.e., the higher the risk of the bank to increase capital to meet the expected risks [Casu et al., (2006), p.275].

Capital risk indicates that the market value of assets is lower than the market value of liabilities, capital risk is calculated through the following equation (owned capital ÷ total assets) and shows that the lower the capital risk, the lower the capital risk (Casu et al., (2006), p.260].

8.4 *Effects of capital risk*

Capital risk (solvency risk) occurs when the bank's capital is unable to cover losses generated by the bank's exposure to various risks, so exposure to a large volume of risk may lead to the bank's insolvency as the bank's retention of the equity ratio to assets is high, enabling the bank to take more risks. Capital risk therefore represents the bank's likelihood of defaulting on obligations, and the Bank is unable to meet obligations when shareholders' equity becomes negative and is determined by the difference between the market value of its assets and the market value of the liabilities, so capital risk indicates a significant reduction in net asset value [Hemple and Simonson, (1997), p.63].

9 CAMELS

CAMELS is one of the most important rating systems used by the world's regulatory bodies to assess the safety of banks, and dates back to November 1979 when it was first used by the U.S. Federal Council for The Examination of Financial Institutions, after it was adopted by the National Federal Credit Management Board (NCUA) in the United States in October 1987 [Milligan, (2002), p.70].

CAMELS refers to the initials of the system's components, which include six elements: capital adequacy, asset quality, management, earning and liquidity, sensitivity to market risk.

CAMELS is based on a five-year rating of one to five, as the rating (1) is the best and reflects the integrity of the bank's operations and the existence of strong performance and risk management practices, while rating (5) is the worst rating for the bank because it reflects the bank's unsatisfactory performance and indicates a high probability of bank failure, significant challenges facing management, usually the procedures followed here by the regulatory authorities to liquidate the bank, or resort to mergers and acquisitions.

9.1 *CAMELS model elements*

Research will draw on the six camels model elements to explain the financial performance of banks, including:

- 1 *Capital adequacy*: The capital adequacy ratio reflects the bank's ability to withstand unexpected losses and meet obligations [Aspal and Malhotra, (2013), p.73], and the capital adequacy ratio will be measured in accordance with the capital adequacy instructions issued by the Central Bank of Jordan, which are calculated and published by the banks in their financial reports, which is the regulatory capital divided by total assets according to their risk weights.
- 2 *Asset quality*: One of the most used measures of the quality of the bank's assets is the ratio of non-performing loans to total loans (Babar and Zeb, 2011): This ratio will be measured by dividing non-performing loans by the bank's total loans.

- 3 *Management efficiency*: This ratio reflects the ability and efficiency of the bank's board of directors and executive management in the conduct of its business and risk management [Dang, (2011), p.21] and the efficiency of management will be measured by its ability to control the bank's operating expenses by dividing the bank's operating expenses by total assets (Khatib and Nour, 2021).
- 4 *Profitability*: Achieving profitability is the most important objective and determinants of the bank's performance, since profits are the primary source of appropriate returns for the bank's shareholders and to enhance the bank's capital (Atikogullari, 2009) and the bank's profitability will be calculated through net interest margin, by dividing the difference between received and interest paid on total income (Matthew Matthew, 2012; Saleh et al., 2020).
- 5 *Bank liquidity*: Liquidity is particularly important in assessing the bank's solvency because it reflects the bank's ability to meet its obligations to creditors, particularly depositors [Ongore and Kusa, (2013), p.241], and liquidity will be measured by dividing the bank's liquid assets by the total assets (Ilhomovich, 2019).
- 6 *Market risk sensitivity*: This variable measures the bank's exposure to market risk, and market risk sensitivity will be measured by dividing the bank's portfolio of securities by total assets [Gulzeb, (2011), p.35; Jabarin et al., 2019].

10 Previous studies

In this regard, we will try to present the related research's and studies, which have been characterised by the fact that they are directly related to their subject matter and problem: (Shara et al., 2019), examined the impact of the management of banking risks (liquidity risk management, capital risk management) on the degree of banking security, and the study was conducted on a sample of the ten commercial banks listed on the Iraqi Stock Exchange (1) (10) Banks for the period (2010–2015) and the study variables were measured by adopting appropriate financial indicators for this goal, and for the purpose of achieving the objectives of the study their hypotheses were formulated and then tested by statistical means and the application of the statistical program (SPSS). The study reached a range of conclusions, perhaps the most important of which: a relationship of a moral statistically significant expulsion effect between both liquidity risk management and capital risk management on the degree of banking safety, while the study (Mansoor, 2018) analysed and assessed the impact of interest rate and capital risks on Yemeni banking stability, reviewing the extent of interest and capital risk faced by the banking sector and the extent of Yemeni banking stability. The results of the study at each bank level showed that interest rate risks did not affect the financial stability of the commercial banks studied at all, nor did there be any impact of capital risks on the financial stability of banks except Bank of Yemen and Kuwait, but the study (Hamza and Malallah, 2018) measured the impact of risks (liquidity, credit, capital convenience) To the degree of safety, a specific sample of ten private commercial banks listed on the Iraqi Stock Exchange was selected, where the researchers made sure that the official annual reports of the period (2005–2015) were available and the researchers calculated the values of each of the three independent variables and variables It has more than one mathematical equation, in preparation for its use as inputs into panel data to measure the impact of

independent variables on the approved variable. The study concluded that there is a moral impact of the first, second and third independent variables (liquidity risk), (credit risk) and (capital solvency risk) respectively, in the dependent variable (bank security degree) and that the interpretive strength of the designed model was (88%) This indicates his competence in expressing the impact of banking risks researched in the degree of banking security (Yahya, 2017) indicate that assessing the financial performance of commercial banks in the Arab Republic of Egypt through camels application has a clear impact in determining the importance of bank inspection reports in clarifying the positives and negatives The researchers relied on the method of comprehensive inventory, which is represented by public and private commercial banks to which the terms of research apply, and the researcher used many statistical methods, including standard deviation, arithmetic average and analysis of monovariability of statistical analysis. The study found a range of results, the most important of which: follow-up first reveals a full analysis of the bank's internal environment through banking strengths and weaknesses, which helps to increase banking efficiency in asset management and liabilities and the imbalance between profitability and liquidity, which will show that there are insufficient capable of exploiting skills to reach the best employment of the bank's capabilities, as carried out by the study (Karri et al., 2015) analysed the financial situation and performance of Baroda Bank and Punjab National Bank of India during the period (2010–2014) based on the financial characteristics of each bank through camel model and the study measured the relative performance of each bank through the six elements of the model. The results of the study showed the success of both banks in maintaining the capital ratio above the specified level, noting that Baroda Bank achieved the highest level during the five years of study, and the results showed that out of the 14% used in camel model, Baroda Bank was the best in six ratios, followed by Punjab National Bank in five ratios, reflecting that Baroda Bank is The best bank in the selected public sector banks, on other hand the study of Omran (2015) dealt with the impact of liquidity, credit and capital risk management on the degree of security at the National Commercial Bank by analysing the financial statements of the study variables during the period from (2004–2010) using regression analysis using Minitab statistical analysis program. The study showed a direct relationship between liquidity risk and bank security on the one hand, and a reverse relationship between credit and capital risks from the degree of banking security at the National Commercial Bank, Al-Ghussin and Nashwati (2014) sought to assess the financial performance of Jordanian Islamic and traditional banks and compare it with the use of the five financial indicators of camels model represented by the capital adequacy index, the asset quality index, the management quality index, the profit management index and the liquidity management index, with the aim of detecting any from the Islamic or traditional banks achieved better performance than the other in addition to studying the impact of financial performance at the level of public confidence of the customer audience, and to this end all Jordanian Islamic and traditional banks (13 traditional banks, Islamic bankers) were selected as a sample of the study during the period 2006–2012, and the t-test was used to study the moral differences between average financial ratios and analysis of multiple linear regression to study the impact of individual financial performance indicators combined at the level of public confidence. The study found that traditional banks achieved better financial performance than Islamic banks and that the level of public confidence of the public Clients in Islamic banks mainly arise from their financial performance, contrary to what has been achieved for traditional banks, while Ogboi and Unuafe (2013) concentrate on impact of credit risk management and capital

adequacy on the financial performance of banks operating in Nigeria, by testing the impact of both credit risk and capital adequacy in the profitability of Niger's banks, using the panel data mode model, the researchers learned about the nature of the study showed that both credit risk and capital adequacy positively affect the financial performance of the sample banks, but on the contrary for the variable bad debt, as it negatively affects the profitability of banks, as the study of Abu Khreis and Ahmed (2011) identified the types of banking risks (credit, liquidity, capital, interest rate) to which Libyan commercial banks are exposed, and the impact these risks may have on the profitability of these banks and financial institutions, and this study was conducted on the results showed that there was a statistically significant expulsion relationship between bank risks combined as independent variables, return on assets as a continuing variable, while the results showed a simple regression analysis used to test sub-hypotheses that had a statistically significant expulsion relationship between credit risk, return on assets and head risk. Money, return on assets on bank credit, Borquba (2007) highlighted the importance and benefit camels provide to regulatory authorities in assessing the performance of banks, particularly Islamic banks, which have begun to grow increasingly on the banking scene with indicators through which the financial situation and the bank's degree of capital adequacy can be inferred. The study reached conclusions, the most important of which Camels method can provide the performance of traditional banks as well as Islamic banks despite the privacy they enjoy in employing funds to help them detect deviations and identify their causes early, but it did not address the Basel model in assessing capital adequacy. At the end this study is distinguishes from the previous study, that the majority of them focused on the impact of risk (liquidity, credit, capital adequacy) on banking's, bank safety and financial performance of banks without linking them to the impact of camels on these risks, and the current study was characterised by its focus on measuring the impact of capital risk on the application of CAMELS standards in banks listed in Palestine Stock Exchange PEX.

11 Methodology and procedures for study

The researcher relied on the inductive approach, and inference to conform to the theoretical and applied framework of Research , as for the practical framework of research, interested in setting the assumptions and determining the appropriate methodology to test it by identifying the type of data required and research community, and methods of appropriate statistical analysis, and then interpreting the results, to reach the facts and scientific generalisations.

11.1 Community and sample study

Research community is represented by all five banks listed on the Palestine Stock Exchange, namely Arab Islamic Bank, Palestinian Islamic Bank, Jerusalem Bank, Palestinian Investment Bank, Bank of Palestine, and this sector is important for the Palestinian business environment.

- *Time limit:* Study of financial reports and statements through a time series of 13 years from 2007–2019.

- *Objective limit:* Capital risk and camels criteria of six variables (capital adequacy, asset quality, management quality, 'returns' profits, liquidity quality, sensitivity of market risk).

11.2 Research variables

One variable (capital risk) (independent variable) has been adopted, and the dependent variable of camels standards of six variables has been adopted, and variables can be explained as follows:

11.3 Measuring research variables

The research employed a set of metrics for its variables, and was based on a set of related studies in accordance with the data disclosed in the Palestine Stock Exchange database, and the following is the explanation of the methods of measuring the variables:

11.3.1 Measuring the independent variable

Table 3 Measuring the independent variable

<i>Pointer</i>	<i>The method of measurement</i>	<i>Icon</i>
Capital risk	The main causes of the inequality in the world are the high risk of a high-risk situation.	X1

11.3.2 Dependent variables measurement (camels standards application):

Table 4 Dependent variables measurement

<i>No.</i>	<i>Pointer</i>	<i>The method of measurement</i>	<i>Icon</i>
1	Capital adequacy	Regulatory capital to total assets	Y1
2	Asset quality	Non-performing loans to total loans	Y2
3	Quality management	Bank operating expenses to total assets	Y3
4	Profits(returns)	Return on assets and return on equity	Y4
5	Quality of liquidity	Total loans to total deposits	Y5
6	Market risk sensitivity	Portfolio securities to total assets	Y6

11.4 Statistical methods used in research

- arithmetic average and standard deviation
- Pearson's association
- analysis of simple linear regression
- maximum, minimum.

11.5 Descriptive statistical measures of the dimensions of the study

Table 5 Distribution of study dimensions by descriptive analysis

	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. deviation</i>
Capital risk	0.000	0.441	0.176	0.076
Capital adequacy	0.000	0.441	0.175	0.076
Asset quality	0.000	0.116	0.010	0.021
Quality management	0.034	0.530	0.067	0.060
Profits(returns)	0.000	0.270	0.102	0.072
Quality of liquidity	0.152	0.933	0.396	0.189
Market risk sensitivity	0.000	0.331	0.056	0.065
Camels standards	0.077	0.221	0.134	0.037

11.6 The link between the variables of the study

The (Table 6) Pearson correlation transactions show between the main variables of the study, and the results indicate a statistically significant relationship between the impact of capital risk and the application of CAMELS standards in banks listed on the Palestine Stock Exchange.

Table 6 Pearson link transactions to study variables

		<i>Capital risk</i>	<i>Capital adequacy</i>	<i>Asset quality</i>	<i>Quality management</i>	<i>Profits (returns)</i>	<i>Quality of liquidity</i>	<i>Market risk sensitivity</i>	<i>Camels standards</i>
Capital risk	Pearson correlation	1							
Capital adequacy	Pearson correlation	0.995**	1						
	Sig. (2-tailed)	0.000							
Asset quality	Pearson correlation	-0.089	-0.071	1					
	Sig. (2-tailed)	0.480	0.574						
Quality management	Pearson correlation	-0.011	-0.055	0.059	1				
	Sig. (2-tailed)	0.928	0.665	0.638					
Profits (returns)	Pearson correlation	-0.462**	-0.490**	-0.146	0.197	1			
	Sig. (2-tailed)	0.000	0.000	0.247	0.115				

Table 6 Pearson link transactions to study variables (continued)

		<i>Capital risk</i>	<i>Capital adequacy</i>	<i>Asset quality</i>	<i>Quality management</i>	<i>Profits (returns)</i>	<i>Quality of liquidity</i>	<i>Market risk sensitivity</i>	<i>Camels standards</i>
Quality liquidity	Pearson correlation	0.077	0.065	-0.066	-0.031	-0.233	1		
	Sig. (2-tailed)	0.542	0.605	0.600	0.806	0.062			
Market risk sensitivity	Pearson correlation	0.189	0.189	-0.124	-0.078	0.088	0.027	1	
	Sig. (2-tailed)	0.131	0.131	0.323	0.538	0.486	0.832		
Camels standards	Pearson correlation	0.301*	0.275*	-0.086	0.277*	0.027	0.808**	0.375**	1
	Sig. (2-tailed)	0.015	0.027	0.496	0.025	0.833	0.000	0.002	

11.7 Regression analysis and testing of study hypotheses

After reviewing the theoretical framework and previous literature of the main variables of the study, the role of this study in linking capital risks to the application of CAMELS standards in banks listed on the Palestine Stock Exchange, and to achieve as well as formulating the hypotheses of Research in the nihilistic form to answer the study's questions as follows:

11.7.1 The main hypothesis: there is no statistically significant effect at the level of significance ($\alpha \leq 0.05$) capital risk in camels standards for banks listed on the Palestine Stock Exchange

This hypothesis was validated using simple linear regression analysis, as shown in the Table 7.

The previous table showed that: The correlation coefficient is equal to (0.301) and the adjusted selection coefficient equals (0.076), i.e., 7.6%. The change in the variable dependent camels standards is due to the change in capital risk, and the remaining percentage (92.4%) due to the change in other factors. The value of (P) reached (6.27) at a moral level (0.015), which confirms the morale of the regression model $\alpha \leq$.

Thus, we reject zero imposition and accept the alternative hypothesis: there is a significant effect at the level of significance ($\alpha \leq 0.05$) of capital risk in camels standards for banks listed on the Palestine Stock Exchange.

The result of the testing of this hypothesis is consistent with the study of Shara et al. (2019), Hamza and Malallah (2018), Ogboi and Unuafe (2013) and Abu Khreis and Ahmed (2011), that the bank's retention of a high equity-to-asset rate enables the bank to

take more risks, so capital risks represent the bank's potential inability to meet obligations, so capital risks indicate a significant reduction in net asset value, measured using regulatory capital to total assets.

Table 7 Regression analysis (child variable: CAMELS criteria)

<i>Independent variables</i>	<i>Regression coefficients</i>	<i>Standard error</i>	<i>Standard regression coefficients beta</i>	<i>Value (t)</i>	<i>Probability value .sig</i>	<i>Indication level at (0.05)</i>
Constant	0.108	0.011		9.714	0.000	Function
Capital risk	0.145	0.058	0.301	2.504	0.015	Function
<i>ANOVA contrast analysis</i>						
F test value		6.27		Probability value		0.015
R ² selection factor value		0.091		Link coefficient		0.301
R-2 rate selection factor value		0.076				

11.7.2 The initial hypothesis: there is no statistically significant effect at the level of significance ($\alpha \leq 0.05$) capital risk on the capital adequacy of the banks listed on the Palestine Stock Exchange

This hypothesis was validated using linear regression analysis (enter), as shown in the Table 8.

Table 8 Regression analysis (dependent variable: capital adequacy)

<i>Independent variables</i>	<i>Regression coefficients</i>	<i>Standard error</i>	<i>Standard regression coefficients beta</i>	<i>Value (t)</i>	<i>Probability value .sig</i>	<i>Indication level at (0.05)</i>
Constant	0.001	0.002		0.228	0.820	Not function
Capital risk	0.992	0.012	0.995	79.841	0.000	Function
<i>ANOVA contrast analysis</i>						
F test value		6,374.5		Probability value		0.000
R ² selection factor value		0.990		Link coefficient		0.995
R-2 rate selection factor value		0.990				

Source: Preparation of the researcher, based on the data of the applied study

The previous table showed that: The correlation coefficient is equal to (0.995), and the adjusted selection factor equals (0.990), i.e., 99%. The change in the capital adequacy variable is due to the change in capital risk, and the remaining percentage (1%) due to the change in other factors. The value of 'P' was 6,374.5 at a moral level (0.000), which confirms the morale of the regression model. This confirms that there is a significant impact on the level of significance ($\alpha \leq 0.05$) capital risk on the capital adequacy of the banks listed on the Palestine Stock Exchange.

In this way, we reject zero imposition and accept the alternative hypothesis: there is a significant moral impact at the level of significance ($\alpha \leq 0.05$) capital risk on the capital adequacy of the banks listed on the Palestine Stock Exchange.

The result of the testing of this hypothesis is consistent with the study of Al-Ghussin and Nashwati (2014) and Yahya (2017) that the higher the degree of capital risk, the clearly affecting the quality of the assets and their ability to repay loans, measured using non-performing loans to total loans.

11.8 Second hypothesis: here is no statistically significant effect at the level of significance ($\alpha \leq 0.05$) capital risk on the quality of assets of the banks listed on the Palestine Stock Exchange

This hypothesis was validated using linear regression analysis (enter), as shown in the Table 9.

Table 9 Regression analysis (dependent variable: asset quality)

<i>Independent variables</i>	<i>Regression coefficients</i>	<i>Standard error</i>	<i>Standard regression coefficients beta</i>	<i>Value (t)</i>	<i>Probability value .sig</i>	<i>Indication level at (0.05)</i>
Constant	0.015	0.007		2.207	0.031	function
Capital risk	0.025	0.035	0.089	0.710	0.480	Non-function
<i>ANOVA contrast analysis</i>						
F test value		0.504		Probability value		0.480
R ² selection factor value		0.008		Link coefficient		0.089
R-2 rate selection factor value		0.008				

Source: Preparation of the researcher, based on the data of the applied study

The previous table showed that: The correlation coefficient equals (0.089), and the adjusted selection coefficient equals (0.008), that the value of 'P' was (0.504) at a moral level (0.480), which confirms the in morality of the regression model. This confirms that there is no significant impact on the level of significance ($\alpha \leq 0.05$) capital risk on the quality of assets of the banks listed on the Palestine Stock Exchange.

In this way, we accept zero imposition and reject the alternative hypothesis: there is no moral significance at the level of the significance ($\alpha \leq 0.05$) of capital risk on the quality of assets of the banks listed on the Palestine Stock Exchange.

11.9 Hypothesis 3: there is no statistically significant effect at the level of significance ($\alpha \leq 0.05$) capital risk on the quality of management of banks listed on the Palestine Stock Exchange

This hypothesis was validated using linear regression analysis (enter), as shown in the Table 10.

The previous table showed that: The correlation coefficient equals (0.011), and the adjusted selection coefficient equals (0.016), that the value of 'P' was (0.008) at a moral level (0.928), which confirms the in morality of the regression model. This confirms that

there is no significant impact on the level of significance ($\alpha \leq 0.05$) capital risk on the quality of management of the banks listed on the Palestine Stock Exchange.

In this way, we accept zero imposition and reject the alternative hypothesis: there is no moral significance at the level of significance ($\alpha \leq 0.05$) capital risk on the quality of management of banks listed on the Palestine Stock Exchange.

Table 10 Regression analysis (dependent variable: management quality)

<i>Independent variables</i>	<i>Regression coefficients</i>	<i>Standard error</i>	<i>Standard regression coefficients beta</i>	<i>Value (t)</i>	<i>Probability value .sig</i>	<i>Indication level at (0.05)</i>
Constant	0.069	0.019		3.597	0.001	function
Capital risk	0.009	0.1	0.011	0.091	0.928	Non-function
<i>ANOVA contrast analysis</i>						
F test value		0.008			Probability value	0.928
R ² selection factor value		0.000			Link coefficient	0.011
R-2 rate selection factor value		0.016-				

Source: preparation of the researcher, based on the data of the applied study

The result of the testing of this hypothesis is consistent with the study of Shara et al. (2019), Al-Ghussin and Nashwati (2014) and Ogboi and Unuafé (2013) that the ability and efficiency of the bank's management and executive management in the management of its business and risk management will be done by measuring the efficiency of management in risk management to which the Bank may be exposed, and measured through the bank's operating expenses to total assets.

11.10 Hypothesis 4: there is no statistically significant effect at the level of indication ($\alpha \leq 0.05$) capital risk profits (returns) for banks listed on the Palestine Stock Exchange

This hypothesis was validated using linear regression analysis (enter), as shown in the Table 11.

Table 11 Regression analysis (dependent variable: earnings (returns))

<i>Independent variables</i>	<i>Regression coefficients</i>	<i>Standard error</i>	<i>Standard regression coefficients beta</i>	<i>Value (t)</i>	<i>Probability value .sig</i>	<i>Indication level at (0.05)</i>
Constant	0.179	0.020		8.882	0.000	function
Capital risk	0.436	0.105	0.462-	4.138	0.000	Function
<i>ANOVA contrast analysis</i>						
F test value		17.122			Probability value	0.000
R2 selection factor value		0.214			Link coefficient	0.462
R-2 rate selection factor value		0.201				

Source: Preparation of the research er, based on the data of the applied study

The previous table showed that: The correlation coefficient is equal to (0.462) and the adjusted selection coefficient equals (0.201), i.e., (20.1%) The change in variable dependent profits (returns) is due to the change in capital risk, and the remaining percentage (79.9%) due to the change in other factors. The value of 'P' was 17.122 at a moral level (0.000), which confirms the morale of the regression model. This confirms that there is a significant impact on the level of significance ($\alpha \leq 0.05$) capital risk on the profits (returns) listed on the Palestine Stock Exchange.

Thus, we reject zero imposition and accept the alternative hypothesis: there is a significant moral impact at the level of the significance ($\alpha \leq 0.05$) of capital risk on profits (returns) of the banks listed on the Palestine Stock Exchange.

The result of the testing of this hypothesis is consistent with the study of Al-Ghussin and Nashwati (2014) and Ogboi and Unuafé (2013) that profitability is the most important objective and determinant of the bank's performance, since profits are the primary source of appropriate returns for the bank's shareholders and to enhance capital, that is, there is an impact of capital risk on returns or profits, i.e., the higher the capital risk, the lower the profits and vice versa, and measured using return on assets and return on equity.

11.11 Hypothesis 5: there is no statistically significant effect at the level of significance ($\alpha \leq 0.05$) capital risk on the quality of liquidity of the banks listed on the Palestine Stock Exchange

This hypothesis was validated using linear regression analysis (enter), as shown in the Table 12.

Table 12 Regression analysis (dependent variable: liquidity quality)

<i>Independent variables</i>	<i>Regression coefficients</i>	<i>Standard error</i>	<i>Standard regression coefficients beta</i>	<i>Value (t)</i>	<i>Probability value .sig</i>	<i>Indication level at (0.05)</i>
Constant	0.362	0.060		6.046	0.000	function
Capital risk	0.192	0.313	0.077	0.613	0.542	Non-function
<i>ANOVA contrast analysis</i>						
F test value		0.376			Probability value	0.542
R ² selection factor value		0.006			Link coefficient	0.077
R-2 rate selection factor value		0.010-				

Source: Preparation of the researcher, based on the data of the applied study

The previous table showed that: The correlation coefficient is equal to (0.077), and the adjusted selection coefficient equals (0.01-). The value of 'P' was (0.376) at a moral level (0.542), which confirms the dismorality of the regression model. This confirms that there is no significant impact on the level of significance ($\alpha \leq 0.05$) capital risk on the quality of liquidity of the banks listed on the Palestine Stock Exchange.

In this way, we accept zero imposition and reject the alternative hypothesis: there is no moral significance at the level of the significance ($\alpha \leq 0.05$) of capital risk on the quality of liquidity of the banks listed on the Palestine Stock Exchange.

The result of the testing of this hypothesis is consistent with the study of Shara et al. (2019), Hamza and Malallah (2018), Al-Ghussin and Nashwati (2014) and Abu Khreis and Ahmed (2011) that there is an impact on capital risk management on liquidity risk management and will therefore affect the degree of banking security and the extent to which the Bank is able to meet its obligations to creditors, especially depositors, and liquidity risks have been measured through total loans to total deposits.

11.12 Hypothesis 6: there is no statistically significant effect at the level of significance ($\alpha \leq 0.05$) capital risk on the sensitivity of market risk to banks listed on the Palestine Stock Exchange

This hypothesis was validated using linear regression analysis (enter), as shown in the Table 13.

Table 13 Regression analysis (dependent variable: market risk sensitivity)

<i>Independent variables</i>	<i>Regression coefficients</i>	<i>Standard error</i>	<i>Standard regression coefficients beta</i>	<i>Value (t)</i>	<i>Probability value .sig</i>	<i>Indication level at (0.05)</i>
Constant	0.027	0.020		1.360	0.179	Non-Function
Capital risk	0.161	0.105	0.189	1.530	0.131	Non-function
<i>ANOVA contrast analysis</i>						
F test value			2.342		Probability value	0.131
R ² selection factor value			0.036		Link coefficient	0.189
R-2 rate selection factor value			0.021			

The previous table showed that: The correlation coefficient is equal to (0.189) and the adjusted selection coefficient equals (0.021), i.e., 2.1%. The change in the variable dependent market risk sensitivity is due to the change in capital risk, and the remaining percentage (97.9%) due to the change in other factors. The value of 'P' was 2.342 at a moral level (0.131), which confirms the dismorality of the regression model. This confirms that there is no significant impact at the level of significance ($\alpha \leq 0.05$) capital risk in the sensitivity of market risk to the banks listed on the Palestine Stock Exchange.

In this way, we accept zero imposition and reject the alternative hypothesis: there is no moral significance at the level of indication ($\alpha \leq 0.05$) of capital risk on the sensitivity of market risk to the banks listed on the Palestine Stock Exchange.

The result of the testing of this hypothesis is consistent with the study of Hamza and Malallah (2018), Yahya (2017) and Al-Ghussin and Nashwati (2014) that capital risks will affect market sensitivity risks, and market risk sensitivity has been measured by dividing the Bank's portfolio into total assets.

12 Conclusions

Research aimed to show the impact of capital risk on the application of CAMELS standards in banks listed on the Palestine Stock Exchange, and camels model is a comprehensive evaluation tool used by regulatory bodies to assess the financial strength of banking institutions, which is one of the most important office control tools that assess the overall position of banks, identifies its weaknesses, and based on the results of the analysis of the data the research concluded a number of results:

- There is a significant effect at the level of significance ($\alpha \leq 0.05$) capital risk on the capital adequacy of the banks listed on the Palestine Stock Exchange.
- There is no significant moral impact at the level of significance ($\alpha \leq 0.05$) capital risk on the quality of assets of the banks listed on the Palestine Stock Exchange.
- There is no significant impact on the level of significance ($\alpha \leq 0.05$) capital risk on the quality of management of banks listed on the Palestine Stock Exchange.
- There is a significant impact at the level of significance ($\alpha \leq 0.05$) capital risk on the profits (returns) of the banks listed on the Palestine Stock Exchange.
- There is no significant impact on the level of significance ($\alpha \leq 0.05$) capital risk on the quality of liquidity of the banks listed on the Palestine Stock Exchange.
- There is no significant moral significance at the level of significance ($\alpha \leq 0.05$) capital risk on the sensitivity of market risk to the banks listed on the Palestine Stock Exchange.

In light of the above, the researchers recommend that banking departments increase the capital adequacy ratio by deducting a percentage of realised profits, in order to meet capital risk, and to work to analyse the basic components of camels by measuring the adequacy of camels' capital, asset quality, quality of management, profits, liquidity quality, and sensitivity of market risk to reduce capital risk in banks listed on the Palestine Stock Exchange. The Palestine Monetary Authority ('PMA') (Central Bank), urged to use CAMELS the office control process on banks listed on the Palestine Stock Exchange to ensure access to strong banking institutions that provide good services.

Further Research and scientific papers related to capital risks, which will contribute to measuring the effectiveness of the application of camels model and its ability to evaluate the financial performance of banking institutions in Palestine, as well as holding seminars, workshops and training courses to demonstrate the importance of applying camels model standards and its ability to overcome the capital risks faced by banks listed on the Palestine Stock Exchange, thus developing technical and professional capabilities to improve the requirements of banking and dealing with it efficiently and strengthening their banking systems, The Palestinian Monetary Authority (Central Bank) must work permanently to identify the risks facing financial stability, and to draw an analytical picture permanently and permanently, precautionary, guarantor and financial stability guarantee, and the positive effects of risks that may have on financial stability.

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