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The Extent to Which the Financial Performance of Banks is affected by Economic Indicators (Applied Study on Palestinian Banks)

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Abstract

This study aims to investigate the extent to which the financial performance of Palestinian banks is affected by economic indicators, banks registered with the Palestinian Monetary Authority during the time period from the beginning of 2015 until the end of 2019. The impact of the independent variable in the study was measured based on the following economic indicators :(inflation, GDP, unemployment, public debt, and per capita GDP) on the dependent variable, which was determined by the following financial indicators: (deposits volume, net profit, Credit facilities, and bad debts). A quantitative analysis was used as a method that is based on referring to cross-sectional time series data (Panel Data) for the banks included in the study. The study results showed that there is a statistically significant impact of the economic indicators on the financial performance of the banks that is measured by net profits, the volume of deposits, the credit facilities, and the bad debts in the Palestinian banks. The results showed a high ability of economic indicators to explain the variance for both bad debts and credit facilities, where the explanation rate was 59% for bad debts and 49.26% for credit facilities. The results also showed that there is a medium ability for economic indicators to explain the variance for both the volume of deposits and the net profit, where the explanation ratio was 37.68% for the volume of deposits and 29.42% for the net profit.

Keywords: **economic development, financial system, macroeconomic indicators, Markets turbulence**

Introduction

Financial sector is a lifeblood of economic development and banks represent the main aspect of financial system of countries, at a meanwhile financial system has been affected by changes in macroeconomic changes, therefore, macroeconomic indicators and banks performance indicators have a mutual effect. Banks also operate in the industry and national environment. This environment is often turbulent and volatile as a result of interaction between and among various forces, among them macroeconomic indicators. Governments often enact legislation desired to achieve certain socioeconomic goals; these legislative enactments and other government intermediations in the market influence the macroeconomic environment [1]. In Palestine, responding to instability in political conditions, macroeconomic indicators and banks performance indicators are changed continuously. Many studies investigated the effects of changes in banks performance indicators to macroeconomic indicators, while this study is designed to explore the effects of macroeconomic indicators to financial performance of banks in Palestine

Research Problem

Macroeconomic indicators affect the performance of banks; it affects their profitability [3]. Variations in macroeconomic indicators affect the operating environment of banks. Markets turbulence presents threats as well as opportunities to the industry players simultaneously. The empirical studies reviewed, indicate that studies have been done in the past on how macroeconomic indicators affect the financial performance of corporations either inside Palestine or outside but none of them investigated this relation with banks. There is therefore a lack of consensus as to how macroeconomic indicators affect the financial performance of banks [2]. This study sought to fill this gap by seeking to answer the research question: What is the effect of macroeconomic indicators on financial performance of banks in Palestine?

Literature Review

Meher and Dewudu in 2020 studied the determinants of firm’s internal and macroeconomic factors on financial performance of Ethiopian insurers, their findings shows that GDP per capita and size of the companies demonstrate a positive and significant relationship while liquidity and underwriting risk are negative relationship with return on assets of insurance companies [4] examines the impact of macroeconomic changes on bank profits in Austrain, their finding summarized that bank profits are positively influenced by the spread between long-term and short-term interest rates. Cliff and Willy tested the effects of macro-economic factors on the financial performance of the companies listed at Nairobi Stock Exchange Market in various sector, their findings indicate that interest rate and inflation rate have significant effects on performance of firms in construction and manufacturing sectors while they have insignificant effects on agriculture sector [5]. Studied the influence of macroeconomic factors which are:

inflation rate, unemployment level, Gross Domestic Product (GDP), and exchange rate on firm profitability which is reflected by Return on Asset (ROA) ratio. Their findings showed that all studied economic factors have influence on ROA ratio (firm profitability) and partial t-test result showed that only Gross Domestic Product (GDP) level has influenced significantly on firm profitability, while other three macroeconomic factors have no significant influence [6]. The paper is purposively designed to study the linkages between organizational factors, including liquidity, leverage, asset utilization, market share position and firm size on financial performance in service firms illustrated the importance of financial performance in terms of ROE and ROA for company's development, and growth [7]. The factors conducive to higher firm performance should be empirically tested on financial performance indicators. Above all the important factors discussed in this article are the effective and efficient management and the organization of processes by managers to drive the business firm towards its goals and objectives i.e. financial performance [7]. Ongore and Kusa argue that during periods of declining GDP growth the demand for credit falls which in turn negatively affects the profitability of a bank [8]. Sought to find out the impact of macto economic factors on the performance of the stock market [9]. The results showed evidence that Foreign exchange rate, Interest rate and Inflation rate, affect stock return volatility. Inflation is the measurement of price rise of goods and merchandises for a particular period of a country [10] argued that the performance of the firm is insulated from the effect of macroeconomic factors like GDP per capita and inflation. Vong and Chan examined the impact of bank characteristics as well as macroeconomic and inancial structure indicators on the performance of the Macao banking industry [11]. The result proved that the rate of inflation and banks' performance has a significant correlation. Kosmidou did research on 32 commercial banks in UK within the period of 1995 to 2002 [12]. The study established that macro-economic factors that are inflation positively influenced the following banks' profitability which was reflected on their ROA and NIM (Net Interest Margin). Economic factor such as financial crises could affect the unemployment rate. Tanveer proved that financial crisis in 2007-2008 has impact on unemployment rate in different group of country [12]. Increasing unemployment has an impact on the decrease of income per capita. Decreasing in GDP has a negative impact on consumer purchasing power furthermore can diminish the demand products which ultimately can reduce the profitability of the company[13].

Research Methodology

This study used a quantitative analysis based on panel data for Palestinian Banks for the period of 2015-2019 then using multiple regression analysis for both dependent and independent indicators. The data were collected from financial statements of Palestinian banks, Palestine Monetary Authority (PMA) and Palestinian Central Bureau of Statistics (PCBS). The population of this study consists from 6 banks with 30 observations, the model of linear regression is

$$Y_{it} = B_{0i} + \sum_{j=1}^{k} B_j X_{jit} + \varepsilon_{it} (i = 1, 2, \ldots, N; t = 1, 2, \ldots, T; j = 1, 2, \ldots K)$$

Y_{it}: Dependent variable for bank I during period t
B_{0i}: Regression constant for each bank
B_j: Factor of Independent variable
X_{jit}: Independent indicators #j in banks i during period t
Error :ε_{it}

Results and Hypothesis Test

H1: There is no significant impact for macroeconomic factors on Profitability of bank

For testing this hypothesis the study used Fixed Effectiveness Model (EFM) depending on Lagrange Multiplier Test and Hausman Test. Based on below table, results show there is a significant impact for economic indicators on Profitability of Palestinian Banks, there is statistical significance is 0.00 which is lower than significant level of (α = 0.05)and R^2 is 29.24%. Unemployment factor has a significant impact on profitability at significant level of (α = 0.1) where is, statistical significance is 0.09 which less than, while inflation and GDP per capita factors has no significant impact on profitability where is statistical significance is 0.73 and 0.56 respectively

Independent Factors	**B**	**z-statistic**	**Sig.**
Constant B_0	-3.45e^7	-3.92	0.01
Unemployment	1411050	2.10	0.09*
Inflation	-2120.327	-0.36	0.73
GDP per capita	6069.199	0.63	0.56
Lagrange Multiplier Test	(54.12 ،Sig=0.00<0.05)		
Hausman Test	(1.00 ،Sig=0.00<0.05)		
Study Model test	(62.88 ،Sig=0.00<0.05)		
(R^2)	0.2924		

H2: There is no significant impact for macroeconomic factors on Banks Saving

For testing this hypothesis the study used Fixed Effectiveness Model (EFM) depending on Lagrange Multiplier Test and Hausman Test. Based on below table, results show there is a significant impact for economic indicators on banks saving in Palestine, there is statistical significance is 0.02 which is lower than significant level of (α = 0.05)and R^2 is 37.68%. Unemployment factor has a significant impact on profitability at significant level of (α = 0.1) where is, statistical significance is 0.01 which less than, while inflation and GDP per capita factors has no significant impact profitability where is statistical significance is 0.14 and 0.91 respectively

Independent Factors	B	z-statistic	Sig.
Constant B_0	-5.61e^9	-1.53	0.14
Unemployment	1.76e^8	2.87	0.01**
Inflation	751680.8	1.53	0.14
GDP per capita	122046.5	0.12	0.91
Lagrange Multiplier Test	(51.27 ، Sig=0.00<0.05)		
Hausman Test	(1.00 ،Sig=0.00<0.05)		
Study Model test	(4.23 ،Sig=0.02<0.05)		
(R^2)	0.3768		

H3: There is no significant impact for macroeconomic factors on Banks Credits

For testing this hypothesis the study used Fixed Effectiveness Model (EFM) depending on Lagrange Multiplier Test and Hausman Test. Based on below table, results show there is a significant impact for economic indicators on banks credits in Palestine, there is statistical significance is 0.00 which is lower than significant level of (α = 0.05)and R^2 is 49.26%. Unemployment and inflation factors have a significant impact on profitability at significant level of (α = 0.1) where is, statistical significance is 0.00 and 0.088 respectively, while GDP per capita factors has no significant impact on profitability where is statistical significance is 0.92.

Independent Factors	B	z-statistic	Sig.
Constant B_0	-5.03e^9	-1.92	*0.07
Unemployment	1.63e^8	3.72	0.00**
Inflation	629108.6	1.79	*0.088
GDP per capita	75799.98	0.110	0.92
Lagrange Multiplier Test	51.27) ، (Sig=0.00<0.05		
Hausman Test	1.00) ،(Sig=0.00<0.05		
Study Model test	6.80) ،(Sig=0.00<0.05		
(R^2)	0.4926		

H3: There is no significant impact for macroeconomic factors on Bad Debts

For testing this hypothesis the study used Fixed Effectiveness Model (EFM) depending on Lagrange Multiplier Test and Hausman Test. Based on below table, results show there is a significant impact for economic indicators on bad debts in Palestine, there is statistical significance is 0.00 which is lower than significant level of (α = 0.05)and R^2 is 59%. Unemployment and inflation factors have a significant impact on profitability at significant level of (α = 0.1) where is, statistical significance is 0.00 and 0.09 respectively, while GDP per capita factors has no significant impact on profitability where is statistical significance is 0.157.

Independent Factors	B	z-statistic	Sig.
Constant B_0	7.53487	-1.47	0.157
Unemployment	0.5242461	5.01	**0.00
Inflation	0.001489	1.77	*0.091
GDP per capita	-0.0025425	-1.47	0.157
Lagrange Multiplier Test	(33.38، Sig=0.00<0.05)		
Hausman Test	(1.00 ،Sig=0.00<0.05)		
Study Model test	(10.07 ،Sig=0.00<0.05)		
(R^2)	0.5900		

Conclusions

There are significant effect of economic indicators on financial performance of banks through net income of Palestinian banks, is 29.42 of variance in net income explained by economic indicators. Unemployment has significant positive effect on banking performance through net income, while there is no significant effect of Per-Capita of GDP & Public Dept on net income of the banks which explained by the researcher by the connection between economic sectors connected to economic sectors that affects profitability and net income of banks

Through Deposits economic indicators significantly affect financial performance of a banks is 37.68 of variance in banking deposits explained by economic indicators. 49.26% of variance in credit facilities been explained by the effect of economic indicator on banking financial performance. The effect of economic indicators on financial performance of banks explains 59% of variance in default loans in Palestinian banking sector.

Recommendations

The financial sector regulators (Monetary Authority) should be concerned about the extent to which the financial performance of Palestinian banks is affected by economic indicators because they have an impact on the performance and ability of these banks to achieve their returns and provide their service.

The Palestinian government should develop a stable economic environment that will support banks, increase their revenues and enable them to provide their services in productive way.

Palestinian banks should take into account the different economic fluctuations when making different decisions, which will reduce their impact on these fluctuations.

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