



**Arab American University**

**Faculty of Graduate Studies**

**COVID-19 and its impact on the financial and operational  
performance of the Palestinian Banks**

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requirements for the Master's Degree in Strategic Planning  
and Fundraising**

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## Declaration

The thesis entitles “**COVID-19 and its impact on the financial and operational performance of the Palestinian Banks**” is conducted under the supervision of Dr. Naser Abd Alkareem, an instructor of Strategic Planning and Fundraising in the Arab American University (AAUP).

I declare that the information reported in the current paper is the result of my own work, except where due to references is made. The thesis has not been accepted for any degree and is not concurrently submitted to any candidature for any other degree.

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## List of Acronyms

BOP	Bank of Palestine
TNB	The National Bank
AIB	Arab Islamic Bank
PIVB	Palestinian Investment Bank
PIB	Palestinian Islamic Bank
CA	Capital adequacy
AQ	Asset Quality
ME	Management Efficiency
EPS	Earnings per Share
ROA	Return on Assets
ROE	Return on Equity
NPL	Non-Performing Loans

## **Abstract**

The Palestinian banking sector plays a vital role in the economic growth, the good financial well-being of a banking sector is important for owners, investors, personnel, and the whole economy as well. Recently, the whole world was affected by a coronavirus and it caused economic consequences, and the Palestinian economy is part of this global economy, it had registered a sharp decline of up to 12% during 2020 ( PMA, Dec2020). The banking sector plays a vital role in the economic development and prosperity of the country, so the research aimed to measure COVID-19's impact on the operating and financial performance of local Palestinian Banks. Through this research, the performance of six Palestinian banks has been evaluated using the CAMEL model rating system, and the data has been collected for the past four years i.e. 2017-2020, the sample consisted of all local commercial Palestinian banks and two Islamic banks.

CAMEL model consists of five critical indicators that assess the soundness and execution of the bank. These segments are Capital adequacy, Asset quality, Management, Earnings, and Liquidity. The researcher used descriptive analysis and comparison approaches to identify the impact of the pandemic on the banks' performance.

The research concluded that Palestinian banks performed well even during the pandemic, they are committed to the Basel Accords and international standards in having capital adequacy of 10%, and some banks had a high level of capital adequacy, so they had to apply the capital in a profit-generating manner, on the other hand, profitability was not satisfied in all banks. The researcher recommended sustainable investing and monitored risk management practices to increase profits.

Key words: COVID-19, Capital adequacy, Asset quality, Management, Earnings, Liquidity, Palestinian banking sector.

## **Chapter One: Introduction**

### **1.1 Research overview**

#### **1.1.1 General overview**

In late December 2019, a new infectious respiratory disease emerged in Wuhan, Hubei province, China, and was referred to by the World Health Organization as COVID-19. The COVID-19 pandemic is considered to be the most global health calamity of the century and the greatest challenge that humankind has faced since the Second World War (Chakraborty and Maity 2020). Whereas the name COVID-19, 'CO' stands for 'corona,' 'VI' for 'virus,' and 'D' for disease, and 19 represents the year of its occurrence.

The virus has spread at an alarming speed, affecting the lives of millions around the globe. Governments have implemented swift, wide-ranging public health emergency measures that included social restrictions and quarantines, stay-at-home orders for nonessential workers, and the shutdown of all nonessential businesses to mitigate the rapid spread of the virus. As the health and human toll grows, the economic damage is already evident and represents the largest economic shock the world has experienced in decades (The World Bank, 2020).

The outbreak of COVID – 19 has shaken the global financial markets, and this action is reminiscent of the world economic crisis that happened in 2008-2009, which has seen the largest and sharpest drop-in global economic activities at that time. In 2009, most of the major developed economies suffered from a deep recession. It seemed that the burst

of the housing market bubble in late 2007, the ensuing collapse in the subprime mortgage market and related financial markets, and the subsequent collapse of Lehman Brothers Bank in 2008 have resulted in a sharp increase in the risk premium on interbank borrowing around the world causing it to rise 5 percent, whereas typically it was close to zero (Stoeckel. A & McKibbin.W, 2010). This financial crisis led to a sharp decline in lending, production, and employment in many countries and waved off fear around the world financial markets, and virtually stopped lending banks to each other (Coleman. N & Fehler. L 2015).

Banks play a significant role in the development of countries' economies; thus the assurance of a strong, solid, and steady banking sector is of the highest importance to the economic life for all participants such as employees, governments, depositors, and shareholders. The performance of the banking sector is an effective indicator to check the economy's performance, yet within the uncertain environment, as is the case in Palestine, banks' performance might be exposed to fluctuations and thus the state economy is adversely affected (Kullab. Y & Yan.CH 2018).

The Palestinian economy has worked in high risk and challenging environment over the past years. This has caused a series of political and economic crises, most recently the Palestinian liquidity crisis due to the deduction of clearance revenue by the Israeli occupation in 2019.

Financial institutions around the world measure their performance to evaluate the extent to which they are well managed, and whether they create value for the organization's stakeholders. A clear performance measurement definition can help directors go in the right

direction and focus on what matters and quantify the efficiency and effectiveness of past actions (Moullin, 2003). This can be achieved when organizations design methods to measure performance using a set of performance indicators, and through an evaluation process that determines whether performance targets were accomplished and at what cost.

There are various techniques and financial performance indicators used by researchers to assess the determinants of successful bank performance, the CAMEL framework has been proposed by the Basel Committee on Banking Supervision in 1988 to be used for managerial and financial assessment, to help in ranking the performance of banks and to provide a comprehensive evaluation of financial organizations as cited in Awan (2009) and Akhtar (2010). Various technical methods are used to assess banks' performance to maximize the investors' wealth, which is determined by financial decisions made by bank directors. Therefore, the Palestinian Monetary Authority (PMA) evaluated the financial soundness of banks based on the International Monetary Fund methodology, in its annual financial reports to assess bank performance using CAMEL main aspects (Abusherbeh, 2020).

The CAMEL model has been used by the researcher to contrast the performance of Palestinian banks before and during the covid-19 pandemic in 2020 and is categorized under the following ratios: the capital adequacy ratio, the Liquidity ratio, and finally the Assets Quality, Operational Efficiency, and Earnings.

### **1.1.2 Palestinian Banking Sector overview**

The formal financial sector emerged in Palestine after 1993- 1994, previous to that period only two banks were operating in Palestine, the Bank of Palestine and the Cairo-

Amman Bank. The banking sector has enjoyed tremendous growth after the Oslo agreement, and it dominates the Palestinian financial sector, as it is in developing countries. (The World Bank, 2008).

The Palestinian Banking sector consists of PMA and banks operating in Palestine. Since the signing of the Paris Protocol, the number of banks in Palestine grew rapidly, reaching 14 banks in 2019, seven of which were local banks and seven were foreign. Until the end of the third quarter of the year 2020, the Palestinian banking sector shrank to 13 local and foreign banks, including seven local banks, three of which are Islamic, six foreign banks, of which five are Jordanian and one is an Egyptian bank. Through the years, many foreign banks were acquired by local banks; the last one was the Jordan Commercial Bank, which was acquired by The National Bank in 2020. Table 1: summary of the current situation of the Palestinian banking sector based on the statistics published in PMA's 2019 annual report.

*Table 1.1: Operating Banks in Palestine (Source: PMA, 2019)*

Bank Name	Year of Establishment in Palestine	Branches	Notes
Local Banks			
Bank of Palestine P.L.C	1960	73	
Palestine Investment Bank	1995	20	
Quds Bank	1995	39	
The National Bank	2006	28	
Palestine Islamic Bank	1997	45	
Safa Bank	2016	9	

Arab Islamic Bank	1996	52	
Foreign Banks			
Cairo Amman Bank	1986	22	
Arab Bank	1994	32	
Bank Of Jordan	1994	38	
Egyptian Arab Land Bank	1994	7	
Jordan Ahli Bank	1995	10	
Housing Bank for Trade and Finance	1995	15	
Jordan Commercial Bank	1994	5	Acquired by TNB in 2020

According to the PMA Annual Report (2019), these banks operate through 395 branches distributed throughout the West Bank and Gaza Strip. Despite the acquisitions in the last few years, the number of branches had increased. This increase comes consistent with the PMA strategy to increase the number of branches operating in Palestine, aiming at increasing service efficiency, by decreasing the average population density served by a bank branch.

### **The Banking Sector Assets**

The PMA 2019 Annual Report indicates that the main indicators (assets, deposits, facilities, equity, and other indicators) of the Palestinian banking sector had continued growing in 2019 at levels that exceeded the levels of years 2018 and 2017. Given coronavirus, the total assets showed a decrease of 1.2% in the first quarter of 2020 but

recovered by the end of the last quarter of the year to increase by 12.5%, reaching USD 19,934 million when it was initially USD 17,709.5 million (PMA, April 2021).

The banking sector's financial statements analysis (as at the end of the year 2019) showed an 11.2 percent increase in total assets compared to a 1.7 percent increase at the end of the year 2018, creating a USD 17,923.8 million increase in dollars, influenced by improvements in the main components of assets (and liabilities) in the consolidated balance sheet of banks.

### **The Banking Sector Liabilities**

PMA Annual Report (2019) shows that the total deposits in all banks operating in Palestine amounted to USD 14,755.6 million by the end of the year 2019, whereas in 2020, despite COVID-19, it has increased to USD 16,553 million (PMA, April 2021). The bank deposits and non-banking deposits have grown significantly over the past years, this is due to the awareness campaigns which lead to successfully attracting more deposits, which undoubtedly has a positive impact on their potential use, particularly in the area of medium and long-term finance and investment.

Although the Federal Reserve Bank had cut official interest three times in the year 2019, dollar deposits continued to increase, reaching 38.7 percent of total customer deposits compared to 37.6 percent in 2018. with USD currency holds the largest share, indicating that interest rates in the Palestinian cause are not the main influence in dollar deposits.

## **The Banking Sector Credit Facilities**

Over the past years, PMA has succeeded in attracting more deposits, through its credit policies, procedures, and methodologies of distributing funds, which in turn played a vital role in increasing amounts of funds into the Palestinian economy, in various fields, areas, and economic activities in a direct credit facility.

The continuous growth of the credit facilities portfolio over the past five years in terms of size and relative importance is evidence of how banks are heading towards more usage and employment of source of funds in the local economy despite the corresponding risk.

Of the entire credit facilities portfolio, loans acquire the largest share amounting to 84.3% in 2019 of the total credit facilities portfolios, compared with 82.9% in 2018. In 2020 loans percentage of total credit facilities equaled 84.43%. While the overdraft accounts share fell from 14.6% to 14.35 during the year 2020 in the total portfolio of 2019.

## **The Banking Sector Profits and Losses**

PMA Annual Report (2019) indicates that banks' net income generated from all operations was USD 726.0 million, 3.8 percent higher than the year 2018 figures, against USD 510.4 million expenses (excluding interest), with an increase of 11.9 percent over the same period.

Banking sectors' operations reflected a net income (after-tax) of USD 164.4 million, exhibiting a decrease of 8.3 % compared to the figures of the year 2018. This

decrease can be attributed to increasing costs at a larger percentage than revenues. Considering all revenue streams in the Palestinian banking sector, 72.5% of the revenues were generated through credit facilities interests, of which up to 3.8% (USD 526.5 million) in the year 2018, while the rest are attributed to banking commissions, investment, and currency exchange.

This structure of revenue streams indicates that the Palestinian banking sector is still focusing on its most important function, working as an intermediary between borrowers and investors. Nevertheless, it is worth mentioning that while Palestinian banks operate in a deteriorating economy with limited resources, there is severe competition.

## **1.2 Research Problem:**

The spread of COVID 19 has led to a major worldwide catastrophe, countries have had to comprehensively shut down all operating sectors and entities as a precautionary measure to reduce disease outbreaks. As a result, all sectors have been affected by this preventive shutdown and the changing lifestyle of citizens and companies, which has been reflected directly on profits and financial returns, thus, leading to the disruption of infected countries' economic balance.

The Palestinian economy registered a sharp decline of up to 12% during the year 2020 (PMA, Dec2020). The banking system is of particular importance in the Palestinian economic activity, as it is the main component of the Palestinian financial system, the main financing artery for the Palestinian economy. Moreover, it is the main guarantor for

providing all financial services needed by various economic activities and the various role of the banking sector in the development of the Palestinian economy (Odeh, S. 2011).

Banks' performance is important to all individual customers of banks' loans and deposits services as well as to the performance of the entire economy. The prime question is whether the operational and financial performance of the Palestinian banks had been affected by the coronavirus pandemic. It is a matter of argument regarding knowing the extent of the impact of the crisis on the activity and performance of Palestinian banks to contribute to hedging when these banks encounter similar problems or crises in the future.

### **1.3 The Significance of the Research:**

The significance of this research is derived from the modernity and seriousness of the current crisis continuing on a worldwide level, including Palestine. In addition to the lack of quality research interested in studying COVID-19 effects on the financial and operational performance in the Palestinian banks. Furthermore, to discuss the importance of the contribution of the Palestinian banking sector to the economy. The Banking sector is considered the main financing artery for the economy; it mediates production processes, motors the economic growth, and contributes to the formation of gross added value in one way or another. Palestine is a developing country that depends directly on the banking sector in finance development and provides the liquidity needed for different economic activities to achieve sustainable development (Odeh, S. 2011).

## **1.4 Research objective and questions:**

Given that the literature lacks research related to financial and operational performance measurement in the Palestinian context and particularly in the Palestinian-banking sector, the study is designed to achieve the following objectives:

- To assess the financial performance of the selected banks before and during coronavirus pandemic
- To assess the operational performance of the selected banks before and during the coronavirus pandemic.
- To assess whether the Palestinian banking sector has performed profitably and can cope with the crisis

To achieve the objectives of the research, the researcher poses the following questions:

### **The main research questions:**

- To what extent did Coronavirus affect the financial and operational performances of banks operating in Palestine?

### **The sub-questions are:**

1. At what range was the financial performance of Palestinian banks affected by the Coronavirus crisis?
2. To what extent is the Coronavirus crisis affecting the operational performance in the operating banks in Palestine?
3. Is the banking sector in Palestinian performing profitably with strong soundness?

## Chapter Two: literature review

### 2.1 COVID-19 and its inception and development

In December of 2019, COVID-19 was reported by officials as a new infectious respiratory disease, in Wuhan City, China, Hubei, detected in the Hunan seafood market. Coronavirus is a single-stranded RNA virus with a diameter ranging from 80 to 120 nm, it belongs to a large diverse family of viruses. These can be categorized into four genera namely,  $\alpha$ -,  $\beta$ -,  $\gamma$ -, and  $\delta$ . All the previously discussed coronaviruses are responsible for the worldwide spread of a pandemic, namely SARS, MERS-CoV, and SARS-CoV-2 are  $\beta$ coronaviruses (Chakraborty. I, Maity. P 2020).

Starting in January 2020, the epidemic spread outside China, first in Thailand, South Korea, Japan, and the USA. In Europe, Italy reported its first official community-based case on the 20<sup>th</sup> of February of the same year, and, very quickly, clusters of cases developed in the Lombardy region (Milani, F. 2020). The World Health Organization declared South America as the new epicenter of COVID-19 on the 22<sup>nd</sup> of May 2020, as of December 13<sup>th</sup>, more than 360 thousand deaths have been reported. Adjusted by population, Argentina, Colombia, Chile, Brazil, and Peru are among the countries with the most reported COVID-19 infections and deaths globally (Asahi. K, Undurraga. E, Valdés. R and Wagner. R 2021). Since then, the disease has rapidly spread across the globe; it has eventually affected every continent except Antarctica (Chakraborty. I, Maity. P 2020).

The spread of this virus has affected millions of people, whether through severe illness or death. The most common symptoms of this viral infection are fever, cold, cough, joints pain, muscle pain, diarrhea, sputum production, and breathing problems, and ultimately leading to pneumonia.

By reviewing the published data by the world meters' website-the official authority to publish data on the spread of the Coronavirus- on the 28<sup>th</sup> of March 2021, it was detected that the disease has so far spread to 219 countries around the world, with more than 127,406,423 infected cases, 2,791,313 Deaths, and more than 100 million recovering cases since the virus began spreading. Recently a vaccine has been composed and given to many countries, which in turn have helped mitigate the virus spread.

The spread of COVID 19 has led to a major worldwide catastrophe, as countries have had to comprehensively shut down all operating sectors and entities. In addition to traveling restrictions between countries, locking their population and enforcing strict quarantine as a precautionary measure, in order to control the spread of the havoc of this highly communicable disease. (Haleem,A. Javaid, M. and Vaishya, R. 2020).)

As a result, all sectors have been affected by this preventive shutdown and the changing lifestyle of citizens and companies, which has been reflected directly on profits and financial returns, thus, leading to the disruption of infected countries' economic balance.

This pandemic will be recorded as one of the historical events of this century. along with two world wars, the economic crisis of 1929, the collapse of the eastern camp, the fall

of the Berlin Wall, the emergence of the so-called new unipolar world order, and the ensuing wars led by the United States of America in Afghanistan and Iraq.

## **2.2 COVID 19 effects on the global economy**

The Coronavirus pandemic has swept out most world countries, deeply harming their population and economy in a matter of months. While the World Health Organization (WHO) urged countries to adopt strict social distancing and quarantine measures to avoid virus spread and to protect public health, implementing countries have struggled from the severe economic downturns that resulted from their attempt to contain the virus; such downturns include the collapse of World Trade, tourism, capital flows, payments, and commodity prices.

In January 2020, the WHO declared COVID-19 a world health emergency; on March 11<sup>th</sup>, it announced the viral outbreak was officially a pandemic, and this is the highest level of a health emergency (Jackson, J., Weiss, M., Schwarzenbeg, A. & Nelson, R. March 2020).

The global economy has been affected by COVID-19, because of traveling the number of positive cases increased over time, especially in of which were international travels. Worldwide, all governments and healthcare organizations are continuously focusing on identifying infected cases; these governments and healthcare organizations have faced many difficulties in maintaining the quality of healthcare standards, they have implemented large-scale non-pharmaceutical interventions such as social distancing,

school, and universities closures, along with other interventions to control and prevent the virus spread. These strict strategies have imposed substantial social and economic costs on societies (GRS, October 2020).

Asahi. K, Undurraga. E, Valdes. R and Wagner. R (2021) argued that the global GDP decline in two months under the lockdown in 2020 was similar to the decline during the 2008-2009 great recession, which was decreased by 1.1% instead of growing by 3.7%.

Estimates so far indicate that the virus reduced global economic growth to an annualized rate of -4.5% to -6.0% in 2020, with a partial recovery of 2.5% to 5.2% projected for 2021(CRS, March 2021). This steep economic fall is diverse depending on different compositions of GDP in countries. For instance, in tourism-based countries, this crisis had a greater impact. As well, the supply chain disruptions and severe decline in global trade exert put further pressure on the countries depending highly on foreign trade (Fernandes, N. April 2020).

Being an epicenter of the virus and the first country to be affected by it, China was seriously damaged and threatened in the first quarter of 2020; as it faced a great economic and social challenge. Statistics from the China Statistical Bureau show that although China's GDP decreased by 6.8 percent in the first quarter, and the first half-year GDP growth averaged 1.6 percent, the country succeeded in halting the virus spread in a short period and was able to recover from this steep fall during the second quarter to an increase of 3.2%. This was achieved through implementing strong and quick measures in self-protection, resource allocation, professional health care, and control mobility. The growth

rates dramatically exceeded the 1.2 percent projection of the IMF in China, therefore, excelling over the performance of other countries (Tian. W, 2021).

Despite being the largest country in the world, the United States of America has suffered impeccably because of the COVID-19 pandemic, which caused the largest decline in economic output and a sharp decline in carbon emissions and energy consumption exhibited in the United States since World War II (Ozili, P. and Arun, T. April 2020). In the first quarter of 2020, the U.S real GDP (measures the goods and services produced in the U.S) fell at an annualized rate of 4.8% in comparison with 2.1% growth rate in the last quarter of 2019, and since the pandemic, the economic downturn has become more severe. additionally, the fall of personal consumption spending by an annualized rate of 7.3% according to inflation-adjusted, with a decline exceeding 20% for motor vehicles, clothing, recreation services, transportation services, and food services, accordingly unemployment rates have been affected and rose to 14.7% in April of 2020 (CRS, May 2020).

The Central Europe area was affected economically by the COVID-19 pandemic due to the lockdown measures that were implemented, represented in factories shut down, supply chains interruption or the services industries, especially restaurants, hotels, and retail trade, that experienced an unprecedented profit drop. The European Union GDP declined by around 8% in the year 2020 compared to 2019. the CE Countries-Italy, Europe, and Croatia- were affected greatly by the COVID19 pandemic, these countries particularly suffer from a decline in tourism, dropping the GDP of those countries to around 11%. the pandemic effects on Poland, Germany, and Hungary were estimated to be less drastic. Nevertheless, their GDP was expected to decline by about 4.6 to 7 percent in the year 2020 (RÖMISCH, R. Sep. 2020).

African countries have been severely affected by the COVID-19 pandemic and the number of confirmed cases has been rising rapidly particularly in South Africa, Egypt, Algeria, Morocco, and Cameroon where uncertainty is greater. the African region was the most affected in comparison to other regions. the imposed social distancing and policies have affected social interaction and economic activities, moreover, this pandemic harmed the African businesses that rely heavily on China's supply of primary and intermediate raw materials (Ozili. P May 2020).

according to Diop.S and Asongu. A (Feb 2020) Poverty levels in African countries were as follow: the middle and higher poverty lines have increased by US\$0.19 and US\$0.32, respectively, while the extreme poverty line has increased by US\$0.1 per day from US\$1.90 per day. The poverty headcount for the three levels of poverty have increased by 35.85%, 57.55%, and 76.42% for the US\$1.9, US\$ 3.20, and 5.5\$ per day poverty lines respectively.

The economic crisis recorded in 2008-2009 is similar and the closest to the current crisis; this economic crisis first became visible in the banking sector, where housing prices dropped further than during the Great Depression of 1929, in addition to mortgage loan rates jump, which caused an increase in foreclosures. On the other hand, the bailout lowered interest rates, made it possible for the housing market to recover. At that time, it was the worst economic disaster since the Great Depression (Amadeo. K 2020). Even though this housing bubble is centered in the U.S and Europe but it has affected other regions, damaging the long-term improvements achieved previously. United State GDP growth rate for the fourth quarter of 2008 was negatively affected by 6.3% (Amadeo.K 2021).

After the collapse of Lehman Brothers in September 2008, Brazilian state banks largely increased lending. Local areas in Brazil with a higher share of state banks received more loans and experienced better employment results compared to the areas with a lower share of state banks. Fortunately, an increase in government bank lending eased the economic downturn (Coleman, N and Fehler, L, 2015).

### **2.3 Palestinian economy before and during COVID-19 pandemic**

Coronavirus is one of the most impactful crises to the global economy of the century, due to its direct effects on human and humanitarian resources and the economy.

For the past years, the Palestinian economy has worked in a dynamic high-risk environment, causing series of political and economic crises in the county, most recently the Palestinian clearing revenue crisis with the Israeli occupation in 2019. Through a published report by the World Bank in the Wafa News Agency, estimates indicate that growth in 2019 was weak, reaching 0.9%, with economic activity stalled for most of the year due to the fiscal crisis (clearing). These events have reflected negatively on inflation, interest rates, exchange rates, and fluctuating growth rates (PMA, position paper, March 2020), and the year 2020 was not exceptional for the Palestinian economy.

Twenty-three years later, the economic outcome of the Oslo agreement has been modest; the growth of GDP over the period fluctuated widely. For multiple years the growth rate of real GDP was negative, since the early 1990s the annual average of growth has been around 4.5%, with 3.5% population growth, and real per capita GDP was rather unassuming for both the West Bank and Gaza Strip. The unsuitable practices and policies

from the Palestinian side prevented economic growth enhancement and affected the sustainability of previously made improvements (Abed, G., 2016). The recent Palestinian attempt to redirect trade with Israel towards other partners to reduce and ultimately eliminate all economic relations with the occupation exacted a high cost of the PA which led to salary cuts in the public sector (Shusterman. N, May 2020).

However, by far the most decisive factors that impeded genuine developments in the Occupied Palestinian Territory derived from Israel's repressive occupation and deepening expropriation and colonization of Palestinian lands (Abed, G., 2016).

After the fiscal crisis in 2019, the Palestinian economy was expected to recover slowly in 2020. Nevertheless, the outbreak of the virus greatly affects economic activity, as a quarter of the workforce suffers from unemployment, and 24% of Palestinians live on less than \$ 5.5, the spread of the virus posed significant negative risks (Wafa. April 2020).

The results of the economic model for the outbreak of the Covid19 epidemic, prepared by the Palestinian Economic Policy Research Institute (MAS. 2020), shows that manufacturing activities are the most affected among industry activities by these measures because of the high share of the added value it holds, industrial production has witnessed a decline of 6% at the beginning of the crises (PCBS, DEC 2020). limiting movement will reduce the number of workers, and their working hours. even though industrial activity began to recover gradually during the second half of 2020, it remains at a lower level than its pre-pandemic levels due to the clearance revenues crisis. Mining and quarrying are the second most affected activities, as its losses exceeded double in percentage and value (PCBG, DEC 220).

Palestinian Authority responded quickly and effectively at the beginning of the pandemic to contain the outbreak, this, in return, boosted its social support among the public. The PA improved its health services and treatment of infected cases. From the outset, the policy was driven by medical considerations, including a state of emergency declared on March 5 (Shusterman. N May.2020).

In the first quarter of the pandemic (March-May), as shown in a report published by the Palestinian Center Bureau of Statistic (PCBS) on 4th October 2020, about Covid-19 impact on the labor market reality; it mentioned that during the lockdown 54% of workers in the west bank were absent from work, reaching 75% later on due to the emergency declaration and the closure of all institutions and restriction imposed by the government in an attempt to cope the pandemic.

consumption witnessed a sharp decline of Palestinian families, due to most Palestinian families losing their sources of income as a result of non-payment of wages or loss of work, thus the decline in overall demand, which caused a decline in production and imports (Samarah, A. June 2020).

Therefore, COVID 19 has markedly affected income streams due to fewer working hours in most sectors, which affect the banking sector directly. PCBs mentioned that 23% of main income earners received their full wages, 25% of them received a portion of their salaries, and more than 50% of them didn't receive salaries during the lockdown period. According to a World Bank press release in February of 2021, the poverty rate increased to around 30 percent with approximately 1.4 million people living in poverty.

Palestinian economy had recorded a decline of around 4% in the first quarter of 2020 compared with the same quarter in 2019, and during the second quarter, it witnessed a sharp decline of around 20% compared to the same quarter of 2019. Most economic activities recovered gradually during the second half of the year, due to the policy of balancing between the aspects of health and economy, and GDP increased nevertheless remained lower than the pre-pandemic rates, moreover, the negative effects of the clearance tax revenue alteration (PCBS, Dec.2020).

The volume of trade exchange to and from Palestine during the crisis reached USD 10 billion declining by 10% compared to 2019. This resulted from a 7% decline in exports, which was estimated at USD 2.5 billion, and an 11% decline in imports, which reached USD 7.4 billion. Consequently, the trade balance witnessed a deficit of around USD 5 billion (PCBS, Dec.2020). The COVID-19 impacts continued to hit hard an already faltering Palestinian economy, resulting in contraction of the GDP by 11.5 percent in 2020, causing it to become one of the most severe declines ever recorded (World Bank. Feb 2021).

The biggest challenge for PA is to control and stop the spread of the disease managing other current challenges, such as the Israeli military and economic control, uncontrolled borders, the shortage of medical and financial resources, crowded cities and refugee camps, poverty, food insecurity, and the financial crisis. Even before COVID-19, the estimate of the Palestinian economy was somber, the slow growth, high unemployment rates, persistent fiscal deficits, and increasing poverty, the situation worsened over time with the combined effects of the pandemic and the cessation of clearance revenues, leading to one of the sharpest contractions in economic activity (World Bank. Feb 2021).

Based on the aforementioned, there is great economic damage to Palestinian establishments, with a variation of the impact on different sectors. Many individuals and establishments alike were unable to fulfill their financial obligations due to the lack of financial liquidity (Samarah, A. June 2020).

## **2.4 COVID-19 Effects on the Banking sector worldwide**

Banks are financial institutions that facilitate the process of supply and demand for money, saving a surplus of wealth that exceeds their need, to use it in lending clients' needs for liquidity in the form of loans with interest, in exchange for guarantees that are determined by the banks and central banks in countries. In addition to investing clients' deposits which are beneficial to the owner with interest, either annually, semi-annually, quarterly, or monthly, according to the signed agreement between partners, and the banks are free to dispose of it during the deposit period.

Moreover, there are several other functions that the banks perform, such as drawing and endorsing bills of exchange and commercial paper. Around the world, there are many types of banks, the Central bank being the core one; it is a financial organization given privileged control over money production and distribution, as well as the responsibility of formulating monetary policies and regulations of banks operating in the country. In Palestine, the Palestinian Monetary Authority is the acting central bank. Commercial banks, investment banks, industrial banks, real state banks, agricultural banks, Islamic banks, and saving banks, have been influenced by this crisis.

In countries all over the world, the banking sector was affected during the pandemic, although mostly indirect. Central Banks through cooperation with governments have taken several drastic steps trying to avoid economic depression and maintain the economy afloat during the coronavirus lockdowns. Providing remote services as a solution for social distance through limiting human interaction and not relying on direct client contact, led banks and other financial institutions to lose providers of payments, savings, and credits which in turn extended the negative effects of the COVI-19 crisis on those institutions. The COVID 19 outbreak had detrimental impacts on the global banking sector, it affected their financial performance across various financial indicators, also affected their financial stability. These impacts are observed for various regions and different bank-level characterizes, and across income-generation levels among countries (Elnahass, M. Trinh, V. and Li,T. 2021).

The crisis affected banks in different aspects; first, the firms that have stopped working were unable to repay loans due to revenue losses. The same case with householders who have lost their jobs or have had to adjust to lower income. This resulted in lost revenue and losses in profits and banks' capital. Second, banks were affected negatively by bonds and other traded financial instruments which have lost value, resulting in further losses for banks. Third, banks faced increasing credit demands, especially as firms require additional cash flow to meet their costs even in times of no or reduced revenues. Fourth, banks faced lower non-interest revenues, as there was lower demand for their different services, as there were fewer payments and transactions to be done with lower economic activity (Beck, T. AUG,2020).

Jafrin , R. 2020 evaluated the performance of the commercial banks operating in the Chittagong zone during the pandemic and analyzed the financial performance of five commercial banks operating in the same zone from January to June of the year 2020 by using ROA, EPS, ROE, and LDR financial ratios. DBBL has performed higher than the other four banks during the pandemic, it ranked number one in the ratios aforementioned. Banks in Bangladesh were already struggling with a pre-COVID challenging environment. and the pandemic further damaged the performance of that bank, creating an ill-timed double whammy, the pandemic has caused a historic fall in the non-operating income of banks due to a nosedive in LC opening and remittances.

Ichsan, R., Over, S., Yusuf, M., Ismal, R., and Sitompul, S. 2021 analyzed Islamic Banks' financial performance during the Covid-19 pandemic, using data of annual financial statements from 2011 to 2020 through Multiple Linear Regression testing using the Ramsey test. This research examined the impact of CAR, BOPO, NPF, and FDR ratios on banking financial performance (ROA) over the period 2011-2020. The results showed that the Capital Adequacy Ratio (CAR), Operating Costs to Operating Income (BOPO), Financing to Deposit Ratio (FDR) affect positively and significantly the financial performance (ROA), in contrast, with the Non-Performing Financing (NPF), which had a negative and insignificant effect on financial performance (ROA).

The Unprecedented global shock represented by COVID-19 fast spread, with mitigation efforts represented by social distancing measures and partial and national lockdown measures, which no doubt had a significant impact on the economy worldwide. Giri, R. 2021, examined the impact of the lockdown on daily stock returns of banks and financial institutions in Nepal. This research measured the effect of daily infected cases of

COVID-19 on the stock returns during the pre-lockdown, lockdown, and after lockdown period of 74 listed firms in Nepal from May 2019 to April 2021. The results confirm that the number of daily infected cases had no notable impact on the stock returns throughout the entire study period. Moreover, the research inquires the covid 19 effect on the individual level and discloses that the commercial banks, development banks, and microfinance companies' stock returns were adversely impacted during the pre-lockdown and lockdown period. However, the after-lockdown period had significantly rebounded the overall BFIs stock returns in Nepal with the highest returns earned by microfinance companies and lowest return by commercial banks.

In the immediate aftermath, the financial sector, particularly banks, played a significant role in absorbing the shock by supplying vital credit facilities to the corporate sector and households (Demirguc-Kunt & more, August 2020). The adverse COVID-19 impacts on banks were much more pronounced and long-lasting than on non-bank financial institutions such as corporates. Furthermore, larger banks, public banks, and to some extent better-capitalized banks suffered greater reductions in their stock returns, reflecting their greater anticipated role in dealing with the crisis (Molyneux, P. and Wilson, J. July 2020).

The ongoing Covid-19 pandemic has been exerting negative effects on the global banking stability, it has had detrimental effects on financial performance across various indicators of financial performance (i.e., accounting-based and market-based performance measures) and financial stability (i.e., high-risk indicators including default risk, liquidity risk, and asset risk). moreover, the banking sector also suffered from the weakening capacity of the banking industry to mitigate financial risks and hence sustain financial stability in the face of the Covid-19 crisis (Elnahass, M. Trinh, V. and Li,T. 2021).

## **2.5 COVID-19 effects on the Palestinian Banking Sector**

In developing countries, the financial and banking sectors play a vital role in financing economic development and increase economic growth rates. The theory of economic growth states that the banks are considered a useful instrument for enhancing the productive capacity of the economy (Abu sharbeh, M. 2017).

Palestine is a developing country that suffers from special political circumstances due to Israel's occupation. The banking system is important to its economic growth through its ability in providing loans to enhance investment and production. The banking sector encourages economic expansion in agriculture, industry, and trade sectors, despite that the Palestinian economy depends on importing products that cannot be substituted by local products (Abu Sherbah, 2017).

With the advent of the pandemic, there is no doubt that the virus had impacted all economic sectors in Palestine. The financial services sector faced many challenges, because of reducing the number of working hours, and in many cases, it was able to serve only a limited number of customers due to the rules of social distancing, thus, forcing great pressure on the telephone and internet banking services.

The aforementioned problems were considered to be the small problems facing the banking sector, while the big issue lies in the inability of customers to pay their financial dues, loans, and monthly bank installments, because of the deterioration of the economy and the decline in local trade and international trade. In the first month of the crisis, the percentage of bounced checks was up to 38%, according to Palestinian Monetary Authority

data (Samarah, A June 2020). In addition to that, there was government pressure on the banking sector to provide more financial financing during the crisis to help provide preventive and medical services to citizens to limit the spread and contain Coronavirus.

The first quarter in 2020 witnessed an increase in the internal and external debt and banks' loans that are part of the internal debt and the arrears of the private sector compared to the same period of previous years. There was an increase in the public internal debt with a percentage of 24% compared with 2019. Moreover, there was an increase in the unemployment rate (Abed Alkareem, N. 2020). Prime Minister Mohammed Shtayyeh had announced that the PA's budget deficit was \$1.4 billion, and he expected it to reach \$3.1 billion by the end of the year 2020, assuming that foreign aid payments will not be affected by the global crisis (Institute for National Security Studies (2020)).

The Palestine Monetary Authority and Palestinian banks had assisted the Palestinian Authority but given the constraints of the Paris Protocols on the Palestinian financial system, their influence was limited. Thus, restricting the performance of actions such as printing money, changing interest rates, or reducing exchange rates, additionally, The Palestine Monetary Authority lacks access to international capital that could finance this deficit. (Institute for National Security Studies (2020)).

In 2019, operating banks in Palestinian profit, in general, had witnessed a fall in its profit that reached 9.2%, while it was affected negatively by coronavirus during the first quarter in 2020. Palestine Today website mentioned in a report on June of the year 2020, that the net profit for the Bank of Palestine- one of the largest banks in Palestine, declined by 28.5% in the first quarter of the year 2020 to 7.71 million dollars from \$ 10.78 million.

The National Bank's profits also had declined, marking at 3.79 million dollars when it was previously 5.569 million dollars in the same quarter of the previous year. On the contrary, there was an increase in profits in some other Palestinian banks. For Instance, Al Quds Bank's net profit increased by 20% in the first quarter of 2020 to \$ 2.956 million, up from \$ 2.46 million in the first quarter of 2019. The Palestine Investment Bank net profit had a slight increase by .05% in the first quarter of 2020 to \$ 1.067 million, compared to \$ 1.062 million in the first quarter of 2019.

During the first nine months of 2020, banks profit witnessed a fall to 79\$ million compared with the same months in 2019 which recorded profits of 126\$ million. While it witnessed an increase by 103% (to 27\$ million) in its net profit in the last quarter of 2020 compared with the second quarter of the same year ( Rammalah News website, Dec 2020).

## **Chapter Three**

### **Research Methodology and Data analysis**

#### **3.1 Research Methodology**

##### **3.1.1 Introduction**

This chapter discusses the methodology that is used in this research. mainly discussing the research design, data collection method, population and sample size, and research instruments that were used to measure and interpret the variables of the study.

##### **3.1.2 Research design**

After investigating the literature on coronavirus and its economic impacts on various sectors in different countries, the researcher searched for literature related to financial and operational performance in banks in the Palestinian context and worldwide. However, there were very few resources that discussed the subject matter, and certainly, less than the researcher can build on.

Hence, the researcher chose to conduct the analytical research approach for this matter. Analytical research is an inductive and subjective approach, which focuses on capturing and analyzing data to gain an understanding of the phenomena and concepts questioned. Moreover, the analytical approach is more suitable for this research that is due to its nature and the research questions, this approach allows for a more in-depth understanding of a phenomenon.

### **3.1.3 Data Collection Method**

The proposed topic relates to the Banking Sector in Palestine, for this purpose, secondary data was used to assess the performance of the banks. The data was gathered from the annual audited financial statements officially disclosed to the public of six Palestinian banks throughout 2017-2020 (the three years pre-Coronavirus pandemic and the pandemic year). The key financial ratios had been calculated using data from the selected Palestinian banks during the above-mentioned period, as well as to assess the Coronavirus impacts of banks. Moreover, the data was also assembled from articles, papers, the World Wide Web (Internet), PMA annual reports, Association of Banks in Palestine reports, Banks' annual reports, Specialized International Journals, and relevant previous studies.

### **3.1.4 Research Approach**

This research follows qualitative and quantitative research approaches. The Qualitative approach is interpretive and subjective, focuses on capturing perceptions to gain an understanding of a phenomenon insight of specific meanings and behaviors, using descriptions and categories. Conversely, Quantitative methods use a highly objective, systematic approach and work with numerical data (Palmer and Bolderston, 2018).

The qualitative term characterizes the phenomenon and explains its features, while quantitative expression provides a numerical description that indicates the extent of this phenomenon or its dimensions and its degree of comparison with other phenomena. the quantitative approach surpasses describing the phenomenon to explicate and analyze data

to attain facts about the existing circumstances to develop and improve them (Obiedat and others, 2003).

### 3.1.5 Research sample and Study Area:

The population under research consisted of seven listed commercial and Islamic Palestinian Banks, and the sample of six listed banks, which is broken down as follow: four local commercial banks (Bank of Palestine, The National Bank, Palestinian Investment Bank, Al Quds Bank), two Islamic banks (Arab Islamic Bank, Palestine Islamic Bank). The period of this research was limited to four years, three of which were previous to the pandemic (2017, 2018, 2019) and a year during it (2020), knowing that this crisis is still ongoing.

*Table 3.1: List of banks included in the research sample (Source: researcher).*

Bank Kinds	Banks Name
local Commercial Banks	The National Bank
	Al Quds Bank
	Bank of Palestine
	Investment Bank
Islamic Banks	Arab Islamic Bank
	Palestinian Islamic Bank

### **3.1.6 Research Instruments:**

In this research, the researcher used a descriptive-analytical approach to examine the data to know what happened and what was happening during this pandemic, using secondary data to achieve the expected results more accurately.

For this research, secondary data was selected from Islamic and Commercial banks in Palestine. The researcher focused on four local commercial banks and two Islamic banks of Palestine regarding the application of the CAMEL model, to identify the impact of the Covid-19 pandemic on the Palestinian banks during the period between (2017-2020).

The CAMEL model is the supervision and administrative framework implemented by PMA in its annual reports. It consists of five critical indicators to assess the soundness of the Palestinian banks in the COVID-19 crisis. These segments are Capital Adequacy, Assets Quality, Management Efficiency, Earnings, and liquidity.

Many researchers had adopted the CAMEL model to assess the banks' performance worldwide. Biswas (2014) analyzes the execution of two public sector banks. The researcher utilizes the CAMEL model to compare the performance of Andhra Bank and Maharashtra Bank. The research was conducted for the period 2011-2013 and the data was taken from the annual reports of banks. Mohiuddin (2014) utilized the CAMEL rating model to assess the financial execution of the two major banks operating in Bangladesh (PCB and NCB). The outcome showed that the position of the banks was comprehensive and satisfactory in terms of their Capital, Asset quality, Management efficiency, Earnings Quality, and Liquidity. Gebba and Ahmed (2013) analyzed the execution of privatized financial institutions operating in Egypt by adopting the CAMEL rating model.

In the Palestinian, Daas and Zedan (2017) utilized the CAMEL model to evaluate the performance and financial soundness of the Palestinian commercial banks for the year 2015, based on the performance in the five areas: Capital adequacy, asset quality, management efficiency, earning quality, and liquidity, the banks' ratings were sustained. Abusherbeh (2020) also used the CAMEL rating model to evaluate the financial soundness of commercial banks listed on the Palestine Exchange, relying on secondary data obtained from the banks' financial statements for the period of 2007-2017 in order to conduct his research.

Referring to the prior studies, this thesis will employ the CAMEL model with its variables to examine the performance of the selected banks during the four years. In the case of this study, the below variables have been chosen.

Table 3.2: The variables measures and their notation (Source: Researcher)

Variables	Measures	Notation
Capital Adequacy Ratio	$\text{Total Deposit to Equity Ratio} = \frac{\text{Total Deposits}}{\text{Total Equity}}$	CAR
Asset Quality	$\frac{\text{Non – performing loans provision expenses}}{\text{total assets}}$	AQ
Management Efficiency	$\text{operating expense to operating income} = \frac{\text{operating expense}}{\text{operating income}}$	ME
Earnings Quality	$\text{Return on Assets} = \frac{\text{Net Income}}{\text{Total Assets}}$	EQ
Liquidity	$\text{Loan to deposit ratio} = \frac{\text{total loans}}{\text{total deposits}}$	LQ

**Capital Adequacy Ratio:** Prasad, N. and Ravinder, G. (2012) defined the capital adequacy ratio as a necessary parameter for banks to maintain investors' and depositors' confidence, and prevent banks from announcing bankruptcy, as well as promoting the stability and efficiency of financial systems. this model shows the overall financial state of the banks and their administrative ability to defeat the need for additional capital. Capital adequacy is vital to the financial sector's reliability in withstanding shocks jeopardizing its financial position. Deterioration in the ratio signifies risk exposure and possible capital

adequacy problems while an increase in the ratio means the opposite (Daniel, 2019). The higher the ratio, the better the performance of the bank.

Fatima, N. (2014) argues that an appropriate level of capital adequacy for a bank ensures that the enlargement of its business, and its net worth is enough to absorb any financial downturns without committing bankruptcy. net worth is measured through the ratio of money to hazard-weighted holdings. as it measures a banks' ability to meet its obligations relative to its exposure to risk. This ratio determines the capacity of the banks to meet the time liabilities and other risks, such as credit risk, operational risk, market risks, etc.

Capital adequacy ratios (CARs) are a measure of the amount of a bank's capital expressed as a percentage of its risk-weighted credit exposures. To calculate CAR, capital should be classified into Tier I capital (equity capital and disclosed reserves) and Tier II capital (long-term debt, undisclosed reserves, and hybrid instruments (Zedan, K. & Daas, G. 2017).

**Asset Quality:** Asset quality is an important indicator to measure the financial stability of the bank against the potential loss value of its assets, it involves rating investment risk factors that may face the bank and balance those risk factors against the bank's capital earnings. The main objective of asset quality computing is to determine the factor of non-performing assets (NPA) as a percentage of the bank's total assets (Kumar, P. & Nazeen, A., 2014). According to Ishaq, A., Karim, A., Zaheer, A., & Ahmed, S. 2015, asset quality determines the robustness of banks against loss of assets' value. a decline in the value of assets directly affects other areas, as losses are ultimately written-off against capital, this ultimately reduces the earning capacity of the institution. asset quality is

determined in relation to the level and severity of distribution of assets, adequacy of provisions, recoveries, non-performing assets, etc.

Prasad, N. and Ravinder, G. (2012) mentioned the major ratios that assess the asset quality:

- Net NPAs to Total Assets (NNPAs/TA): This ratio discloses the efficiency of banks in assessing the credit risk and, to an extent, recovering the debts.
- Net NPAs to Net Advances (NNPAs/NA): It is the most standard measure of asset quality measuring the net non-performing assets as a percentage of net advances.
- Total Investments to Total Assets ratio (TI/TA): The Variables indicate the extent of deployment of assets in investment against advances.
- Percentage Change in NPAs: this ratio tracks the movement in Net NPAs over the previous year. The higher the reduction in the net NPA level, the better.

**Management Efficiency:** Management assessment is another parameter of the CAMEL model. Prasad, N. and Ravinder, G. (2012) defined it as the component that determines whether an institution can properly react to financial stress; this assessment includes subjective analysis to measure productivity and effectiveness of administration. According to Basel II, management efficiency reflects the ability of banks to respond to organizational circumstances that may occasionally arise. In addition, it evaluates management competency, leadership, human resources, and corporate governance to comply with banking regulations (Abusharbeh, M. 2020).

Dass, G. Zedan K. (2017) argued that management is the single most important element in the CAMEL rating system due to its great role in a bank's success; however, it is measured as the asset quality examination.

Ishaq, A., Karim, A., Zaheer, A., & Ahmed, S.(2015) also agree that Efficient Administration is the most vital ingredient that ensures the smooth functioning of banks. Numerous indicators measure performance and soundness of the management, through Admin Expense to Interest Income Ratio, Gross Advances to Total Deposits Ratio, and Assets Turnover Ratio.

Management efficiency component is reflected by the management's ability to measure, point out, look after, and control the risks on the bank's daily activities. It also covers the ability of management to ensure safe operation as they comply with the necessary and applicable internal and external regulations.

**Earning Quality:** Earnings signify banks' capacity to produce earnings to achieve sustainability. The earning quality is a very significant measure that defines the banks' ability in reliable earning and costs coverage, it determines the profitability of banks and predicts their sustainability and profits growth in the future (Prasad, N. and Ravinder, G. 2012). generally, banks have to register positive economic results, or else it's considered an indicator of dysfunction, which means that the banks are incapable of managing costs per revenues, and negative results erode equity and consequently, reduce banks' resources. The higher acquisition suggests the bank is doing great.

According to Ishaq, A., Karim, A., Zaheer, A., & Ahmed, S., 2015, earnings and profitability are the main sources of enhancing the capital base and are inspected concerning interest rate policies, and the adequacy of provisioning. Likewise, it additionally serves to help the present and future operations of the Institutions. ROA, ROE, and Interest Income to Total Assets Ratio are indicators of earnings and profitability, and

the net income after taxes to total assets ratio (ROA) is the single best indicator used to measure profits and earnings.

A consistent profit reassures the public confidence in the bank, moreover, it absorbs losses of loans and provides sufficient provisions. Profitability proportions measure the capacity of a bank to produce profits from revenue and resources (Dang, 2011).

**Liquidity:** The liquidity of a bank measures its ability to meet its short-term obligations; liquidity in banks is of prime importance, along with investments and cash which represent the most liquid form of a bank's assets (Ishaq, A., Karim, A., Zaheer, A., & Ahmed, S. (2015).

the ratios that were considered to assess the earnings ability of the banks were Liquid assets as a percentage of total assets, liquid assets as a percentage of total deposits, total deposits as a percentage of total loans, deposits/total assets, liquid assets to demand deposits, cash to total assets and investments in government securities to total assets (Reddy, 2012)

### **3.1.7 Research limitations:**

- The recency of the crisis and limited time. Whereas the researcher could not reach all financial reports needed for the year 2020.
- The restricted interaction between the researcher and the supervisor. This research was conducted during the pandemic when mass lockdowns were mandatory, limiting the interaction with the supervisor to emails and internet calls this made proper interaction and the acquisition of accurate information and explanations regarding the research, despite that the supervisor was very helpful.

- The sample size used in the analysis was relatively small making it difficult to generalize the results. Having an appropriate sample size is an important aspect for conducting research and its lacking caused complications regarding acquiring the correct results and generalizing them, thus a large sample size is more preferable. Therefore,

## 3.2 Financial Analysis

### 3.2.1 Introduction

This portion of the study includes analysis of data collected and ratios that have been calculated and collected from reports depending on the composite CAMEL rating criteria to assess the banks' performance within the research period.

### Composite CAMEL rating criteria

The composite CAMEL rating is ranked from 1 to 5 numerically in keeping with the standing of banks. Where "1" is the highest rating, which shows the strength and soundness of banks, while "5" shows the lowest rating and worse bank performance. Thus, bank performance is assessed using a rating scale as presented in Table 3.3. This assessment method was supported by several studies, such as Sarker (2006), and Desta (2016) (Abusherbeh, M. 2020).

*Table 3.3 Composite Rating based on CAMEL (Source: Abusherbeh, M., 2020)*

Rating	Composite range	Status	Description
1	1-1.49	Strong	The bank's performance is very strong.
2	1.5-2.49	Superior	The bank's performance is good, but there are some weaknesses.
3	2.5-3.49	Fair	The bank's performance is acceptable with some associated risks.
4	3.5-4.49	Marginal	The bank has many financial weaknesses that could potentially threaten its growth and development.
5	4.5-5	Unsatisfactory	The bank has a high probability of failure and bankruptcy.

According to *Zedan, K. and Daas, G. (2017)* the composite rating indicators mean the following:

- Composite rating 1: indicates a strong bank's position, soundness, and best performance, this rating is usually given to the bank that is rated 1 or 2 in most components.
- Composite rating 2: indicates the bank's stability and capability to hold out economic depressions, and that its management has a good enough hold to redress moderate bank's weaknesses, banks in this category of rates usually acquire a 3 or higher rating in most components.
- Composite rating 3: indicates that the bank has weakness in various component areas, as well as the lack of ability for banks management, in controlling the situation and in creating solutions to guide banks out of weakness. composite rating 3 is given to banks with More than 2 rating components above 3 ratings.
- Composite rating 4: indicates risky, unsatisfactory, and unstable performance, due to insufficient financial and managerial performance. It shows management's inability to indicate flaws and weaknesses and to resolve problems. Most components ratings are above three, 1 or 2 of them are rated 5 as well.
- Composite rating 5: shows the unstable, risky, and unsoundness of the bank's performance. Most of its components are rated 4 and 5 and have negative earnings. In this stage, outside regulators and financial assistance supervision is required to avoid the highly probable bank failure. The table below shows the classification rating of the CAMEL parameter.

Table 3.4: Classification Rating of CAMEL parameters (Source: Abusherbeh, M., 2020).

Ratios	Composite rating				
	1	2	3	4	5
Capital Adequacy (CAR)	> 13%	12-12.99%	8-11.99%	6-7.99%	< 5.99%
Asset Quality (NPLs)	< 1.5	2.5-1.51%	3.5-2.6%	5.5-3.6%	> 5.6%
Management Efficiency (OE/OI)	< 60%	60-74.9%	75-89.9 %	90-99.9%	> 100%
Earnings Capability (ROA)	> 1%	0.6-0.99%	0.5-0.599%	0.3-0.499%	< 0.29%
Liquidity (Liquid asset)	> 50%	40-49.9%	30%-39.9%	20%-29.9%	< 19.9%

### 3.2.2 Analysis

#### 1. Capital adequacy ratio

Table 3.5 Capital adequacy ratio (Source: Author calculation)

Bank	Average of pre-Crisis	2017 – 2019 Rating	2020	2020 Rating
AL-Quds Bank	0.13	1	0.14	1
TNB	0.14	1	0.126	1
BOP	0.15	1	0.142	1
PS.INV.Bank	0.27	1	0.215	1
AIB	0.14	1	0.134	1
PISB	0.13	1	0.145	1

The CAR ratio is critical to ensure that banks have sufficient protection to absorb a reasonable number of losses before they become insolvent. It is a measurement of a bank's available capital expressed as a percentage of the bank's credit risk weighted. Applying minimum CARs serves to protect depositors and promote the efficiency and stability of the financial system. Table 3.5 represents sample banks' CARs and the composite rating of capital adequacy ratios for each bank over the research period.

The Basel committee required banks to hold capital equal to at least 8% of weighted assets, and PMA determined the minimum CAR in Palestine at 12%. In this research, all banks included in the sample showed a fair CAR and had a higher CAR than the required minimum over the three years previous to and the year of the COVID-19 crisis which rated at one in the composite rating. Palestine Investment Bank recorded the highest CAR over the years 20017-2020 and reached above 20% that is mean this bank doesn't fully employ its resources correctly to gain more profit or exploit its capital to make suitable investments.

## **2. Assets Quality**

a major indicator that measures the bank's strength is Assets Quality, which assesses the credit risk associated with any particular asset. The support of asset quality is an essential feature of a bank.

Quality of loans portfolio and credit administration programs are primary and major factors affecting overall asset quality. and since credit risk is still the largest source of risk for banking institutions, makes it the most important area of risk management due to the loan portfolio is the largest asset and primary source of a bank's revenue (*Zedan, K. and Daas,G. 2017*). Because when banks give out loans to clients regardless if they are individuals or corporations, and they cannot meet payments requirements, banks' profitability and earnings will be affected, increasing the cost for banks, which ultimately decreases their earning capacity.

Asset quality is measured through the level and severity of non-performing assets, adequacy of provisions for bad advances, credit recovery, and asset allocation. The nonperforming loan ratio, better known as the NPL ratio measures the effectiveness of a bank in receiving repayments on its loans. Also, it measures the amount of non-performing

loans in a bank's loan portfolio to the total amount of outstanding loans the bank holds. The table below shows sample banks' asset quality ratio (NPLs to net loans). The NPL was calculated by default for direct credit facilities net of suspended interests, commissions, and profits.

*Table 3.6: non-performing loans 2017-2020 (Source: Author calculation)*

<b>Bank</b>	<b>Average of pre-Crisis</b>	<b>2017 – 2019 Rating</b>	<b>2020</b>	<b>2020 Rating</b>
AL-Quds Bank	3.29	3	4.52	4
TNB	3.04	3	5.53	4
BOP	3.60	4	4.89	4
PS.INV.Bank	3.66	4	4.87	4
AIB	0.95	1	1.51	2
PISB	1.81	2	1.51	2

The table shows the results of non-performing loans over the period before and during the pandemic and specifies the percentages of written-off bank loans due to uncollectible funds. The table concludes that PISB and AIB had successfully managed their NPLS over the research period. In 2020 the NPLs ratio of AIB was 0.95% and received a rating of 1, which was an improvement from the before the pandemic average, which means that the AIB had well managed its NPLs and kept them under positive control and has a well-defined credit policy. On the other hand, the Bank of Palestine (BOP) and the Palestinian Investment bank (PINVB) had a high NPLs ratio over the research period and

rated 4. The rating 4 is assigned to deficient and inadequately controlled assets quality in the bank, which translates into poor credit risk management.

Alquds Bank and The National Bank (TNB) NPL ratio, increased over the crisis year, to rate 4 when it was previously rated 3, rate 3 is modest and indicates stability in assets quality and is better than the rate 4, 4 rating means less than satisfactory credit administration. The level and severity of rated assets, vulnerabilities, and other risks require a high level of supervisory attention. There is a general need to improve credit management and risk management practices in these banks.

In General, the average of the sample banks' rating over the pre-crisis period which equals 2.83%, and 3.33% over the year 2020 concludes that the fluctuating in the NPLs ratio is due to the instability in the Palestinian political and economic situations, most recently the financial crisis in 2019 and USA funds withdrawal in 2018, thus, the asset quality of each bank seems sufficient to control credit risks.

### **3. Management Quality**

The success of a financial organization requires effective management; it is difficult to determine the sound performance of the bank's management based on quantitative data because generally, it is qualitative (Sarker, A. 2006). Management efficiency is most important for ensuring the bank's stability and strength. However, to determine the soundness of the management, the researcher applied the operating expenses/ operating income ratio. lower ratios indicate that management has a better ability to handle the bank operations.

*Table 3.7: operating expenses to operating income 2017- 2020 (Source: Author calculation)*

Bank	Average of pre-Crisis	2017 – 2019 Rating	2020	2020 Rating
AL-Quds Bank	67.9	2	64.2	2
TNB	69.8	2	68.4	2
BOP	66.7	2	61.8	2
PS.INV.Bank	68.3	2	68.5	2
AIB	81.2	3	73.4	2
PISB	83.3	3	83	3

The table above reveals that the management of almost all banks is performing considerably well and had greater operational efficiency during and before the pandemic.

Despite the COVID-19 pandemic, Arab Islamic Bank rated 2 during the pandemic, knowing that it was 3 pre-pandemics, indicating improved management performance. Palestine Islamic bank had the highest ratio (around 83% during the study period) but it received a rating of 3, meaning that its operating expenses were larger than operating income compared with other banks in the year 2020,

Bank of Palestine received the lowest ratio of 61.8 and 66.7 during the years 2017-2020, this improved performance refers to the availability of a large pool of resources and funds in the Bank of Palestine, to hire the best management personnel available in the market.

#### **4. Earning Quality**

Healthy profits need sufficient earnings to achieve many tasks, starting from capital protection and growth; absorbing losses; attracting new investors to promote public

confidence. It is an important indicator for a successful and sustainable bank. The tables below show earnings ratios represented in ROA and ROE.

*Table 3.8: Return on assets 2017-2020 (Source: Author calculation)*

Bank	Average of pre-Crisis	2017 – 2019 Rating	2020	2020 Rating
AL-Quds Bank	0.52	5	0.78	2
TNB	0.84	2	- 0.0251	5
BOP	0.20	5	0.39	3
PS.INV.Bank	0.16	5	0.46	4
AIB	0.20	5	0.74	2
PISB	0.20	5	0.585	3

**Return on assets (ROA):** This is an indicator of how well banks utilize their total assets in terms of profitability, comparing profits to revenue is a useful operational metric; it is the simplest of such corporate bang-for-the-buck measures. The higher percentage of ROA the better, because it means that banks' management is using the bank's assets to generate income efficiently. The above table shows the efficiency of Palestinian banks in investing in their loans and advances.

The average ROA ratios over the period pre-crisis were worse than in 2020, five out of six banks rated “5” and one bank rated 2, but in 2020 during the COVID-19 outbreak and lockdown periods, this ratio was exceeded by all banks except The National Bank, it

decreased in a sharp decline reaching to -0.0251%, although it had the highest rate before the crisis, the pandemic wasn't the main causer of this decline. The main and largest effects on its returns in TNB resigned in internal administrative problems and the clearing crisis.

**Return on equity:** ROE is a measure of profitability in relation to stockholders' equity, calculated by dividing net income by shareholders' equity. ROE has considered the return on net assets because shareholders' equity is equal to a company's assets minus its debt. The higher this ratio, the better the profitability for the bank stockholder, which indicates a better bank performance.

*Table3.9: Return on equity (Source: Author calculation)*

<b>Bank</b>	<b>Average of pre-Crisis</b>	<b>2017 – 2019 Rating</b>	<b>2020</b>	<b>2020 Rating</b>
AL-Quds Bank	0.1	3	0.093	4
TNB	0.1	3	- 0.003	5
BOP	0.11	3	0.052	5
PS.INV.Bank	0.04	5	0.040	5
AIB	0.07	5	0.068	5
PISB	0.13	3	0.095	4

*Table 3.10: Rating based on CAMEL component (Source: Zedan, K. and Daas,G. (2017)*

Components	Rating 1 (%)	Rating 2 (%)	Rating 3 (%)	Rating 4 (%)	Rating 5 (%)
Capital adequacy CAR	≥13	11-11.99	8-8.99	7-7.99	≤6.99
Assets quality NPLR	≤1.5	1.51-2.5	2.6-3.5	3.6-5.5	≥5.6
Management efficiency (NER)	40-49.99	50-59.99	60-69.99	70-75	≥75
Earnings					
ROA	≥1≥22	0.9-0.8	0.35-0.7	0.25-0.34	≤0.24≤6.99
ROE		17-21.99	10-16.99	7-9.99	
Liquidity ratio 1	≤55≥50	56-62.99	63-68.99	69-74.99	≥75≤32
Liquidity ratio 2		45-49.99	38-44.99	33-37.99	

CAR: Capital adequacy ratio, ROA: Return on assets, ROE: Return on equity, NPLR: Non-performing loan ratio, NER: Non expense ratio

The researcher had rated the return on assets depending on table 3.10, taken from Zedan, K. and Daas, G. (2017) research, which evaluates the Palestinian commercial banks' performance and financial soundness for the year 2015. Four out of six local banks rated 3 in their return on equity before the crisis but worsened during the crisis, as the rating was between 4 and 5. That means, in general, the stockholders' profit from the invested resources in the bank is weak. but in the case of COVID-19, it is normal to not divide any dividends and that is due to increased costs and expenses in all sectors.

## 5. Liquidity

Table 3.11 Loan to deposit ratio 2017-2020 (Source: Author calculation)

Bank	Average of pre-Crisis	2017 – 2019 Rating	2020	2020 Rating
AL-Quds Bank	0.76	1	0.77	1
TNB	0.77	1	0.75	1
BOP	0.70	1	0.68	1
PS.INV.Bank	0.68	1	0.59	1
AIB	0.75	1	0.73	1
PISB	0.75	1	0.76	1

A bank is considered liquid, when it has the appropriate amount of spendable funds on hand when required or easily accessible to raise funds either from borrowing or converting assets into cash. The **loan-to-deposit ratio** was used in this research to assess a banks' liquidity as one of the operational performance indicators, by comparing the bank's total **loans** to its total **deposits** for the same period.

Table 3.11 shows the sampled banks' loan to deposit ratio averages during the pre-crisis to be between 62% and 81%, and between 68% and 77% in the crisis year rated at "one". Those averages were neither too high nor too low, but within the normal range, which means that the banking sector has enough liquidity to cover any unforeseen fund requirements in addition to its earnings. This is due to banks utilizing their funds such as credit facilities and long-term investments efficiently.

## **Chapter Four: Conclusion and Recommendations**

### **4.1 Conclusion**

Since the beginning of the year 2020, the whole world has been hit by a health crisis caused by the outbreak of coronavirus (COVID-19) in most countries. In the year 2020, the global economy witnessed a hard shrink and many challenges, that the Palestinian economy was in no separation from, Palestine was doubly affected by the clearing crisis on one hand and the coronavirus on the other hand, which reflected on businesses and firms' profitability in Palestine and in general.

In this research, the performance of the Palestinian banks has been evaluated for the years 2017, 2018, 2019, and 2020 using the CAMEL rating model. The research was limited to six Palestinian banks and was not generalized for all banks operating in Palestine. Banks were rated based on their performance in five areas: Capital adequacy, asset quality, management efficiency, earning quality, and liquidity. CAR applied to analyze capital adequacy parameter, NPLs to total loans was used to analyze assets quality parameter, the non-expense ratio was used for analyzing management quality parameter, ROE and ROA was used to analyze earnings ability, and total loans to total deposits ratio was used to analyze liquidity management.

*Table 4.1 Banks rating (Source: Author estimation)*

<b>Bank</b>	<b>CAR</b>	<b>NPL</b>	<b>OEOI</b>	<b>ROA</b>	<b>ROE</b>	<b>LD</b>	<b>AVERAGE</b>
AL-Quds Bank	1	4	2	2	4	1	2.3
TNB	1	4	2	5	5	1	3
BOP	1	4	2	3	5	1	2.7
PS.INV.Bank	1	4	2	4	5	1	2.8
AIB	1	2	2	2	5	1	2.2
PISB	1	2	3	3	4	1	2.3

The above table shows that all banks in the sample have been ranked based on the total component score attained by each bank. The lower the score is the better is the ranking of the banks. According to Basel Accords, the results show that the selected banks have committed to Basel Accords' capital requirements. By the end of the year 2020 all banks included in the sample have accomplished positive profits, except TNB which experienced USD 713,437 in losses, it's important to note that this loss is not caused by the pandemic alone, TNB performance was effected by internal problems related to financial embezzlement, and the clearing crisis.

Partial and complete closure, intermittent presences to remote work, shrink employees' numbers, and other precautionary measures, and numerous medical conditions,

with no doubt had affected banks performance at the beginning of COVID-19 outbreak, but it has no tangible effects on the banks' profitability at the end of the year. The Palestinian banking sector has faced political challenges, the Israeli occupation targeted all banks operating in Palestine with threats of legal pursuits if they received benefits of all prisoners, and families of martyrs, and this coincided with stopping the transfer of Palestinian clearing funds. In conjunction with the Palestinian Monetary Authority measures banks-imposed grace periods and postpones payments for four months and allows checks issuers to return their checks.

The average of capital adequacy ratio (15.04%) for the period of crisis exceeds the standard of 10%. This finding indicates that Palestinian banks are sustainable and can absorb any potential losses and protect investors from external threats. Higher levels of capital adequacy prevent banks from liquidation and bankruptcy.

Arab Islamic Bank is ranked at 2.2 average, exhibiting the best performance. Bank of Palestine, which is considered the largest bank in Palestine, is ranked at 2.7 average. The Palestinian Islamic Bank, which is considered the second-largest local bank following the Bank of Palestine, ranked at 2.3 on average. Here can notice that the Islamic Banks operate better than commercial banks, and this due to the fact that Islamic banks don't deal with interests.

Regarding asset quality, the results indicate that non-performing loans have fluctuated throughout the research period. The average of NPLs has been increased by banks over the year 2020 compared with the previous period. Meaning that Palestinian

banks don't acquire a well-defined credit policy and are not able to efficiently manage credit risk.

Depending on financial reports and calculated ratios, the findings indicate that the banks have had fair performance levels during the pandemic in general, even though there is a decline in some ratios. Finally, according to net profits, all banks in the research sample recorded profits, but less than profits in the year 2019, except Al Quds Bank that gained a net profit of \$10 million with an increased rate 29.3% from 2019.

## 4.2 Recommendations

- Despite the pandemic, the capital adequacy and liquidity in the Palestinian banks over the research period were strong and at a level higher than 10%, but the Palestinian Investment Bank has a very high level of capital adequacy reached more than 20%, so the researcher recommended employing its sources in long term investment to gain more profits and returns.
- In the year 2020, The National Bank recorded the highest non-performing loan ratio, thus, the researcher recommended it increasing its collaterals against loans, to decrease the demand on it.
- COVID-19 was a special case faced by the Palestinian banking sector, but it was not the only one, so the researcher recommended that policymakers pay more attention to the credit risk management problems when financing investment projects.
- Improve and develop electronic services and increase reliance on them even after the end of this pandemic. Moreover, create a good banking system that enables working remotely from home with a high level of auditing and monitoring, to be used in a similar crisis.
- Corona virus pandemic has left significant long-term challenges, so the researcher recommended the Palestinian Monetary Authority to re starting economic growth, deleverage the economy, and manage what is likely to be significant structural changes resulting from the pandemic.
- The financial and operational performance of the Palestinian banks remains stable despite being faced with the global crisis due to the Covid-19 pandemic, however, it is essential to conduct evaluation and survival strategies in anticipation if the impact of the crisis gets worse.

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## ملخص الدراسة

يلعب القطاع المصرفي الفلسطيني دورًا حيويًا في النمو الاقتصادي ، فالرفاهية المالية الجيدة للقطاع المصرفي مهمة للمالكين والمستثمرين والموظفين والاقتصاد ككل أيضًا. في الآونة الأخيرة، تأثر العالم كله بفيروس كورونا وتسبب في عواقب اقتصادية، والاقتصاد الفلسطيني جزء من هذا الاقتصاد العالمي، فقد سجل انخفاضًا حادًا وصل إلى 12٪ خلال عام 2020 (سلطة النقد الفلسطينية، ديسمبر 2020). حيث يلعب القطاع المصرفي دورًا حيويًا في التنمية الاقتصادية وازدهار البلاد، لذلك يهدف البحث إلى قياس تأثير فيروس كورونا و انتشاره على الأداء التشغيلي والمالي للبنوك الفلسطينية المحلية. من خلال هذا البحث ، تم تقييم أداء ستة بنوك فلسطينية باستخدام نظام التصنيف CAMEL ، وتم جمع البيانات على مدى السنوات الأربع الماضية أي من عام 2017 حتى عام 2020، وتألفت العينة من جميع البنوك الفلسطينية التجارية المحلية ومصرفين إسلاميين.

يتكون نموذج CAMEL من خمسة مؤشرات مهمة لتقييم سلامة البنك وتنفيذه، هذه المؤشرات هي كفاية رأس المال، جودة الأصول، الإدارة، الأرباح والسيولة. استخدم الباحث التحليل الوصفي ومنهج المقارنة للتعرف على تأثير الوباء على أداء البنوك.

تدل نتائج البحث إلى أن أداء البنوك الفلسطينية كان جيدًا حتى أثناء انتشار الوباء، فهي ملتزمة باتفاقيات بازل والمعايير الدولية في كفاية رأس المال بنسبة 10٪ ، كما أن بعض البنوك لديها مستوى عالٍ من كفاية رأس المال ، لذلك كان عليها استخدام رأس المال بطريقة مدرة للربح، من ناحية أخرى ، لم تكن الربحية راضية في جميع البنوك. وأوصى الباحث بالاستثمار المستدام ومراقبة ممارسات إدارة المخاطر لزيادة الأرباح.