# Financial Performance of Conventional and Islamic Banks: Evidence From Covid-19

Abdullah Alawadhi<sup>1</sup> & Ahmad AlQassar<sup>1</sup>

<sup>1</sup> College of Business Administration, Kuwait University, Kuwait

Correspondence: Abdullah Alawadhi, College of Business Administration, Kuwait University, Kuwait. Tel: 965-9880-1982. E-mail: a.salawadhi@ku.edu.kw

Received: January 8, 2023	Accepted: February 27, 2023	Online Published: March 6, 2023
doi:10.5430/ijba.v14n1p52	URL: https://doi.org/10	0.5430/ijba.v14n1p52

# Abstract

The COVID-19 pandemic had a devastating effect on the global economy, and Kuwait had its fair share. This study examines the impact of COVID-19 on the performance of banks in Kuwait. A pre-and post-COVID-19 statistical analysis was conducted between the largest conventional and Islamic banks in Kuwait. The correlation coefficient and analysis of variance are conducted at the 5% level of significance and 95% confidence level. Additionally, a comparative approach is adopted to ensure the proper analysis of the effect of COVID-19 on the performance of 10 banks in Kuwait. Findings reveal that the COVID-19 pandemic had a great impact on the profitability of the financial institutions in Kuwait; the COVID-19 pandemic did not have any negative effect on the performance of the stock prices of the banks in Kuwait

Keywords: COVID-19, accounting, financial performance, development, banks

# 1. Introduction

The COVID-19 pandemic left a lasting effect on the global economy, one which is still being felt today, leading to a new narrative in the way businesses are being done. Countries worldwide have continued to evaluate the impact of COVID-19 on their economy. Banks in Ireland have continued to witness a series of shortfalls at a weekly rate of 20%–24% (Byrne, Hopkins, McIndoe-Calder, & Martina, 2020). Unicredit, a financial institution in Italy, closed down 70% of its branches, with the remaining 30% operating on alternate days. In the UK, the banks had to raise the spending limit on their card payment from £30 to £45 to encourage customers to embrace digital banking (Yerchuru & Chidambaram, 2020).

At the end of February 2020, the global financial markets entered a risky phase because of the increasing volatility across the global market. The equity market witnessed a sharp decline of about 30% in market value within a week, which far exceeds the sell-off that occurred during the global economic crisis of 2008 (World Economic Forum, 2020). Nguyen (2022) stated that the COVID-19 pandemic has hurt the performance of businesses, and it has put a strain on the productivity of major economies, with financial institutions not being spared. This and other issues have had a great impact on the performance of various financial institutions.

Kuwait is endowed with natural resources, a growing number of financial institutions, and a thriving stock exchange market, which has continued to change the country's business landscape. According to the World Bank (2022), Kuwait's GDP was valued at \$104.327 billion in 2021.

As COVID-19 affected countries and major businesses, Kuwait has also experienced adverse effects of the pandemic. The country witnessed a drastic slump in the prices of oil and a fiscal deficit, which Kuwait's significant financial assets can temporarily curtail; however, they are not enough to offset the structural and fiscal problems due to lower oil prices and the rising marginal cost of oil production (World Bank, 2020). The steep downward trend in the country's oil prices and slower global growth due to the COVID-19 pandemic have had a great impact on the performance and operations of financial institutions, especially banks (World Bank, 2020).

Despite the challenges posed by COVID-19, Kuwait took decisive steps to ensure that its economy could continue to prosper. According to the Central Bank of Kuwait (2020), in its drive to limit the impact of COVID-19 on the financial sector in Kuwait, banks were made to reduce the discount rate from 2.75% to 1.5%; the repurchase (repo) rate was reduced by 1% while other monetary policies of the Central Bank of Kuwait was reduced by 0.125%, and fees charged

by banks on point of sales were stopped for six months. Furthermore, the capital adequacy ratio was ordered to be lowered from 13% to 10.5%, whereas the financing limit was increased from 90% to 100%, thereby allowing loans to be easily accessible to individuals and organizations (Kuwait Direct Investment Promotion Authority, 2021). These measures were made to address the lingering problem of the pandemic on the economy and its impact on the financial sector.

Kuwait's financial sector was regarded as a sector at the forefront of the Gulf region, but multiple factors such as regional and global developments as well as an increased level of competition, have led to the destabilization of Kuwait's financial sector, compared with that of other Gulf Cooperation Council countries (Rung & Ghoul, 2015). Kuwait, located in the Gulf, is a rich country with an abundance of crude oil, which over the years has become the major export of the country. It is a major contributor to the country's GDP, which was worth over \$104 billion in 2021 (IMF, 2022). The continuous growth of the country's GDP is not only associated with the contributions of the oil and gas sector of the economy but also other economic sectors, such as the financial, technology, and communication sectors. It was reported that as of the end of 2002, the total assets of the financial institutions were more than 200% of the total nominal GDP of the country (IMF, 2004), and the country's nominal GDP per head was more than \$45,620, with a real GDP per head of more than \$29,403.

Eleven local banks are operating in Kuwait, including five Islamic banks, and the Central Bank of Kuwait supervises them to maintain the stability of the Kuwaiti Dinar (Corporate Finance Institute, 2021). Together with some foreign-owned banks, these banks have been quite effective in meeting the demands of individuals and corporate entities in the country. One role played by banks in Kuwait is to ensure that credits are available to those who needed them and to further spur financial development and economic growth (Arslan et al., 2019). Apart from making credits available, the banks have also financed huge economic projects.

Two of the biggest banks in Kuwait are the Kuwait Finance House (KFH) and the National Bank of Kuwait (NBK). KFH was established in 1977 as the first bank in the country to operate following the Islamic principles of Shari'a. KFH has over 400 branches and over 700 ATMs worldwide. The NBK was established in 1952 as the largest financial institution in Kuwait with 68 branches in Kuwait and over 140 branches worldwide; unlike KFH, it employs the conventional (non-Islamic) banking system (Boursa Kuwait).

Several studies have examined the financial performance of banks during COVID-19. Some studied the effect of COVID-19 on financial institutions in Europe, the USA, and Indonesia (Candera, Muslimin, & Permatasari, 2021; Dunbar, 2022; Fakhri, 2021; Kozak, 2021; Mesta, 2022). Other studies focused on COVID-19's impact on Islamic banks (Candera, 2020; Ichsan, Suparmin, Yusuf, Ismal, & Sitompul, 2021). Furthermore, studies by Almutairi (2022) and El-Chaarani, Ismail, El-Abiad, and El-Deeb (2022) compared the effect of COVID-19 on Islamic banks to that of conventional banks in Kuwait during the pandemic. Most of these prior studies only focused on the short-term effects of the pandemic, i.e. period from before the pandemic until its peak. Furthermore, most studies studied the impact of COVID-19 on developed countries such as the USA and Europe.

This study makes a valuable contribution to the existing literature by exploring several under-researched areas in the context of the impact of COVID-19 on the banking sector. Firstly, it conducts an analysis of both pre- and post-COVID-19 periods spanning from 2017 to 2021 to enable a thorough examination of the long-term effects. Secondly, the study investigates the influence of COVID-19 on the stock prices, financial performance, and operational costs of the largest conventional and Islamic banks operating in a developing country, namely Kuwait. Finally, the study adopts a comparative approach to ensure an appropriate and comprehensive analysis of the impact of COVID-19 on the performance of all banks in the country.

# 2. Literature Review and Research Hypotheses

The impact of COVID-19 was felt by various sectors, from the aviation, manufacturing, telecommunication, transportation, logistic, marketing, and agriculture, to financing sectors (AbdulKader, Meero, & Zayed, 2021; Edel, 2021; Ileka & Hajilee, 2020; Puri-Mirza, 2022; Tan, Ma, Wang, Feng, & Xiang, 2022; Zahoor, 2021). During this period, major organizations experienced a drastic downturn in profits, including those in the financial sector (Demirg üç-Kunt, Pedraza, & Ruiz-Ortega, 2021; Dunn, Hood, & Driessen, 2020; Ileka & Hajilee, 2020). Examining the performance of financial institutions is a step toward understanding an organization's sustainability in the face of challenges at any given period or within a given trend. Sustainability drives businesses toward operational efficiency (Harris, 2003; Shi, Han, Yang, & Gao, 2019; Tan et al., 2022) and organizational growth and development through various control measures and succession plans. Financial institutions in Kuwait aim to achieve profitability and improve the confidence of shareholders (investors) in the economy, helping to strengthen the country's financial market.

# 2.1 The Impact of COVID-19 on the Financial Performance of Banks

The advent of the COVID-19 pandemic had a great impact on the global economy. Countries were strongly affected and businesses were put on hold (AbdulKader et al., 2021; Edel, 2021; Zahoor, 2021). Over the years, the financial sector has continued to receive attention, as banks are seen as the major determinant of economic growth and development. Banks are major contributors to businesses in terms of capital acquisition for both big and small businesses. The role of the financial sector is to provide the required support to businesses operating in a country and aid in the economic stability of the country irrespective of the challenges through the proper utilization of resources at its disposal and in compliance with the guidance of the country's regulators.

The Central Bank of Kuwait introduced a \$16.5 billion support package to the Kuwait economy, ensured a reduction in liquidity and capital adequacy requirements, and reduced the risk weight for small businesses through policy rate cuts (World Bank, 2020). Puri-Mirza (2022) asserted that, in 2019, the total profit after tax of listed banks in Kuwait was valued at approximately 1.2 billion Kuwaiti dinars (KWD) but reduced to KWD 592 million in 2020 because of the COVID-19 pandemic. With the contribution of the Kuwaiti government in supporting the banking industry, the financial industry maintained its strong and lucrative sector status with the potential of rising beyond the problems associated with the global pandemic.

Despite the threat posed by the pandemic, the rate of deposits in the banks has continued to grow. Bank customers have continued to make deposits into their accounts despite the challenges of the pandemic, as the value of deposits made increased from KWD 41.11 billion in 2008 to KWD 84.01 billion in 2020, which is an increase of more than 100% in deposits, although the pandemic was at its peak (Statista, 2022). This improvement in deposits was due to the level of confidence the people have in the Kuwaiti banking sector and measures taken by the Kuwaiti government to sustain the economy through the national fund that was set up to support and combat COVID-19 (Kuwait Direct Investment Promotion Authority, 2021); the Kuwaiti banks, Kuwaiti Chamber of Commerce, and Kuwaiti Charity Organizations also contributed funds. This demonstrates that the government and financial institutions have been working to ensure that the Kuwaiti economy continued to function and meet the demand of the market during the COVID-19 period.

In addition to the monetary measures that were introduced by the Central Bank of Kuwait to provide the necessary support to the major sectors, individuals, and small businesses, the Central Bank of Kuwait also played a major role during the period in terms of supervision and regulation (Central Bank of Kuwait, 2020). To further strengthen the sector, policymakers ensured that regulations were relaxed and the adoption of capital as a buffer was prioritized, which were prudent measures (Demirg üç-Kunt et al., 2021).

Nonetheless, the financial sector is not immune from any negative effects in crises. Sghaier, Sekrafi, and Mighri (2016) indicated that all types of banks were negatively affected by the 2008 financial crisis. Fakhri and Darmawa (2021) showed that the COVID-19 pandemic affected the financial performance of both Islamic and Conventional Banks in Indonesia. Arafat, Abdul Rashid, and Qazi Waseem Jan (2021) similarly investigated how COVID-19 affects both conventional and Islamic banks' performance and stability. According to their results, COVID-19 adversely impacted the profitability of all banks regardless of type. At the same time Abdulle and Kassim (2012) also revealed that Islamic banks in Malaysia were less exposed to liquidity risks during the 2008 global financial crisis. Thus, we hypothesize the following:

# H1: The COVID-19 pandemic did not negatively affect the profitability of financial institutions (Banks) in Kuwait.

# 2.2 The Impact of COVID-19 on the Banking Sector's Stock Market

The implication of the pandemic was felt by major economies of the world across different sectors. Stock prices went down, and companies were unable to operate effectively and efficiently because of the impact of the pandemic. The World Economic Forum (2020) reported that of the end of February 2020, the global financial market was faced with great risk because volatility increased across the global market while the equity markets began to decline rapidly with a loss of 30% of the market value within weeks, as sell-off of the stock continued during the COVID-19 pandemic, which far exceeded that of the global financial recession of 2008.

The global stock exchange market was hit hard by the COVID-19 pandemic as developed countries like the US recorded the longest market bullish run of 11 years with the quickest drawdown on investment. The Standard & Poor 500 index lost one-third of its value within one month of the pandemic (Capelle-Blancard & Desroziers, 2020). Numerous empirical studies have demonstrated the adverse effects of COVID-19 on stock markets (Liu et al., 2021; Topcu & Gulal, 2020; Utomo & Hanggraeni, 2021).

In the United States, the stock market index experienced a major market shock because of losing most of its stock prices. This issue was caused by the reduction in demand for stocks due to the impact of the pandemic (Hasan &

Ahmed, 2021) and the increase in unemployment rates, especially in the United States, where 22 million workers sought unemployment benefits (Dunn et al., 2020). Kuwait's stock exchange market was not spared, as the country's main stock index was negatively affected (Euronews, 2020). Al-kandari et al. (2021) reported that the COVID-19 pandemic severely affected the services and financial stock of the economy negatively. Accordingly, we hypothesize that:

The confidence of investors dropped drastically due to the fall in turnover and profitability during the period. However, the banking and technological sectors were the anamolies during the period. Technology was a "saving grace" during the period, as tech companies designed products that were useful for addressing the challenges experienced. The use of digital, and mobile banking was fully embraced, allowing people and corporate organizations to transact businesses remotely without a physical presence in banking halls.

# H2: The COVID-19 pandemic did not negatively affect the stock prices of financial institutions (banks) in Kuwait.

# 3. Research Methodology

This study employs a quantitative research method, which according to Sinaga (2014), involves an in-depth analysis of the research variables. It is also used to gain an understanding of various underlying reasons as well as opinions and motivations while providing insights into problems or helping in developing ideas and hypotheses for quantitative research. The study examines the financial performance of banks based on published data for five years from 2017 to 2021 and the stock market performance of the institutions. Furthermore, the study conducts an in-depth analysis of the biggest Islamic bank (KFH) and biggest conventional bank (NBK).

Financial and statistical analyses are used to examine the banks' financial reports from 2017 to 2021. This gives an in-depth view of the variables being examined while considering the income statement and statement of financial position. The research methodology also adopts a trend analysis by observing the financial performance of the financial institutions from 2017 to 2021. The data collected are secondary data, which are further subjected to statistical interpretations using Pearson's coefficient of correlation and analysis of variance at a 5% level of significance and 95% confidence level.

# 4. Research Results and Analysis

# 4.1 Descriptive Analysis

There are 11 local banks in Kuwait—five conventional banks, five Islamic banks, and one specialized bank. The paper studies and interprets data from five conventional and five Islamic banks. General analysis was conducted for all 10 banks, whereas in-depth analysis was conducted for the largest conventional and Islamic banks. Table 1 presents the mean, standard deviation, and variance for bank profits and revenues between 2017 and 2021. The profit after-taxes reveals that all banks were profitable from 2017 to 2021. The biggest bank, NBK, made an average profit after tax of KWD360 million, followed by KFH, which made KWD246.73 million. For total revenues, results show that NBK and KFH had high average total revenues of KWD1010.14 million and KWD859.70 million, respectively. The Kuwait International Bank had the lowest average total revenue (KWD87.73 million).

# Table 1. Bank profit and revenues (in Millions KWD)

Bank Name			Bank Pro	fit		Total Rever	iue
	Туре	Mean	Sd	Var	Mean	Sd	Var
National Bank of Kuwait	С	360.3	64.3	4,128.7	1,010.1	130.9	17,132.1
Gulf Bank KSCP	С	47.9	13.5	181.1	223.9	35.4	1,249.9
Commercial Bank of Kuwait	С	34.8	31.9	1,019.9	87.6	10.3	105.3
AlAhli Bank	С	12.9	46.5	2,159.0	213.0	22.6	510.7
Burgan Bank	С	64.1	22.3	495.3	317.3	53.0	2,805.0
Warba Bank	Ι	11.7	4.9	24.4	89.7	23.0	527.7
Kuwait Finance House	Ι	246.7	48.7	2,367.7	859.7	71.8	5,154.2
Kuwait International Bank	Ι	13.5	8.3	68.7	87.7	10.7	114.3
Boubyan Bank	Ι	49.6	10.9	119.7	198.2	30.0	902.4
Ahli United Bank Kuwait	Ι	42.3	11.5	131.9	146.4	19.0	360.0

Abbreviations (used for remaining tables)

C: Conventional Bank (non-Islamic)

I: Islamic Bank

Table 2. Average total ass	ets. liabilities.	and equity (in	million KWD)
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Bank Name		Total Ass	ets	1	otal Liabi	lities	Total Equity		
	Mean	Sd	Var	Mean	Sd	Var	Mean	Sd	Var
National Bank of Kuwait	29,141.5	2,732.7	7,467,859.0	25,498.8	2,445.1	5,978,511.0	3,642.7	320.5	102,747.2
Gulf Bank KSCP	6,122.8	319.0	101,781.4	5,483.1	293.5	86,161.5	639.6	27.1	731.7
Commercial Bank of Kuwait	4,482.7	227.3	51,657.6	270.3	212.3	45,065.8	725.5	61.9	3,826.9
AlAhli Bank	4,854.5	483.4	233,652.0	4,227.3	486.2	236,377.3	627.2	52.6	2,764.0
Burgan Bank	7,197.9	156.1	24,370.4	6,329.2	178.4	31,832.5	868.7	38.6	1,489.1
Warba Bank	2,833.6	805.5	648,841.2	2,546.0	738.7	545,695.2	287.6	85.2	7,264.1
Kuwait Finance House	19,561.9	2,050.5	4,204,516.9	17,577.7	1,968.3	3,874,295.2	1,984.2	121.6	14,796.7
Kuwait International Bank	2,541.8	492.9	242,896.2	2,220.1	447.8	200,545.4	321.7	50.9	2,595.3
Boubyan Bank	5,481.0	1,416.0	2,004,990.0	4,902.6	1,318.8	1,739,273.5	578.4	111.0	12,316.0
Ahli United Bank Kuwait	4,174.8	372.7	138,927.2	3,649.6	321.5	103,389.2	525.2	70.8	5,005.3

The average total assets, liabilities, and equity of the 10 banks from 2017 to 2021 are presented in Table 2. The data reveals that the average total assets of the NBK and KFH were high at KWD29,141.45 million and KWD19,561.93 million, respectively. The Kuwait International Bank had the lowest average total assets (KWD2, 541.78 million). In terms of liabilities and equity, NBK and KFH had the highest average among all banks. The Commercial Bank of Kuwait had the lowest average total liabilities (KWD270.30 million), and Warba Bank had the lowest average total

equity (KWD287.63 million).

Bank Name	Туре	Percentage Change in Share Price for 52 Weeks	Average Trading Volume
National Bank of Kuwait	С	15.55	97.54
Gulf Bank KSCP	С	53.16	220.01
Commercial Bank of Kuwait	С	(3.00)	3.45
AlAhli Bank	С	63.85	14.93
Burgan Bank	С	15.58	64.51
Warba Bank	Ι	0.73	59.37
Kuwait Finance House	Ι	18.58	257.25
Kuwait International Bank	Ι	(2.35)	42.45
Boubyan Bank	Ι	16.94	22.73
Ahli United Bank Kuwait	Ι	(8.78)	14.35

Table 3. Percentage change in share price for 52 weeks and the average volume of shares traded

Based on Table 3, which shows the average volume of shares traded post-COVID-19 for the 10 local banks in Kuwait, the most traded stock with the highest volume of trading is KFH, with a trading volume of 257.25 million units, followed by Gulf Bank KSCP that traded 220.01million units on the Kuwait stock exchange. Table 3 also shows an analysis of the change in the share price of the banks in Kuwait post-COVID-19, revealing that seven of the banks had a positive percentage change in share prices post-COVID-19, whereas three of the banks had a negative percentage change in the share prices. It also reveals that two of the Islamic banks (Kuwait International Bank and Ahli United Bank) were affected negatively as their share prices did not improve significantly, whereas the share price of one conventional bank (Commercial Bank of Kuwait) was negatively affected in post-COVID-19. This can be due to other factors such as shareholders' preference and the performance of the banks, which resulted in the loss of shareholders' confidence.

Table 4 presents Pearson's coefficient of correlation between the percentage change in the share prices of the 10 banks and the trading volume of shares of the financial institutions. The analysis reveals that there is a positively low correlation between the percentage change in share prices and the trading volume of shares of the banks (34.18%).

	% Change in Share price for 52 weeks	Trading Volume in millions of KWD
% Change in Share price for 52 weeks	1	
Trading Volume in millions of KWD	0.341823329	1

Table 4. Pearson's coefficient of correlation between percentage change and the average volume of shares traded

# 4.2 Testing H1: Impact of COVID-19 on the Financial Performance of Banks

Results of the analysis for KFH witnessed a rise in the income statement in 2017, peaking in 2019, and witnessing a decline during the COVID-19 pandemic in 2020. Figure 1 depicts that, in 2021, the profit before tax and the profit after tax started to improve, whereas the revenue is yet to pick up as it seems to be on a downward trend. The profit after tax (PAT) before the COVID-19 pandemic was high compared with the figures during the pandemic in 2020, which are more than KWD243 million in 2017 to KWD321 million in 2019. Due to the impact of COVID-19 in 2020, it went down to about KWD241 million and then went further up to more than KWD366 million in 2021. The same applies to the profit before interest and tax (PBIT), which also dropped significantly during the COVID-19 period from KWD261.82 million in 2019 to KWD184.22 million in 2020 during the pandemic but increased in 2021 to KWD310.14 million.



Figure 1. Income statement for KFH from 2017 to 2021 (in million KWD)

Similar to KFH, NBK witnessed a rise in its income statement in 2017, and it peaked in 2019 and witnessed a decline during the COVID-19 pandemic in 2020. Figure 2 reveals that in 2021, its profits started to improve, but its revenue is yet to pick up as it seems to be on a downward trend. The PBIT before the COVID-19 pandemic was higher than that during the pandemic in 2020, i.e., from KWD342.31 million in 2017 to KWD461.53 million in 2019, but it went down to KWD284.50 million due to the impact of the COVID-19 in 2020 and then went further up to KWD414.76 million in 2021. The same applies to the PAT, which also dropped significantly during the COVID-19 period from KWD425.99 million in 2019 to KWD258.66 million in 2020 but increased to KWD414.76 million in 2021.



Figure 2. Income statement for NBK from 2017 to 2021 (in million KWD)



Figure 3. Movement in the assets and liabilities for KFH pre- and post-COVID-19 from 2017 to 2021 (in Millions KWD)

KFH's statement of financial position is depicted in Figure 3, indicating the movement in the assets and liabilities of the financial institution pre- and post-COVID-19. The assets and liabilities tend to move in the same direction. Despite the COVID-19 pandemic, KFH's current assets, current liabilities, total assets, and total liabilities have continued to increase from 2017 to 2021, i.e., from a total assets value of KWD 17,357.98 million in 2017 to KWD 21,788.21 million in 2021. In the case of shareholders' equity, the curve remained almost constant from 2017 to 2021. NBK's statement of financial position is depicted in Figure 4, indicating the movement in the assets and liabilities, total assets, and total liabilities have continued to increase from 2017 to 2021, i.e., from a total assets, current liabilities, total assets, and total liabilities of the bank pre- and post-COVID-19. Despite the COVID-19 pandemic, NBK's current assets, current liabilities, total assets, and total liabilities have continued to increase from 2017 to 2021, i.e., from a total assets value of KWD26,034.60 million in 2017 to KWD33,256.59 million in 2021. In the case of shareholders' equity, the curve has remained almost constant from 2017 to 2021.



Figure 4. Statement of financial position for NBK from 2017 to 2021 (in million KWD)

Table 5 presents the statistical summary and ANOVA variance tests computed for KFH and NBK's profitability during COVID-19. The results show the sums of the square between groups as 6337.28691 and within as 314.89924, with a degree of freedom of 7 and 32, respectively. The mean of the square between groups is 905.3267, and that within is 9.840601, with an F-value (i.e., 905.3267/9.840601) of 91.99912 and a p-value of 0.00. These figures were computed at a significance level of 5% and a confidence level of 95%.

# Table 5. Summary and ANOVA (Profitability) for KFH and NBK **SUMMARY**

			KFH			NBK			
Groups	Count	Sum	Average	Variance	Sum	Average	Variance		
GP Margin	5	166.26	33.252	40.59692	194.6605	38.93209	40.99538		
TA/TL	5	5.57	1.114	0	5.7151	1.14302	0		
CA/CL	5	3.56	0.712	0.00052	3.896019	0.779204	0.002954		
ROE	5	61.94	12.388	3.84832	49.70945	9.94189	3.47733		
ROCE	5	71.59	14.318	5.20342	53.98397	10.79679	3.877519		
DPS	5	0.06	0.012	0.00002	0.13	0.026	0		
EPS	5	0.12	0.024	0	0.21	0.042	0		
Net Profit Margin	5	143.8	28.76	29.0755	292.7118	58.54236	897.5011		

Abbreviations (used for remaining tables)

GP Margin: Gross Profit Margin

TA/TL: Total Assets/Total Liabilities

CA/CL: Current Assets/Current Liabilities

ROE: Return on Equity

ROCE: Return on Capital Employed

DPS: Dividends Per Share

EPS: Earnings Per Share

# ANOVA (KFH)

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	6337.28691	7	905.3267	91.99912	0	2.312741
Within Groups	314.89924	32	9.840601			
Total	6652.18615	39				

# ANOVA (NBK)

Source of Variation	SS	Df	MS	F	P-value	F crit	
Between Groups	16770.69	7	2395.813	20.26369	0	2.312741	
Within Groups	3783.418	32	118.2318				
Total	20554.11	39					

As for NBK, the analysis of variance, where the sums of the square between and within groups are 16770.69 and 3783.418 at a degree of freedom of 7 and 32, respectively. The mean of the square between groups is 2395.813 and within groups is 118.2318 computed at an F-value (i.e., 2395.813/118.2318) of 20.26369 and a p-value of 0.00 at a level of significance of 5% and a confidence level of 95%. Because the p-value (0.000) is lower than the alpha value (0.05) for both banks, we reject the null hypothesis that for the KFH and NBK, the COVID-19 pandemic had no impact on their profitability.

	GP Margin	TA/TL	CA/CL	ROE	ROCE	DPS	EPS	Net Profit Margin
GP Margin	1							
TA/TL	0.418765	1						
CA/CL	0.287142	0.196116	1					
ROE	0.895630	0.534877	0.143739	1				
ROCE	0.929440	0.462437	0.023646	0.977101	1			
DPS	0.023513	0.375000	-0.784465	0.091758	0.206344	1		
EPS	0.650887	0.102062	-0.480384	0.536076	0.701131	0.612372	1	
Net Profit Margin	0.984858	0.488813	0.391183	0.924331	0.921036	-0.067387	0.523124	1

Table 6. Correlation table (KFH)

Table 6 indicates a correlation among the variables tested for KFH, indicating that all the ratios tested correlate with the net profit margin, which is negatively correlated with only the dividend per share. The dividends and earnings per share negatively correlate with the financial house's current ratio or liquidity rate. All other variables are positively correlated. Table 7 indicates that there is a correlation among the variables tested for NBK. This result indicates that all tested ratios correlate with the net profit margin, which is negatively correlated with the other variables, except the current ratio, with which it is positively correlated. The dividend per share is positively correlated with all the other variables, whereas the ROCE is negatively correlated with the current ratio.

### Table 7. Correlation table (NBK)

	GP Margin	TA/TL	CA/CL	ROE	ROCE	DPS	EPS	Net Profit Margin
GP Margin	1							
TA/TL	-0.480350	1						
CA/CL	0.372018	-0.565680	1					
ROE	0.611012	0.072790	-0.443010	1				
ROCE	0.611308	0.069351	-0.435190	0.999805	1			
DPS	0.558008	-0.033310	0.227919	0.591973	0.606119	1		
EPS	0.469668	0.261514	-0.404660	0.935017	0.939894	0.763763	1	
Net Profit Margin	-0.145180	-0.452300	0.849171	-0.834490	-0.828220	-0.181760	-0.773300	1

# 4.3 Testing H2: Impact of COVID-19 on the Stock Prices of Banks

Correlation Table 8 indicates that the open, high, low, close, and adjusted closing prices positively correlate with KFH. Stock prices from 2017 to 2021 reveal a positive movement in share prices; Table 9 shows a correlation among the variables tested for NBK, revealing that all the ratios tested are correlated with the net profit margin, which is negatively correlated with the other variables, except the current ratio that it is positively correlated with. The dividend per share is positively correlated with all the other variables, whereas the ROCE is negatively correlated with the current ratio.

	Open	High	Low	Close	Adj Close
Open	1				
High	0.957558	1			
Low	0.982669	0.947076	1		
Close	0.953211	0.992592	0.959112	1	
Adj Close	0.953217	0.992593	0.959115	1	

Table 8. Correlation stock price analysis for KFH

# Table 9. Correlation stock price analysis for NBK

	Open	High	Low	Close	Adj Close
Open	1				
High	0.885108	1			
Low	0.98634	0.879258	1		
Close	0.876601	0.981356	0.894981	1	
Adj Close	0.87661	0.981358	0.894983	1	

The summary and ANOVA Table 10 provide stock price analysis for both KFH and NBK. The results indicate that the average closing price of the share price of KFH is KWD 569.3808, with an all-time average high of KWD 587.151, greatly exceeding the company's share price five years ago. The ANOVA indicates a p-value of 0.519708 at the 5% level of significance and 95% confidence level. Based on the result, the p-value is calculated at 0.519708 at an alpha value of 0.05. Furthermore, the results for NBK indicate that the average closing price of the share is KWD791.8 with an all-time average high of KWD814.03, which is far higher than the share price of the company five years ago. The ANOVA indicates a p-value of 0.251577 at a 5% level of significance and 95% confidence level. The p-value is 0.251577 and the alpha value is 0.05, indicating that the p-value is higher than the alpha value. Since the p-value is higher than the alpha value for both banks, we will, therefore, accept the null hypothesis that the COVID-19 pandemic does not affect the stock prices of the KFH and NBK.

Table 10. Summary and ANOVA (stock prices) for KFH and NBK

	KFH				NBK			
Groups	Count	Sum	Average	Variance	Sum	Average	Variance	
Open	60	33206.59	553.4432	34628.09	46428.36	773.806	29374.81	
High	60	35229.09	587.1515	31967.85	48842.35	814.0391	20770.53	
Low	60	31911.85	531.8641	31401.62	45112.39	751.8732	28722.9	
Close	60	34162.85	569.3808	30742.18	47510.01	791.8336	20509.76	
Adj Close	60	34160.38	569.3396	30749.56	47504.93	791.7489	20518.17	
ANOVA (KFH)								
Source of Variation	SS	df	MS	F	P-value	F crit		
Between Groups	103323.5	4	25830.87	0.8098	0.519708	2.402248		
Within Groups	9409869	295	31897.86					
Total	9513193	299						

# SUMMARY

ANUVA (INBK)							
Source of Variation	SS	df	MS	F	P-value	F crit	
Between Groups	129457.8	4	32364.46	1.349687	0.251577	2.402248	
Within Groups	7073874	295	23979.23				
Total	7203332	299					

### ANOVA (NBK)

### 5. Conclusion

This study aimed to determine the effect of the COVID-19 pandemic on the performance of banks in Kuwait. A comprehensive pre- and post-COVID-19 analysis of the largest conventional and Islamic banks in Kuwait was conducted, along with a comparative approach to provide an in-depth evaluation of the impact of COVID-19 on the performance of ten banks in the country. The results of the study indicate that the COVID-19 pandemic had a substantial impact on the profitability of financial institutions in Kuwait. However, the pandemic did not have any adverse effect on the stock prices of the banks, which contributed to increased investor confidence in the financial institutions. This was evident in the stability of the share prices of two Kuwaiti financial institutions and the marked improvement observed in their share prices over the five-year period under review.

The COVID-19 pandemic has exerted a significant impact on businesses globally, prompting a reevaluation of strategies and fostering greater preparedness for potential future disruptions. The pandemic has altered the manner in which businesses function and impacted their financial performance. Kuwait was not immune to the effects of the pandemic, however, the prompt intervention of the government in fortifying key economic sectors mitigated its impact. Despite a decline in profitability for banks in the country, including KFH and NBK, no losses were recorded during the pre-COVID-19, COVID-19, and post-COVID-19 periods.

Although the performance of financial institutions in other countries has been affected by COVID-19 and employees were laid off, this was not the case in Kuwait as the government was able to manage the situation effectively, investing KWD 500million in its budget to address the COVID-19 pandemic issues. The country's GDP post-COVID-19 went up to more than \$104 billion, according to the World Bank's statistics. Kuwait's Central Bank was advised to reduce its discount rate and its capital adequacy ratio from 13% to 10.5%, which was a great development to further strengthen the financial sector while loans were given to businesses and households to strengthen businesses and reduce the looming rate of unemployment in the country.

The study has limitations that should be considered when evaluating its conclusions. Specifically is limited to the specific two financial institutions in Kuwait (KFH and NBK) and may not necessarily be applicable to other banks in other countries or regions. Additionally, the conclusion is based on data collected within a five-year period (pre and post-COVID-19), which may not necessarily reflect the current status of the banks or the economy. Furthermore, the conclusion is limited to the specific measures taken by the government of Kuwait, such as investing millions in its budget, reducing the discount rate and the capital adequacy ratio, and providing loans to businesses and households. These measures may not be replicable or applicable in other countries.

Despite these limitations, the research conclusion opens up avenues for future studies on the topic of the impact of the COVID-19 pandemic on businesses and financial institutions. Future studies could expand the scope to include more financial institutions and more countries to determine if the results are similar or different. It could also be useful to conduct a longer-term study to determine the sustained impact of the pandemic and government intervention on financial institutions and the economy. Additionally, future research could compare the measures taken by different governments in response to the pandemic and evaluate their effectiveness in mitigating its impact on the financial sector. These studies would provide valuable insights into the best practices for preparing for and responding to future crises.

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