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A Comparative Financial Performance of the GCC's Largest Banks During the Pandemic

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ABSTRACT

This paper investigates the financial performance of the largest Gulf Cooperation Council (GCC) banks by total assets before and during the recent COVID-19 pandemic. The **purpose** of the study was to identify the impact of the COVID-19 pandemic on banks' financial performance. Financial ratios analysis during the period 2017–2020 is employed to measure the financial performance of the largest GCC banks mainly based in Saudi Arabia, Qatar, United Arab Emirates, Kuwait, Oman, and Bahrain. The ratios cover key performance areas such as profitability, efficiency, liquidity, asset quality, asset risk, and expense management. Two significant developments in 2020 are the COVID-19 pandemic and severe drop in oil prices, both of which led to a sharp drop in the region's GDP growth rate from an average of –0.09% in year 2019 to –5.9% in 2020, which in turn is expected to negatively impact bank performance. Using paired samples t-test the research study found statistically significant **results** that the financial performance of all banks suffered on almost all the key parameters in 2020 compared to the earlier period which can explained by the decline in economic activity due to COVID-19. The focus of this study and its conclusions are novel to the extent that there are no country specific studies related to impact of COVID 19 on the biggest banks in a country. Further as far as the authors know there are no studies on the topic of impact of COVID-19 on big banks operating in the Gulf cooperation council countries. The conclusions of the study would of importance to the regulators who would not like the big banks to fail.

Keywords: GCC; pandemic; financial performance; COVID-19; banks

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INTRODUCTION

The current ongoing COVID-19 pandemic is one of the biggest crises of our time, beginning in December 2019 in Wuhan, central China. The availability of credit, risky mortgages, artificially low interest rates, transparency and adequate supervision of the company's balance sheets, and the risk of large financial institutions creating and selling financial derivatives have contributed to the global financial crisis in 2008 [1]. Hence the COVID-19, a virus, created an almost similar effect on the world economy to the global financial crisis. The World Health Organization (WHO) shows that the number of cases across Gulf Cooperation Council (GCC) countries reaching more than 2 million by the end of July 2021. The COVID-19 pandemic is a global crisis, directly affecting almost every country and the banking and financial system in the world. A stable and financially sustainable banking system is essential for the general growth and economic and social well-being of the people of any country [2]. It is expected that because of the scale and

extent of the COVID-19 crisis, it can still be compared with the global financial crisis of 2007–2009, and no bank will remain unaffected. The overall financial market's first reaction was a tsunami, which struck many local and international banks indiscriminately [3]. The governments of the GCC region and most countries in the world have decided to close public places, schools, and lockdown people at home, which has effectively wintered and harmed most of the economy. The cross-border movement of people and goods is strictly minimal. Furthermore, the current pandemic may have accelerated changes in consumer behavior. Banks in many countries continue to operate, but people (especially non-millennials) are forced to use more digital banking solutions and bypass branches and ATMs. In addition, the government started to increase support for digital finance to build a more digital and sustainable economy [4].

The Gulf Cooperation Council (GCC) is home to some of the largest banks in the entire Middle East and North Africa (MENA) region. The Gulf Cooperation

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Council is where Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE) is located. It is a regional and intergovernmental political and economic organization with six members. It was established in May 1981 in UAE, and its headquarter is in Riyadh in Saudi Arabia. The region as a whole has a strong and very active banking industry. The non-oil GDP ratio of all Gulf countries today is higher than 10 or 20 years ago. Many countries still rely heavily on oil and gas exports, which account for more than 70% of total exports for Kuwait, Qatar, Saudi Arabia, and Oman. In addition, the oil revenue exceeds 70% of the total government revenue of Kuwait, Qatar, Oman, and Bahrain [5]. The six biggest banks included in this study; Ahli United Bank (Bahrain), National Bank of Kuwait (Kuwait), Bank Muscat (Oman), Qatar National Bank (Qatar), Saudi National Bank (Saudi Arabia), and First Abu Dhabi Bank (UAE).

When large banks become unstable and vulnerable, they usually stop lending, and the credit crunch can cause the economy to fall into recession or slow growth [6]. Inspired by the above facts and arguments, the objective of this paper is to provide a comparative commentary on the actual impact of the COVID 19 pandemic on the significant Gulf Cooperation Council banks before and during this global pandemic crisis. This research study is an important contribution to the literature. As far as we know, this is the first study to examine major GCC banks before and during the pandemic and helps to understand how these banks are affected by COVID-19.

Two significant developments in 2020 are the COVID-19 pandemic and severe drop in oil prices, both of which led to a sharp drop in the region's GDP growth rate from an average of -0.09% in year 2019 to -5.9% in 2020. The slowdown in economic activity in the region is in turn expected to negatively impact big bank performance.

The structure of the research paper is organized as follows: Section 2 discusses the existing literature. Section 3 presents the data, defines our variables and the methodology, and results and implications in section 4. Section 5 concludes the research paper.

LITERATURE REVIEW

The COVID-19 pandemic has harmed the domestic and foreign economies, leading to a decline in the financial performance and profitability of many companies. The bank loans are the weakest for the countries hardest hit by the health crisis [7]. The COVID-19 pandemic is considered an unprecedented crisis in world history, and its severity varies from country to country. The pandemic caused many companies to close down, severely disrupted world trade, and caused losses to almost every industrial sector in the world. Most companies in the GCC take measures to cut costs, save money, avoid expansion and try to cut costs to maintain their safe funds. These problems are even more severe for startups or small and medium enterprises because they freeze hiring or even downsize and fire their staff. A study by Rababah et al. [8] used conventional least squares (OLS) regression to analyze the impact of the COVID-19 pandemic on the financial performance of listed companies on the China Stock Exchange. It is found that small and medium-sized companies are the most severely affected by the pandemic, and the financial performance of the industries most affected by COVID-19 has fallen sharply compared with other sectors. Comparing with the global financial crisis that started in the United States in 2007, when the mortgage crisis hit the stock market and spread globally in 2008, a study by Flögel and Gärtner [9] concluded that banks seem to be better prepared for the COVID-19 crisis. However, as we are still in this crisis, it is difficult to measure the long-term impact of the pandemic on the banking sector in GCC. As there are limited studies currently available, this study aims to examine the effect of the COVID 19 pandemic on the financial performance of major banks in the GCC before and after the crisis.

Elnahass et al. [10] examined 1,090 banks from 116 countries in the world using quarterly data during 2019-2020. The results provide strong empirical evidence that the COVID-19 outbreak in the global banking industry has adversely affected the financial performance of various indicators, including risk indicators, default, liquidity, and assets. In addition, based on the trend analysis, the average performance and financial stability of banks in each quarter indicate that bank stability has recovered in the second quarter of 2020. A study by Devi et al. [11] investigated the financial performance of 214 companies on the Indonesian Stock Exchange, divided into nine or 49 sub-sectors in proportion. The results show that during the COVID-19 pandemic, the company's leverage ratio and short-term activity rate have increased, but the company's liquidity ratio

and profitability have declined; in addition, before and during the COVID-19 pandemic, the profitability index of listed companies and the short-term activity index fluctuates wildly. Another study by Demirgüç-Kunt et al. [12] studied banks' stock prices around the world to measure the impact of the COVID-19 pandemic on the banking industry. The results show that the crisis and the anticyclical role of banks are expected to have put pressure on the banking system under stress. However, banks' stocks are worse than the stocks of domestic markets and other non-bank financial companies. In addition, they suggested that as the pandemic continues to affect the global economy, the volatility of the banking industry needs to be closely monitored.

Furthermore, Fakhri and Darmawan [13] compared the financial performance of Islamic and conventional banks during the COVID-19 crisis using six financial performance variables. The study used lending on deposit ratio, net operating margin, operating expenses to operating income, capital adequacy ratio, return on assets, and short-term mismatch. The study found using the Artificial Neural Network method that Islamic banking is more susceptible to the impact of financial crises than traditional banking, which is in line with the previous literature. In addition, a study by Akkas and Al Samman [14] analyzed the GCC Islamic financial institutions and Islamic windows at two different stages during the COVID-19. The first phase (January 1, 2020, to October 30, 2020) shows that compared with the traditional and Islamic financial institutions in Oman, Bahrain, Qatar, Saudi Arabia, and the United Arab Emirates, Islamic financial institutions are less affected by the COVID 19 epidemic.

Moreover, Islamic financial institutions in Saudi Arabia and Oman have not been affected by the COVID-19 outbreak. The analysis of the second phase of the COVID 19 outbreak (from November 1, 2020, to March 17, 2021) confirmed that the negative impact of COVID 19 on Islamic financial institutions in Bahrain and Oman has disappeared. Another study by Barua and Barua [15] in the Bangladesh banking sector and the implications of the COVID 19 using the stress testing model show that the largest banks are relatively more vulnerable. The study used three dimensions; capital adequacy ratio, assets value, and interest income. In contrast, and based on 426 banks from 48 countries, Mirzaei et al. [16] evaluated the performance of Islamic bank stocks compared to their traditional peers in the early stage of the COVID 19 crisis (December 31, 2019, to March 31, 2020). The study found that the profitability of Islamic banks is 10-13% higher than that of traditional banks.

By investigating how Canadian banks responded to the COVID 19 pandemic, a study by Talbot and Ordonez-Ponce [17] had applied a strategic positioning analysis. The study attempted to understand how the Banks in Canada serve their customers and communities during the current health crisis. A content analysis was conducted to analyze the actions taken by the top ten Canadian banks supporting efforts toward the pandemic. One hundred twenty-five documents and 19 different measures were examined in the study. The data was performed through a combination of hierarchical clustering and multi-dimensional scaling. Following the corporate social responsibility approach, three banks stand out: aggressive action, cautious action, and waiting. The study finally highlighted that although most banks have done little to help their stakeholders, three of them have shown active participation and strong support for customers and the community during the pandemic period.

DATA AND METHODOLOGIES

Balance sheet and income statement data for years 2019 and 2020 of the biggest bank in each of the six GCC countries is used to examine the impact of COVID 19 on the top banks in the regions. The banks were selected based on total assets, which is the best indicator of size. Data for the years 2017 and 2018 was used to look at the trends in key ratios. The banks selected are as follows: Ahli United Bank (Bahrain), National Bank of Kuwait (Kuwait), Bank Muscat (Oman), Qatar National Bank (Qatar), Al-Rajhi Bank (Saudi Arabia), and First Abu Dhabi Bank (UAE).

Figure presented oil price trends in the last three years are shown in the chart given below. Oil prices in 2019 averaged around 60 USD per barrel. COVID-19 severely impacted oil prices. Prices dropped sharply in 2020, as can be seen in the Brent crude price chart given below. The Gulf economies suffered due to the twin impact of low oil prices and lockdowns due to COVID-19. GCC markets tend to be inefficient during global crisis with few exception [18]. The paper, therefore, tries to examine the effect of the severe economic slowdown and low oil prices on the



Fig. Crude Oil Prices (Brent)

Source: URL: https://www.macrotrends.net/2480/brent-crude-oil-prices-10-year-daily-chart (accessed on 12.08.2021).

performance of the top banks by comparing how key performance ratios behaved over the period 2019 to 2020.

Key performance ratios, which have been identified by many of the studies reviewed in the earlier section, were used to examine if COVID-19 impacted the performance of GCC big banks. The key performance ratios and their definitions are reported in *Table 1*.

Past studies have identified that profitability, efficiency, liquidity, asset quality, and cost management are critical issues impacting a bank's performance. Return on equity, defined as net income after taxes divided by total equity, is an indicator of profitability. Return on assets, net income after taxes divided by total assets, is an indicator of efficiency and profitability. Net interest margin, which is net interest income (interest income minus interest expense) divided by total assets, indicates competitive pressures. Liquidity is measured using the ratio of liquid assets to customer deposits and short-term funds. Liquid assets are defined as cash and cash equivalents. Asset quality and asset risk is an essential performance parameter for a bank. Asset quality is measured using the ratio of loan loss provisions to net loans. Cost management is calculated using the cost to income ratio, a very standard and well-accepted measure. Cost to income ratio is defined as non-interest expenses divided by net-interest income plus other income.

In this paper, we start the analysis by first looking at the trends in key performance ratios from 2017 to 2020. Since a worsening or a decline in a particular

Key Ratios and definitions

Table 1

Symbol	Ratio
ROE	Return on Equity
ROA	Return on Assets
NIM	Net Interest Margin
LCST	Liquid Assets to Customer Deposits and Short Term Funds
LLP	Loan Loss Provisions to Net Loans
CostInc	Cost to Income ratio: Non-Interest Expenses divided by Net Interest Income plus Other income

Source: compiled by the author.

ratio from 2019 to 2020 may or may not be statistically significant, we use the t-test to compare means.

Two-tailed paired samples t-test (dependent) for means is used to examine whether the average for each ratio for the year 2019 is statistically significant from the average for the year 2020. The dependent t-test compares two means when those means have come from the same entities [19] if the t-value is statistically significant, i.e., if the 2-tailed probability associated with the t-value is < 0.05, we conclude the behavior of the ratio in 2020 is different from 2019.

	AVG 2020	AVG2019	AVG 2018	AVG 2017
ROE	11.00	13.91	12.21	12.94
ROA	1.33	1.77	1.55	1.76
NIM	2.28	2.54	2.60	2.50
LCST	11.81	11.37	13.62	12.15
LLP	0.93	0.54	0.62	0.59
CostInc	-34.63	-34.53	-33.93	-36.34

Trends in key ratios of GCC Big Banks, %

Source: compiled by the author.

RESULTS AND DISCUSSION

Table 2 reported below shows the behavior of average (mean) values of various ratios from 2017 to 2020. Compared to 2019, the average performance of the big banks was worse in 2020 in the following key areas: profitability, efficiency, margins, asset quality, and cost or expense management. Return on equity dropped from 13.91% to 11%, and return on assets was also much lower in 2020, indicating that both profitability and efficiency fell due to COVID-19 and low oil prices.

Average net interest margins were much lower in 2020 compared to 2019, primarily due to reduced interest income due to lower earnings on the banks' loan portfolios. Loan loss provisions were much higher in 2020, indicating a worsening in the banks' asset quality and higher asset risk.

Costs increased but only by a small percentage. Top banks reported slightly higher liquidity levels in 2020. We conclude that on the whole, trends in key ratios indicate that top banks did severely on almost all performance parameters in the year 2020, and the apparent reason cutting across the region (and the world) is the advent of the COVID-19 pandemic, resultant lockdowns, and lower oil demand.

While the decline in average ROE from 13.9% to 11% indicates a decrease in profitability of the top GCC banks, we are not sure if the change is statistically significant. Similarly, in ROA and NIM, we have to examine if the reduction in these ratios is statistically significant. In LLP, CostInc, and LCST, we have to statistically determine if the increase is substantial. In this paper, we use the Paired-Samples t-test to check if the two means are statistically different from each other. If the t-value of the paired samples test is significant at a 5% level (that is, if two-

tailed p < .05), we conclude the decline (or increase) is noteworthy.

Tables 3 and *4* report the results of the t-test for return on equity and return on assets. In both cases, the t-values are statistically significant at the 5% level. The results imply that top banks in the Gulf region suffered in 2020 in terms of profitability and efficiency. This result has to be contrasted with the trend from 2018 to 2019. While banks improved their profit performance from 2018 to 2019, the exact opposite happened from 2019 to 2020. However, it is noteworthy that none of the top GCC banks reported losses despite the COVID-19 and low oil prices.

T-test results for net interest margins (NIM) are reported in *Table 5*. The average net interest margin of banks declined from 2.53% in 2019 to 2.27% in 2020. The t-value at 2.67 is statistically significant at the five percent level, which concludes that the decline in net interest margins is noteworthy (significant). Although a drop from 2.53% to 2.27% appears small, it is imperative and has a compelling impact on the performance and profitability. It is a known fact that due to the extreme competitive pressures in the banking market, banks generally operate on fragile margins of around 2% in most banking needs across the world. At the best of times, generating a net interest margin of even 3% is very difficult for a bank. A typical GCC bank pays 2% on deposits on an average and lends at 4.5%, resulting in a standard 2.5% interest margin. Any decline in this margin can push the bank into a severe financial crisis because it has to take care of the administrative and staff costs and losses due to non-performing loans with the wafer-thin interest margin. The biggest bank in each country manages to defend its margins because of its competitive strength

t-Test: Paired Two Sample for Means Return on Equity

	ROE 2020	ROE 2019
Mean	0.110029806	0.139125785
Variance	0.001651484	0.001555874
t Stat	-4.245707488	
P(T < = t) one-tail	0.004062548	
t Critical one-tail	2.015048373	
P(T < = t) two-tail	0.008125096	
t Critical two-tail	2.570581836	

Source: compiled by the author.

Table 4

t-Test: Paired Two Sample for Means Return on Assets

	ROA2020	ROA2019
Mean	0.013305223	0.017718321
Variance	2.29177E-05	2.16298E-05
t Stat	-5.602181893	
P(T < = t) one-tail	0.001251952	
t Critical one-tail	2.015048373	
P(T < = t) two-tail	0.002503905	
t Critical two-tail	2.570581836	

Source: compiled by the author.

and market share. The results in *Table 5* indicate that even top banks suffered due to COVID 19 despite their muscle power.

T-test results for the liquidity ratio (LCST) are reported in *Table 6*. LCST is the ratio of liquid assets to customer deposits and short-term funds. Cash and cash equivalents, including short-term money market funds from banks, are added to arrive at liquid assets. Liquidity is a key performance indicator and has acquired added significance due to BASEL III recommendations. A bank may be able to survive continuous losses over several years because of its capital strength but can become bankrupt very quickly due to a lack of liquidity. This is probably one reason why the BASEL committee is emphasizing liquidity coverage. Liquidity is significant, especially during periods of economic slowdown or a financial crisis. The average liquidity of top Gulf banks increased from 11.3% to 11.8% from 2019 to 2020. Still, the change is not statistically significant as the t-value at 0.368 is lower than the critical value, and the associated two-tail p is more than 0.05. We conclude that the liquidity levels of top banks remained steady during the COVID-19 pandemic. From a managerial perspective, one may say that these banks did an excellent job in managing liquidity in a crisis period, which of course, would not have been possible without the support of the respective central banks.

Table 7 reported below shows the paired sample means t-test for the cost to income ratio. T-value at 0.11 is not statistically significant, indicating no noteworthy change in the cost to income ratios of the top GCC banks during the period 2019 to 2020. The average cost to income ratios remained more or less the same at 34%. One has to view this result in light of the decline

t-Test: Paired Two Sample for Means Net Interest Margin

	NIM2020	NIM2019
Mean	0.022791777	0.025392081
Variance	5.78594E-05	8.43417E-05
t Stat	-2.67225209	
P(T < = t) one-tail	0.022114452	
t Critical one-tail	2.015048373	
P(T < = t) two-tail	0.044228904	
t Critical two-tail	2.570581836	

Source: compiled by the author.

Table 6

t-Test: Paired Two Sample for Means Liquid Assets to Deposits and Short Term Funds

	LCST 2020	LCST2019
Mean	0.118116013	0.113660448
Variance	0.011529106	0.009575299
t Stat	0.368317199	
P(T < = t) one-tail	0.3638581	
t Critical one-tail	2.015048373	
P(T < = t) two-tail	0.727716199	
t Critical two-tail	2.570581836	

Source: compiled by the author.

in banks' net interest income during this challenging period. When net interest income declines, the cost to income ratio will increase if the operating expenses remain unchanged. The fact that the ratio remained at 34% implies that banks reduced costs to offset the decline in net interest income during this period. Top GCC banks managed cost ratios quite well despite the economic slowdown due to the COVID-19 pandemic.

T-test results for loan loss provisions to net loans ratio are reported in *Table 8* given above. The t-stat for the two-tailed test for paired means at 3.02 is statistically significant at the 5% level, implying that the change in loss provisions ratio for 2019 to 2020 is noteworthy.

There is a considerable jump in the average loan loss provisions of the top GCC banks from 2019 to 2020. The mean value of the loss provision ratio almost doubled from 0.5% to 0.9%. In a typical year, a bank may offset the higher loan provision expenses by increasing interest margins to minimize impact profitability. In any given year, top banks improve margins by changing their portfolio mix or using innovative marketing strategies such as zero-interest lottery deposits, etc.

Lower net interest margins combined with higher loan loss provisions are a potent combination that can be debilitating for a bank. Lower interest margins indicate that the bank cannot convert its inputs that are deposited into output that is lending at profitable levels. When a country's economy is suffering due to a slowdown in business activity due to COVID-19, it is difficult for a bank to find core borrowers willing to pay a reasonable rate on loans. Naturally, banks try to continue lending by lowering loan rates or lending to marginal customers whom a top bank would generally avoid. In the process, a bank will experience lower interest

t-Test: Paired Two Sample for Means Cost to Income Ratio

	CostInc2020	CostInc2019
Mean	-0.3462623	-0.345284976
Variance	0.002167449	0.002139527
t Stat	-0.114646241	
P(T < = t) one-tail	0.456593565	
t Critical one-tail	2.015048373	
P(T < = t) two-tail	0.913187129	
t Critical two-tail	2.570581836	

Source: compiled by the author.

Table 8

Table 9

t-Test: Paired Two Sample for Means Loan Loss Provisions to Net Loans

	LLP 2020	LLP 2019
Mean	0.009289594	0.005359497
Variance	8.75791E-06	3.91181E-06
t Stat	3.020292794	
P(T<=t) one-tail	0.014703245	
t Critical one-tail	2.015048373	
P(T<=t) two-tail	0.029406489	
t Critical two-tail	2.570581836	

Source: compiled by the author.

margins and higher asset risk both simultaneously. A decline in asset quality has a multi-year impact, and it would not be surprising if these banks report more and more loan losses in the coming years as well.

Table 9 shows the GDP annual growth rate in the six GCC countries in the years 2019 and 2020. The data clearly shows that there has been a sharp drop in economic activity during the year 2020 due to COVID-19 combined with low oil prices. Unemployment data in the six GCC countries also indicates that GCC economies suffered a lot due to the COVID 19 pandemic. We conclude that the slowdown in economic activity has led to a decline in the performance of big GCC banks during the COVID-19 pandemic.

CONCLUSION

This paper investigates the impact of COVID-19 on the performance of top Gulf Cooperation Council banks. The

GDP Annual Growth Rate

	2019	2020
Bahrain	-1.14	-4.09
UAE	3.4	-6.1
Oman	-0.8	-6.3
Kuwait	-1.1	-11.2
Qatar	-0.6	-3.9
Saudi Arabia	-0.3	-3.9

Source: URL: https://tradingeconomics.com/country-list/gdp-annual-growth-rate?continent=asia (accessed on 21.10.2021).

effects of COVID-19 on the economies in the Gulf region can be termed a double whammy because it resulted in a slowdown in business activity and a decline in oil prices. Oil price is a critical factor in the well-being of the GCC economies because a significant part of the gross domestic product of these countries can be attributed to the oil and gas sector. The biggest bank in each of the six GCC countries was picked up for analysis. Balance sheet and income statement data for 2017 to 2020 were used to analyze trends in key performance ratios. The ratios selected are returned on equity, return on assets, net interest margin, liquid assets to customer deposits and short-term funds, loan loss provisions to net loans, and cost to income ratio. The ratios cover key performance areas such as profitability, efficiency, liquidity, asset quality, asset risk, and expense management.

Trends in the key ratios over the period 2017 to 2020 indicate that the performance of banks suffered on almost all the key parameters in 2020 compared to the earlier period. Results of dependent t-test for paired sample means revealed that compared to 2019 in 2020, there was a statistically significant decline in return on equity, return on asset, and net interest margins. The profitability and efficiency of big GCC banks suffered due to COVID-19 and low oil prices. Cost to income ratios and liquidity ratios did not change significantly during this period indicating that banks could control costs and maintain a steady level of liquidity despite the economic crisis resulting from the COVID-19 pandemic. The ratio of loan

loss provisions to net loans increased sharply and is statistically significant, indicating a decline in asset quality and an increase in asset risk during 2020. The decline in interest margins combined with declining asset quality is a dangerous and potent combination that may unfavorably impact the solvency of the big banks in the coming years.

The focus of this study and its conclusions are novel to the extent that there are no country specific studies related to impact of COVID-19 on the biggest banks in a country. Further as far as the authors are knowing there are no studies on the topic of impact of COVID-19 on big banks operating in the Gulf cooperation council countries. Another important contribution of this study is that COVID-19 has negatively impacted the top banks in each of the Gulf Cooperation Council countries. From the central bank and monetary regulators point of view this is a very important finding. Big banks in any country are too important to be allowed to fail. Failure of big banks can have a domino effect and can bring down not only the whole banking and financial system, but also the economy itself, as has been seen during previous financial crises such as the global financial crisis of 2008. There is need for further research on the impact of COVID-19 on the banking system in the GCC, as the financial performance of the countries' largest bank does not characterize the general condition of the banking system, given the "too big to fail" hypothesis.

REFERENCES

- 1. Al Kharusi S., Weagley R.O. Weak form market efficiency during the 2008 financial crisis: Evidence from the Muscat Securities Market. *The International Journal of Business and Finance Research*. 2014;8(4):27–42.
- Desai R. Impact of priority sector lending on financial profitability: Segment wise panel data analysis of Indian banks. *Management & Accounting Review*. 2021;20(1):19–38. URL: https://ir.uitm.edu.my/id/ eprint/47752/1/47752.pdf
- 3. Aldasoro I., Fender I., Hardy B., Tarashev N. Effects of COVID-19 on the banking sector: The market's assessment. BIS Bulletin. 2020;(12). URL: https://www.bis.org/publ/bisbull12.pdf
- 4. Wójcik D., Ioannou S. COVID-19 and finance: Market developments so far and potential impacts on the financial sector and centres. *Tijdschrift voor economische en sociale geografie*. 2020;111(3):387–400. DOI: 10.1111/ tesg.12434
- Al-Askari A., Alhamdan S., Jweied S. GCC countries back on path to economic growth after contraction due to the pandemic. The World Bank. Aug. 04, 2021. URL: https://www.worldbank.org/en/news/press-release/2021/08/03/ gcc-countries-back-on-path-to-economic-growth-after-contraction-due-to-the-pandemic
- 6. Al-Kharusi S., Murthy S.R. Financial stability of GCC banks in the COVID-19 crisis: A simulation approach. *The Journal of Asian Finance, Economics, and Business*. 2020;7(12):337–344. DOI: 10.13106/jafeb.2020.vol.7.no12.337
- 7. Çolak G, Öztekin Ö. The impact of COVID-19 pandemic on bank lending around the world. *Journal of Banking & Finance*. 2021;133:106207. DOI: 10.1016/j.jbankfin.2021.106207

- Rababah A., Al-Haddad L., Sial M.S., Chunmei Z., Cherian J. Analyzing the effects of COVID-19 pandemic on the financial performance of Chinese listed companies. *Journal of Public Affairs*. 2020;20(4): e2440. DOI: 10.1002/ pa.2440
- Flögel F., Gärtner S. The COVID-19 pandemic and relationship banking in Germany: Will regional banks cushion an economic decline or is a banking crisis looming? *Tijdschrift voor economische en sociale geografie*. 2020;111(3):416–433. DOI: 10.1111/tesg.12440
- 10. Elnahass M., Trinh V.Q., Li T. Global banking stability in the shadow of COVID-19 outbreak. *Journal of International Financial Markets, Institutions and Money.* 2021;72:101322. DOI: 10.1016/j.intfin.2021.101322
- 11. Devi S., Warasniasih N.M., Masdiantini P.R., Musmini L.S. The impact of COVID-19 pandemic on the financial performance of firms on the Indonesia Stock Exchange. *Journal of Economics, Business, & Accountancy Ventura*. 2020;23(2):226–242. DOI: 10.14414/jebav.v23i2.2313
- 12. Demirgüç-Kunt A., Pedraza A., Ruiz-Ortega C. Banking sector performance during the COVID-19 crisis. *Journal of Banking & Finance*. 2021;133:106305. DOI: 10.1016/j.jbankfin.2021.106305
- 13. Fakhri U.N., Darmawan A. Comparison of Islamic and conventional banking financial performance during the COVID-19 period. *International Journal of Islamic Economics and Finance*. 2021;4(SI):19–40. DOI: 10.18196/ijief. v4i0.10080
- 14. Akkas E., Al Samman H. Are Islamic financial institutions more resilient against the COVID-19 pandemic in the GCC countries? *International Journal of Islamic and Middle Eastern Finance and Management*. 2022;15(2):331–358. DOI: 10.1108/IMEFM-07–2020–0378
- 15. Barua B., Barua S. COVID-19 implications for banks: Evidence from an emerging economy. *SN Business & Economics*. 2021;1(1):19. DOI: 10.1007/s43546-020-00013-w
- Mirzaei A., Saad M., Emrouznejad A. Bank stock performance during the COVID-19 crisis: Does efficiency explain why Islamic banks fared relatively better? *Annals of Operations Research*. 2022. DOI: 10.1007/s10479– 022–04600-y
- 17. Talbot D., Ordonez-Ponce E. Canadian banks' responses to COVID-19: A strategic positioning analysis. *Journal of Sustainable Finance & Investment*. 2022;12(2):423–430. DOI: 10.1080/20430795.2020.1771982
- 18. Kharusi S.A., Weagley R.O. Return predictability in emerging markets during a unique market condition. *Afro-Asian Journal of Finance and Accounting*. 2016;6(4):339–350. DOI: 10.1504/AAJFA.2016.080519
- 19. Field A. Discovering statistics using SPSS. 3rd ed. London, Thousand Oaks, CA: SAGE Publications; 2009. 856 p.

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