



Evaluating the impact of financial technology in improving the profitability levels of Islamic banks in the Gulf Cooperation Council countries.

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Abstract

This study aims to measure the extent of the impact of financial technology through its technologies on improving profitability indicators in Islamic banks in the Gulf Cooperation Council countries, by analyzing the profitability indicators after the latter's adoption of financial technology in the period between 2017-2021 and comparing them to the period before the adoption of financial technology, which represents The period extending from 2012-2016

It was found that financial technology increased the profitability of Islamic banks in the Gulf Cooperation Council countries, given that it contributed to improving the quality of services provided and improving their investment efficiency .

- ✓ financial technology. Islamic banks. the profitability. the Gulf Cooperation Council countries.

1. INTRODUCTION

The financial technology sector, which is abbreviated to the term Fintech today, has constituted a technological revolution that has affected all sectors, especially the banking sector, which in recent years has become a revolution in the field of financial services in which technological innovations and financial services have combined to form a new field full of opportunities and challenges.

Profitability indicators is considered fundamental metrics for studying and evaluating the performance of banks. Profitability indicators aim to measure a bank's ability to generate profits and deliver returns to shareholders, reflecting the efficiency of banks in optimizing their resources. On the other hand, risk indicators contribute to assessing the extent to which banks are exposed to risks, thereby assisting in the evaluation of the banks' long-term strategies.

The importance of analyzing and evaluating the performance of Islamic banks based on profitability indicators is increasing. Achieving a balance between profitability and risk management enhances the operations of these banks and contributes to building customer confidence in them. Therefore, studying profitability indicators provides a comprehensive and balanced insight into the performance of Islamic banks, thereby contributing to the achievement of their financial objectives.

So Did the adoption of financial technology have a positive impact on its profitability ?

To address these questions, this study will analyze the profitability indicators of Islamic banks in the Gulf Cooperation Council (GCC) countries. In other words, financial ratios for profitability indicators will be calculated for the Islamic banks in the study's countries before adopting financial technology, covering the period between 2012-2015. These ratios will be analyzed. Subsequently, the same indicators will be calculated for the period after the adoption of financial technology, spanning from

2017-2021, with the analysis of the results as well. A comparison of the findings between the two periods will be conducted for each indicator. The conclusion of this chapter will involve an assessment of the impact of financial technology on improving the performance of Islamic banks based on the adopted performance indicators related to profitability.

2. Analysis of the Impact of Financial Technology on Improving the Profitability Levels of Islamic Banks in the Gulf Cooperation Council (GCC) Countries.

In this component, we will rely on profitability indicators to measure their levels in Islamic banks in the study area before adopting financial technology, comparing them with the profitability ratios achieved after the adoption of financial technology. Subsequently, we will calculate annual average ratios and analyze the results.

There are numerous financial ratios used to measure bank profitability, but we will focus on three commonly used ratios: Net Profit Margin, Return on Total Assets, and Return on Equity. These ratios will provide a comprehensive overview of the impact of financial technology on the profitability levels of Islamic banks in the Gulf Cooperation Council (GCC) countries.

2-1 Analysis of the Impact of Financial Technology on Improving Profitability Levels of Islamic Banks in the Gulf Cooperation Council (GCC) Countries Based on Net Profit Margin Ratio:

2-1-1 Introduction to the indicator and how to calculate it:

The net profit margin is one of the most important ratios that measure the profitability of banks. This is due to its ability to gauge the extent to which these institutions can leverage their resources in investments that yield profits. More importantly, it helps assess the overall success of institutions, particularly banks, and consequently determines their ability to sustain themselves. This ratio is calculated as

follows :

Profit margin ratio = net profit after tax / total income x 100. (عامر، 2019، صفحة 198)

Therefore, it can be said that the profit margin ratio in banks is considered an important indicator for measuring management's efficiency in achieving profits from its operational work. Achieving high profit margin ratios indicates that banks are achieving good profits from their banking activities, while low values indicate achieving limited profits, and in this case Banks must review and improve their financial and operational strategies.

2-1-2 Calculating the profit margin ratio of Islamic banks in the Gulf Cooperation Council countries before adopting financial technology :

Table 1. Profit margin ratios of Islamic banks in the Gulf Cooperation Council countries before adopting financial technology.

	2012	2013	2014	2015	2016	Individual Rate
Emirates Islamic	6.03	7.32	16.13	23.29	3.15	11.18
Al bilad Bank	54.20	38.03	41.20	34.35	31.19	39.79
Al Jazeera	31.27	35.37	25.71	44.05	34.61	34.20
Al Rajhi	56.38	53.72	50.01	51.87	53.16	53.02
Sharjah Islamic	33.49	33.33	32.59	30.69	33.67	32.75
Alizz Islamic Bank	0	-455.97	-284.16	-75.45	-34.89	-170.09
Inma Bank	54.20	44.08	48.26	47.99	45.14	47.93
Dukhan Bank	29.40	35.45	43.78	42.33	36.90	37.57
Dhofar Bank	44.88	65.21	40.92	40.58	37.39	45.79
Qatar Islamic Bank	36.25	42.15	45.92	45.03	38.45	41.56
Nizwa Bank	-177.72	-430.47	-102.54	-44.15	0.63	-150.85
Kuwait Finance House	13.22	19.62	21.27	26.99	24.54	21.12
Al-Ahly United	42.30	65.13	51.01	51.88	54.33	52.93
Bahrain Islamic	-147.88	16.53	21.69	26.85	20.20	-12.52
Kuwait International	29.31	23.21	23.57	19.91	28.86	24.97
Al Hilal Bank	14.44	22.79	4.35	5.77	7.12	10.89
Boubyan Bank	16.19	18.96	36.35	38.51	39.98	29.99
Dubai Islamic	23.71	32.97	44.02	50.87	46.89	39.69
Ajman Bank	11.51	3.18	15.30	20.38	16.15	13.30

Qatar Islamic International	57.38	51.49	54.31	49.31	45.74	51.64
Warba Bank	-22.95	-35.84	0.62	5.53	11.30	-8.26
Masraf Al Rayan	60.24	64.55	67.61	62.43	56.39	62.24
Abu Dhabi Bank	30.45	31.77	33.59	37.66	36.27	33.94
ABC BANK	32.23	34.65	35.81	32.51	27.05	32.45

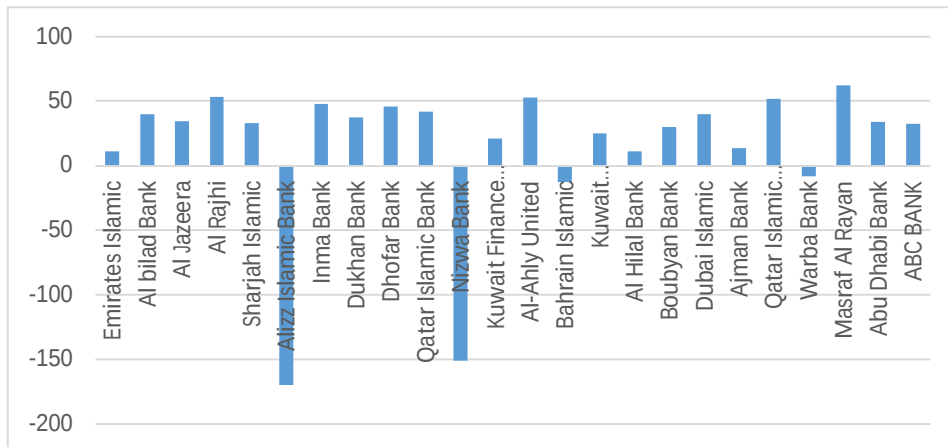
Source : Prepared by researchers based on the annual reports of Islamic banks in the Gulf Cooperation Council countries.

Analysis of the data contained in the previous table :

- ✓ The highest annual percentage recorded according to this indicator was estimated at 67.61 percent and recorded by Masraf Al Rayan in 2014 AD, while the lowest percentage was estimated at -455.97 percent and recorded by Alizz Islamic Bank in 2013 AD ;
- ✓ We also noticed that there were four banks that recorded negative annual percentages according to the profit margin index, and they are in addition to Alizz Islamic Bank, Nizwa Bank, Warba Bank and Bahrain Islamic Bank ;
- ✓ If we exclude the four aforementioned banks, all Islamic banks in the Gulf Cooperation Council countries recorded percentages ranging between 10 and 60 percent, according to the profit margin index, throughout the years of the first period ;
- ✓ Regarding the general trend of the values of these ratios according to the profit margin index of the banks under study before the adoption of technology, we say that this ratio was fluctuating from year to year in almost all banks, so it rose in a year or two and then returned to decline, or it decreased slightly and then rose, but the trend The general trend for these ratios in all banks is a very slight increase, and this is clearly evident in the banks that recorded negative ratios, as their recorded ratios have improved in recent years compared to what they were

at the beginning of this period.

Fig.1. Individual profit margin ratios of Islamic banks in the Gulf Cooperation Council countries before the adoption of financial technology.



Source : Prepared by researchers based on data presented in the previous table.

Notes about the previous figure :

- ✓ It is initially noted that there is a difference between the individual profit margin ratios of Islamic banks in the Gulf Cooperation Council countries before the adoption of financial technology, and this difference or discrepancy is due to the difference in the annual values recorded by each bank and shown in the previous table.
- ✓ The highest individual rate value was estimated at 62.24 percent and was recorded by Masraf Al Rayan, which is the bank that recorded the highest annual rate among all banks in the first period, and the lowest individual rate was estimated at 170.09 percent and recorded by Alizz Islamic Bank, which is the same bank that recorded the lowest annual rate. Among all the ratios of all banks in the first period according to the profit margin index ;
- ✓ Four banks recorded negative individual rates according to the profit margin index, and they are the same four banks that recorded negative annual rates,

which we mentioned in the previous item. The remaining 20 banks recorded positive rates that ranged between approximately 10 and 60 percent.

- ✓ Based on the previous observation, we say that most of the Islamic banks under study have the ability to employ their resources in investments that generate profits, or that they have administrative efficiency in achieving profits from operational businesses, and this is according to the profit margin index.

2.1.3 Calculating the profit margin ratios of Islamic banks in the Gulf Cooperation Council countries after adopting financial technology :

The following table represents the profit margin rates of Islamic banks in the Gulf Cooperation Council countries after adopting financial technology, as well as the individual rates for each bank separately. We will analyze the data contained in this table according to the following detail :

Table (2) : Profit margin ratios of Islamic banks in the Gulf Cooperation Council countries after adopting financial technology.

	2017	2018	2019	2020	2021	Individual Rate
Emirates Islamic	29.34	37.51	39.73	-23.09	34.32	22.36
Al bilad Bank	31.36	32.50	31.52	31.64	36.79	32.76
Al Jazeera	33.24	36.80	33.28	1.02	28.36	26.54
Al Rajhi	57.34	59.45	52.13	51.13	57.34	55.47
Sharjah Islamic	32.05	29.98	28.87	32.23	36.01	31.82
Alizz Islamic Bank	-12.68	5.97	-26.85	5.97	27.73	0.02
Inma Bank	45.99	58.96	45.18	34.60	40.68	45.08
Dukhan Bank	33.54	33.34	23.35	14.95	29.46	26.92
Dhofar Bank	37.52	38.13	23.27	23.52	19.86	28.46
Qatar Islamic Bank	36.30	38.36	38.56	38.51	43.53	39.05
Nizwa Bank	16.91	27.72	30.82	28.19	28.24	26.37
Kuwait Finance House	30.54	35.32	32.14	23.73	36.78	31.70
Al-Ahly United	59.54	62.15	63.84	43.75	57.52	57.36

Bahrain Islamic	23.63	24.99	14.68	-32.21	12.79	8.77
Kuwait International	27.69	31.56	25.28	0.19	16.58	20.26
Al Hilal Bank	7.65	8.20	-445.03	2.80	10.03	-83.27
Boubyan Bank	37.96	40.23	42.99	20.03	25.53	33.34
Dubai Islamic	44.15	54.37	37.28	24.04	37.35	39.43
Ajman Bank	14.45	16.31	6.92	5.08	12.90	11.13
Qatar Islamic International	44.58	42.46	38.94	38.27	40.48	40.94
Warba Bank	17.81	25.70	27.70	7.15	14.87	18.64
Masraf Al Rayan	46.95	43.48	41.90	43.21	33.82	41.87
Abu Dhabi Bank	37.01	38.57	38.65	27.36	39.56	36.23
ABC BANK	29.11	30.35	27.28	-11.60	14.98	18.02

Source : Prepared by researchers based on the annual reports of Islamic banks in the Gulf Cooperation Council countries, for the period extending between 2017-2021.

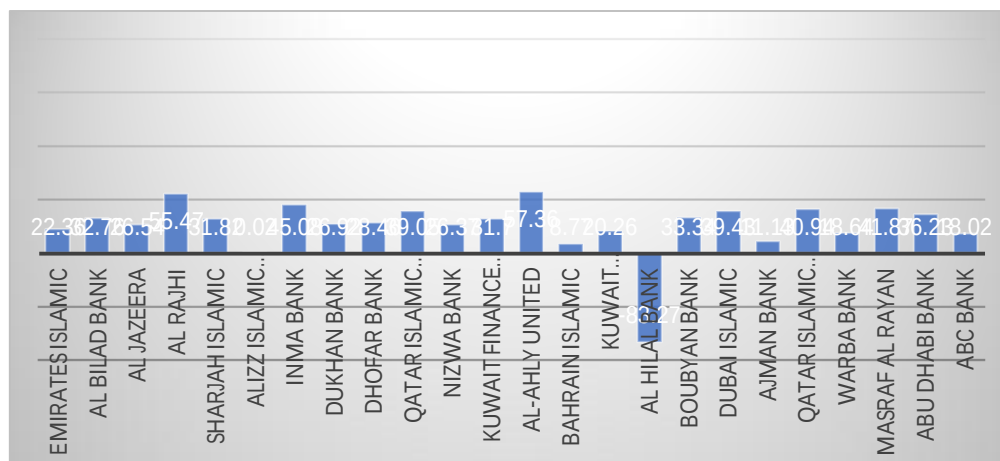
Analysis of the data contained in the previous table :

- ✓ The highest annual percentage recorded according to this indicator was estimated at 63.84 percent and recorded by Ahli United Bank in 2019 AD, while the lowest percentage was estimated at -445.03 percent and recorded by Al Hilal Bank in 2019 AD ;
- ✓ We also noticed that there were five banks that recorded negative annual percentages according to the profit margin index, and this was in one year for the following banks ABC BANK, Al Hilal, Emirates Islamic Bank, and Bahrain Islamic, while Alizz Islamic Bank recorded two negative percentages in two different years;
- ✓ Although the number of banks that recorded negative ratios in this period according to the profit margin index was five, and their number in the first period was only four, it is noted that there is a decline in the number of negative ratios recorded in the period of adoption of financial technology, Because the five banks mostly recorded one negative percentage for each bank. As for the four

banks, each of them recorded a number of negative ratios.

- ✓ If we exclude the five aforementioned banks, all Islamic banks in the Gulf Cooperation Council countries recorded positive percentages according to the profit margin index throughout the years of the second period, and these percentages range in their entirety between 10 and 40 percent.
- ✓ Regarding the general trend of the values of these ratios according to the profit margin index of the banks under study after the adoption of financial technology, we say that this ratio was fluctuating from year to year in almost all banks, and if these ratios recorded in the period of adoption of financial technology are compared to the ratios recorded in the period First, we say that there is a slight improvement in the profit margin index ratios of the banks under study.

Figure (2): Values of individual profit margin rates for Islamic banks in the Gulf Cooperation Council countries after adopting financial technology.



Source : Prepared by researchers based on data presented in the previous table.

Notes about the figure above :

- ✓ Although there is a difference between the individual rates of profit margin of Islamic banks in the Gulf Cooperation Council countries after the adoption of

financial technology, and this difference or discrepancy is due to the difference in the recorded annual values, this variation in the individual rates is less severe than it was in the first period. In other words, most individual rates are relatively close and range between 10 and 40 percent.

- ✓ We note that the highest individual rate was recorded by Ahli United Bank and was estimated at 57.36 percent, which is the same bank that recorded the highest annual rate. As for the lowest individual rate, it was recorded by Al Hilal Bank and was estimated at -83.27 percent, and Al Hilal Bank is the bank that recorded the lowest annual percentage in the second period among all banks;
- ✓ During the period of adopting financial technology, we recorded the presence of only one bank, which was Al Hilal Bank, which recorded a negative individual rate and was estimated, as we said, at -83.27 percent, according to the profit margin index of course. The number of banks that recorded negative individual rates in the first period was four banks, and the number of banks that recorded negative individual rates Positive in the second period 23 and in the first period 20, and this is a positive indicator of the improvement in banks' profitability in the second period, that is, after adopting financial technology, even if in a relative manner.
- ✓ Based on the previous observation, we say that all Islamic banks under study have the ability to employ their resources in investments that generate profits, or that they have administrative efficiency in achieving profits from operational businesses, and this is according to the profit margin index, with the exception of Al Hilal Bank only.

2.1.4 Calculating the annual average percentages of profit margin for Islamic banks in the Gulf Cooperation Council countries before and after adopting financial technology techniques :

After we have analyzed the profit margin ratios of the banks under study before and after adopting financial technology, we will now analyze the annual averages of the profit margin ratios of the banks under study during the two periods and compare them with the standard ratio, the latter of which was calculated through the sum of the individual ratios for all banks before and after adoption. Financial technology and its division by the number of banks.

Table (3) : Annual average percentages of profit margin for Islamic banks in the Gulf Cooperation Council countries before and after adopting financial technology techniques.

Year	Before adopting financial technology	Year	After adopting financial technology
2012	13.68	2017	31.74
2013	-7.61	2018	33.92
2014	15.30	2019	10.22
2015	27.88	2020	17.93
2016	28.92	2021	29.13
General Average	15.63	General Average	24.52

Source : Prepared by researchers based on data contained in the previous two tables.

Notes about the table above :

- ✓ Through the values of the annual averages of the profit margin ratio of Islamic banks in the Gulf Cooperation Council countries before and after the adoption of financial technology technologies, it becomes clear to us that the profit margin ratios improved during the period of technology adoption despite the fluctuation

in the values of these ratios between high and low, as the highest annual average The profit margin over 10 years, that is, before and after the adoption of financial technology, was recorded in 2018 AD, that is, during the period of adoption of financial technology, and was estimated at 33.92 percent, while the lowest annual average was estimated at -7.61 percent and was recorded in the year 2013 AD, that is, before the adoption of financial technology.

- ✓ Although the annual averages recorded in the second period, i.e. the period of financial technology adoption, were greater, this period witnessed a significant decline in profit margin rates, starting from the annual average recorded in 2019, estimated at 10.22 percent, and the reason for this decline can be attributed to the repercussions of the Corona virus on economic activities. As a whole, although this epidemic did not have a direct impact on the work of banks, given that they deal with financial technology techniques that are not hindered by quarantine restrictions, rather the epidemic was a good opportunity for the spread of these technologies, because they facilitate financial transactions without contact and without the need to go to banks. Rather, the impact was the result of the impact of the epidemic on economic and commercial activities, which affected banking business.
- ✓ We note that the general rate of average profit margin ratios in the Islamic banks under study after adopting financial technology, which was estimated at 24.52 percent, was greater than the general rate of the Islamic banks under study before adopting financial technology, which was estimated at 15.63 percent, and also greater than the standard ratio, which was estimated at 20.51 percent, which is of course positive ;
- ✓ It is clear from analyzing the results of the profit margin ratios of banks before and after adopting financial technology techniques that financial technology had an effect in maximizing the profit margin ratio of the banks under study, or that

it had a positive effect in increasing the profitability of the banks, but in a limited way.

3. Analysis of the impact of financial technology on improving the profitability levels of Islamic banks in the Gulf Cooperation Council countries according to the rate of return on total assets index :

3.1 Introduction to the indicator and how to calculate it : (زملط، 2019، صفحة 119)

This indicator represents the volume or percentage of profits and returns generated from funds invested in assets, as it measures the efficiency of banks' investment management in generating profits through their assets. That is, the higher the percentages of this indicator, the more efficient the banks are in exploiting their assets

This indicator is calculated according to the following equation :

$$\text{Return on Total Assets} = \text{Net Profit after Tax} / \text{Total Assets} \times 100$$

Note : The calculated standard rate of return on total assets of the banks under study was estimated at 1.30 percent.

3.2 Calculating the rate of return on total assets of Islamic banks in the Gulf Cooperation Council countries before adopting financial technology :

Initially, the rate of return on total assets of Islamic banks in the Gulf Cooperation Council countries will be calculated before the adoption of financial technology, then the individual rate for each bank during the same period will be calculated, and the results reached that we will analyze are shown in the following table :

Table (4) : Rate of return on total assets of Islamic banks in the Gulf Cooperation Council countries before adopting financial technology

	2012	2013	2014	2015	2016	Individual Rate
Emirates Islamic	0.21	0.35	0.77	1.20	0.17	0.54
Al bilad Bank	3.16	2.00	1.91	1.53	1.50	2.02
Al Jazeera	0.98	1.17	0.90	1.98	1.35	1.27
Al Rajhi	2.94	2.65	2.22	2.25	2.39	2.49
Sharjah Islamic	1.48	1.41	1.58	1.47	1.46	1.48
Alizz Islamic Bank	-0.16	-3.64	-4.59	-0.81	-1.24	-2.08
Inma Bank	3.16	2.00	1.56	1.65	1.43	1.96
Dukhan Bank	1.36	1.49	1.86	1.61	1.60	1.58
Dhofar Bank	1.76	2.24	1.26	1.30	1.20	1.55
Qatar Islamic Bank	1.53	1.71	1.73	1.59	1.50	1.61
Nizwa Bank	-3.24	-6.27	-3.04	-2.13	-0.02	-2.94
Kuwait Finance House	0.83	0.97	0.93	1.15	0.98	0.97
Al-Ahly United	1.26	1.91	1.58	1.66	1.99	1.68
Bahrain Islamic	-4.32	0.67	1.10	1.18	0.82	-0.11
Kuwait International	1.05	0.87	0.82	0.89	0.98	0.92
Al Hilal Bank	0.82	1.14	0.21	0.24	0.28	0.53
Boubyan Bank	0.50	0.58	1.07	1.12	1.18	0.89
Dubai Islamic	1.25	1.51	2.26	2.56	2.31	1.97
Ajman Bank	0.61	0.14	0.63	0.85	0.78	0.60
Qatar Islamic International	2.37	2.20	2.15	1.93	1.84	2.09
Warba Bank	-0.83	-0.19	0.01	0.12	0.22	-0.13
Masraf Al Rayan	2.70	2.61	2.51	2.44	2.26	2.50
Abu Dhabi Bank	1.35	1.40	1.56	1.63	1.59	1.50
ABC BANK	1.07	1.11	1.08	0.84	0.77	0.97

Source : Prepared by researchers based on the annual financial reports of Islamic banks operating in the Gulf Cooperation Council countries.

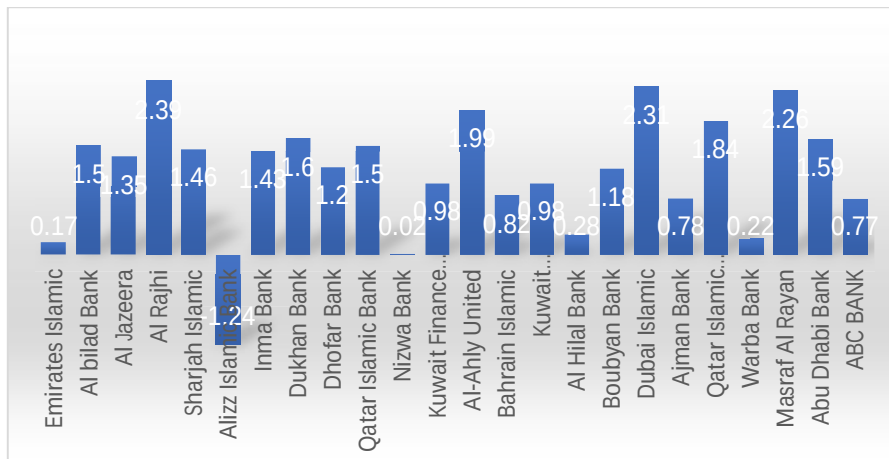
Analysis of the data contained in the previous table :

- ✓ Through a preliminary look at the data contained in the previous table, it becomes clear that the highest percentage of the rate of return on total assets of Islamic banks in the Gulf Cooperation Council countries before the adoption of financial technology is estimated at 3.16 percent, and was recorded by both Albilad and Enmaa Banks in 2012, while the lowest percentage It is estimated at -6.27 percent and was recorded by Nizwa Bank in 2013 AD.
- ✓ We note that there are four banks that recorded negative ratios according to the rate of return on total assets index, which are Alizz Islamic Bank and Nizwa

Bank, in addition to Warba Bank and Bahrain Islamic Bank. As for the rest of the banks, estimated at 20 banks, they recorded positive ratios ranging between 0.5 and 2.5. percent ;

- ✓ We said that twenty banks recorded positive ratios in the period that preceded the adoption of financial technology, but most of these banks witnessed fluctuation in the ratios of the rate of return on their total assets. These ratios decrease at times and rise at other times or vice versa, and an example of this is all of Sharjah Islamic Bank, Inma, Dukhan, Dhofar, Ajman, Al Hilal, Kuwait International, Ahli United, Kuwait Finance House;
- ✓ There are banks that witnessed an increase in the percentages of the rate of return on their total assets during the five years from 2012 to 2016 AD, and they are all of Emirates Islamic, Al Jazira Bank, Boubyan, Dubai Islamic and Abu Dhabi Bank. On the other hand, there are banks that witnessed a decline in the rate of return on their total assets from one year to another, such as Qatar Islamic Bank and Masraf Al Rayan ;
- ✓ When comparing the recorded ratios with the calculated standard ratio estimated at 1.30 percent, it becomes clear that about half of the banks under study recorded ratios equal to or better than the calculated standard ratio. On the other hand, there are also about half of the banks that recorded ratios less than the standard ratio ;
- ✓ Despite the differences and discrepancies in the ratios of this indicator among the banks under study, the general trend of these ratios is to increase, albeit slightly and relatively.

Figure (3) : Ratios of individual rates of the rate of return on total assets of Islamic banks in the Gulf Cooperation Council countries before the adoption of financial technology.



Source : Prepared by researchers based on data presented in the previous table.

Notes about the previous table :

- ✓ Through the above curve, we notice that the highest value of the individual rates for the rate of return on total assets of Islamic banks in the Gulf Cooperation Council countries before the adoption of financial technology was estimated at 2.50 percent, and was recorded by Masraf Al Rayan, which witnessed a continuous decline in annual rates, and the lowest rate was estimated At -2.94 percent, recorded by Nizwa Bank, which recorded the lowest annual rates compared to the rest of the banks ;
- ✓ We also note the presence of four negative individual rates, which are related to the four banks that recorded negative annual rates, and we referred to these banks in our analysis of the previous table;
- ✓ When comparing the values of the recorded individual rates with the calculated standard ratio estimated at 1.30 percent, we notice that 12 of the banks under study recorded individual rates better than the standard ratio, and

12 banks recorded individual rates lower than the standard ratio.

3.3 Calculating the rate of return on total assets of Islamic banks in the Gulf Cooperation Council countries after adopting financial technology :

Table (5): Rate of return on total assets of Islamic banks in the Gulf Cooperation Council countries after adopting financial technology.

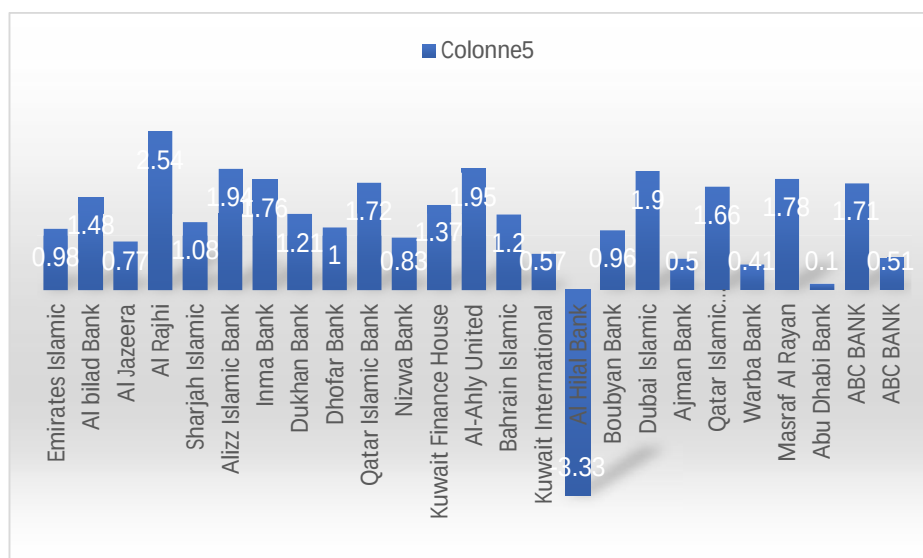
	2017	2018	2019	2020	2021	Individual Rate
Emirates Islamic	1.13	1.58	1.63	-0.68	1.26	0.98
Al bilad Bank	1.48	1.5	1.44	1.5	1.52	1.48
Al Jazeera	1.21	0.51	1.14	0.03	0.97	0.77
Al Rajhi	2.65	2.82	2.64	2.26	2.36	2.54
Sharjah Islamic	1.33	1.23	1.17	0.75	0.93	1.08
Alizz Islamic Bank	-1.22	0.86	-1.38	5.86	5.62	1.94
Inma Bank	1.74	2.35	1.92	1.25	1.56	1.76
Dukhan Bank	1.65	1.72	0.99	0.65	1.07	1.21
Dhofar Bank	1.12	1.09	1.19	1.05	0.56	1.00
Qatar Islamic Bank	1.49	1.72	1.82	1.75	1.83	1.72
Nizwa Bank	0.54	0.86	0.98	0.91	0.89	0.83
Kuwait Finance House	1.24	1.48	1.53	1.03	1.57	1.37
Al-Ahly United	2.00	2.11	1.95	1.21	1.52	1.95
Bahrain Islamic	0.6	0.88	5.07	-1.03	0.5	1.20
Kuwait International	0.92	0.96	0.64	0.004	0.35	0.57
Al Hilal Bank	0.31	0.24	-17.65	0.09	0.35	-3.33
Boubyan Bank	1.2	1.29	1.18	0.52	0.65	0.96
Dubai Islamic	2.34	2.34	2.17	1.09	1.57	1.90
Ajman Bank	0.66	0.75	0.35	0.24	0.51	0.50
Qatar Islamic International	1.78	1.75	1.63	1.52	1.62	1.66
Warba Bank	0.38	0.58	0.52	0.16	0.44	0.41
Masraf Al Rayan	1.90	2.19	2.05	1.80	0.99	1.78
Abu Dhabi Bank	1.86	1.99	2.06	0.95	1.70	1.71
ABC BANK	0.85	0.83	0.77	-0.24	0.36	0.51

Source : Prepared by researchers based on the financial reports of the Islamic banks under study.

Analysis of the data contained in the previous table :

- ✓ We note from the previous table that the highest percentage of the rate of return on total assets of Islamic banks in the Gulf Cooperation Council countries after adopting financial technology is estimated at 5.62 percent, and was recorded by Alizz Islamic Bank in 2021 AD, while the lowest percentage is estimated at - 17.65 percent, and was recorded by Al Hilal in 2019 AD ;
- ✓ We note that there are five banks that recorded negative ratios according to the rate of return on total assets index, which are Bahrain Islamic Bank, Emirates Islamic, Al Ezz Islamic and Al Hilal, in addition to ABC BANK, and as for the rest of the banks, which are estimated at 19 banks, they recorded positive ratios ranging between 0.5 2 percent ;
- ✓ The nineteen banks that recorded positive ratios according to this indicator in the second period can be divided into four groups, some of which recorded an increase in the ratios of this indicator and others a decrease, a third group that witnessed fluctuations between rise and fall, and a fourth group that witnessed stability in their ratios according to this indicator;
- ✓ When comparing the recorded ratios with the calculated standard ratio estimated at 1.30 percent, it becomes clear that about half of the banks under study recorded ratios equal to or better than the calculated standard ratio. On the other hand, there are also about half of the banks that recorded ratios less than the standard ratio, which is the same observation that we mentioned. In the period before the adoption of financial technology ;
- ✓ Due to the difference and variation in the ratios of this indicator among the banks under study in the second period, we say that there is no clear general trend for these ratios, with a slight tendency to rise.

Figure (4) : Ratios of individual rates of the rate of return on total assets of Islamic banks in the Gulf Cooperation Council countries after adopting financial technology.



Source : Prepared by researchers based on data contained in the previous table.

Notes about the previous figure :

- ✓ We note that the highest value of the individual rate ratios for the rate of return on total assets of Islamic banks in the Gulf Cooperation Council countries after the adoption of financial technology is estimated at 2.54 percent and was recorded by Al Rajhi Bank, while the lowest value was recorded by Al Hilal Islamic Bank and was estimated at -3.3 percent.
- ✓ Although there were five banks that recorded negative annual rates according to this indicator in this period, i.e. the second period, we noticed the presence of one bank that recorded a negative individual rate, which is Al Hilal Islamic Bank. This is a positive indicator if this is compared to the first period, in which we recorded the presence of four rates. Negative individuality of four banks ;
- ✓ When comparing the values of these individual rates to the standard ratio

estimated at 1.30, we notice the presence of ten banks that recorded rates better than the standard ratio, and in contrast, we note the presence of fourteen banks that recorded rates lower than the standard ratio.

- ✓ When comparing these individual rates recorded in the second period to what the individual rates were in the first period, we notice a slight and relative increase.

3.4 Calculating the annual averages of the rate of return on total assets of Islamic banks in the Gulf Cooperation Council countries, before and after adopting financial technology techniques :

The following table shows the percentages of the annual averages of the rate of return on total assets for all the banks under study during the two periods, where we will compare the annual averages depending on the period, and we will also compare the general rate of the annual averages before adopting financial technology with the general rate obtained after adopting financial technology, and then we compare The rates are combined with the calculated standard ratio.

Table (6): Annual averages of the rate of return on total assets of Islamic banks in the Gulf Cooperation Council countries, before and after adopting financial technology techniques.

Year	Before adopting financial technology	Year	After adopting financial technology
2012	0.91	2017	1.21
2013	0.83	2018	1.38
2014	0.88	2019	0.67
2015	1.17	2020	0.94
2016	1.14	2021	1.30
General Average	0.98	General Average	1.1

Source : Prepared by researchers using data provided in the previous two tables.

Notes about the previous table :

- ✓ First, we note that the annual averages of the rate of return on total assets of Islamic banks in the Gulf Cooperation Council countries, before the adoption of financial technology techniques, rose in most years, although this increase was not significant, and decreased clearly in 2013 AD and slightly in 2016 AD;
- ✓ As for the annual averages after the adoption of financial technology, they were constantly increasing, although this increase was slight, with one significant decrease recorded in 2019 AD;
- ✓ We note that the average ratios in the second period, i.e. the period of financial technology adoption, were greater than the average ratios in the first period, and the same is true when comparing the general rates for both periods, as we find that the general average in the second period is greater;
- ✓ When comparing the annual averages with the standard ratio, which is estimated at 1.3 percent, we find that all annual averages before adopting financial technology were less than the standard ratio, while we find two annual averages during the stage of adopting financial technology that are greater than or equal to the standard ratio.
- ✓ When comparing the two general rates with the standard ratio, we find that both are lower than the standard ratio, with an advantage being the rate recorded during the period of financial technology adoption, which was relatively close to the standard ratio.
- ✓ Based on our previous observations, we say that the reliance of Islamic banks in the Gulf Cooperation Council countries on financial technology has had a positive impact on the ratios of the rate of return on their total assets and in

a slight way, because the increase in the ratios of this indicator during the period of adoption of financial technology was also limited and fluctuating, and even the ratios that It was recorded in the first period, although it was relatively lower than the percentages recorded in the second period, but it was also rising in a fluctuating manner as well. Based on that, we say that financial technology has had a positive and slight impact on the efficiency of banks' investment management in generating profits through their assets, or has a positive impact on their efficiency. In exploiting its assets, also slightly.

4. Analysis of the impact of financial technology in improving the profitability levels of Islamic banks in the Gulf Cooperation Council countries according to the rate of return on equity :

4.1 Introduction to the indicator and how to calculate it :

The rate of return on equity measures the amount of return that shareholders will receive in return for investing their money in the bank's capital. A high rate of this indicator is evidence of the bank's good making of administrative and operational decisions (محمد نواف عابد وإياد زملط، مرجع سبق ذكره،، صفحة 119) and its efficiency in generating profits from shareholders' funds. A high rate of it may also indicate a high volume of risks associated with it. A high financial leverage ratio, and a decrease in this indicator indicates the bank's reservation in providing loans. (بن عامر زين الدين، مرجع سبق ذكره،، صفحة 223)

4.2 Alculating the rate of return on equity for Islamic banks in the Gulf Cooperation Council countries before adopting financial technology :

Table (7) : Ratios of return on equity among Islamic banks in the Gulf Cooperation Council countries before adopting financial technology

	2013	2012	2013	2014	2015	2016	Rate Individual
Emirates Islamic	3.35	3.09	3.35	8.08	12.57	1.57	5.73
Al bilad Bank	14.29	21.54	14.29	14.66	12.23	11.31	14.08
Al Jazeera	11.35	9.65	11.35	9.35	18.97	11.24	12.11
Al Rajhi	19.32	21.62	19.32	16.31	15.28	15.64	17.63
Sharjah Islamic	6.76	6.12	6.76	8.67	8.86	9.68	8.01
Alizz Islamic Bank	-3.75	-0.16	-3.75	-6.01	-6.23	-5.83	-4.39
Inma Bank	14.29	21.54	14.29	7.04	8.00	7.83	11.74
Dukhan Bank	8.78	6.61	8.78	11.09	10.66	10.17	9.46
Dhofar Bank	19.23	14.43	19.23	12.43	9.81	11.37	13.45
Qatar Islamic Bank	9.69	8.62	9.69	8.66	11.82	10.55	9.86
Nizwa Bank	-8.84	-3.26	-8.84	-5.83	-5.26	0.08	-2.64
Kuwait Finance House	7.63	7.52	7.63	7.63	9.23	7.94	7.99
Al-Ahly United	17.50	11.81	17.50	13.87	12.99	13.75	13.98
Bahrain Islamic	7.81	-51.81	7.81	12.25	10.59	7.26	-2.78
Kuwait International	5.81	6.07	5.81	5.70	6.48	7.15	6.24
Al Hilal Bank	11.30	7.60	11.30	1.57	1.93	2.26	4.93
Boubyan Bank	4.72	3.72	4.72	9.46	8.88	9.76	7.30
Dubai Islamic	10.51	11.28	10.51	15.83	16.84	14.85	13.86
Ajman Bank	1.02	3.17	1.02	6.47	9.91	6.24	5.36
Qatar Islamic International	14.11	13.48	14.11	15.38	14.18	11.75	13.78
Warba Bank	-4.09	-1.94	-4.09	0.12	1.05	2.71	-0.43
Masraf Al Rayan	16.24	15.80	16.24	17.21	16.39	16.12	16.35
Abu Dhabi Bank	11.09	10.75	11.09	12.79	12.82	12.63	12.01
ABC BANK	6.81	6.25	6.81	7.18	5.76	5.49	6.29

Source : Prepared by researchers based on the annual reports of the Islamic banks under study.

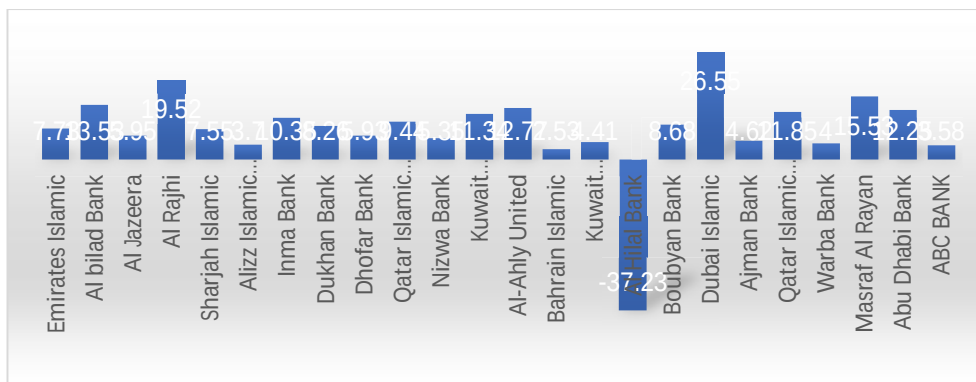
Analysis of the data contained in the previous table :

- ✓ We note from the previous table that the highest percentage of return on equity ratios for Islamic banks in the Gulf Cooperation Council countries before the adoption of financial technology is estimated at 21.62 percent, and was recorded by Al Rajhi Bank in 2012 AD, while the lowest percentage is estimated at 51.81 percent and recorded by the Islamic Bank of Bahrain in 2012 AD ;
- ✓ We note that there are four banks that recorded negative ratios according to the

rate of return on equity index, which are Alizz Islamic Bank and Nizwa Bank, in addition to Warba and Bahrain Islamic Banks. As for the rest of the banks, estimated at 20 banks, they recorded positive ratios ranging between 5 and 16 percent ;

- ✓ We said that twenty banks recorded positive ratios in the period that preceded the adoption of financial technology, but most of these banks witnessed fluctuation in the ratios of the rate of return on their total equity. These ratios sometimes decrease and sometimes rise, or vice versa ;
- ✓ When comparing the recorded percentages with the calculated standard percentage estimated at 7.85 percent, it becomes clear that more than half of the registered percentages according to this indicator are equal to or better than the calculated standard percentage, and less than half of the recorded percentages were less than the standard percentage;
- ✓ Despite the differences and discrepancies in the ratios of this indicator among the banks under study, the general trend of these ratios is to increase, even if slightly ;

Figure (5) : Individual rate ratios of the rate of return on equity of Islamic banks in the Gulf Cooperation Council countries before the adoption of financial technology



Source : Prepared by researchers based on the data contained in the previous table.

Notes about the previous figure :

- ✓ We note that the highest value of the individual rate ratios for the rate of return on equity of Islamic banks in the Gulf Cooperation Council countries before the adoption of financial technology is estimated at 17.63 percent and was recorded by Al Rajhi Bank, while the lowest value was recorded by Alizz Islamic Bank and was estimated at -4.39 percent ;
- ✓ We noticed that there were four banks that recorded negative individual rates, and they are the same banks that recorded negative annual rates ;
- ✓ When comparing the values of these individual rates to the standard ratio estimated at 7.85 percent, we notice the presence of fourteen banks that recorded individual rates better than the standard ratio, and in contrast, we note the presence of ten banks that recorded rates lower than the standard ratio.

4.3 Calculating the rate of return on equity for Islamic banks in the Gulf Cooperation Council countries after adopting financial technology :

Table (8) : Percentages of return on equity among Islamic banks in the Gulf Cooperation Council countries after adopting financial technology.

	2017	2018	2019	2020	2021	Individual Rate
Emirates Islamic	9.60	12.81	12.77	-6.14	9.62	7.73
Al bilad Bank	12.33	14.17	14.04	13.04	14.07	13.53
Al Jazeera	9.80	3.77	8.68	0.29	7.24	5.95
Al Rajhi	16.35	21.31	19.84	18.23	21.90	19.52
Sharjah Islamic	9.21	9.36	7.24	5.30	6.68	7.55
Alizz Islamic Bank	-8.89	7.70	-14.18	16.19	17.69	3.70
Inma Bank	9.76	13.41	11.70	8.07	8.82	10.35
Dukhan Bank	9.89	11.33	6.65	4.92	8.53	8.26
Dhofar Bank	10.10	7.20	4.4	4.39	3.59	5.93

Qatar Islamic Bank	10.77	12.73	13.46	4.84	5.43	9.44
Nizwa Bank	2.89	5.47	6.88	6.93	4.61	5.35
Kuwait Finance House	10.20	12.70	11.67	9.32	12.83	11.34
Al-Ahly United	13.63	15.13	14.71	9.65	10.77	12.77
Bahrain Islamic	6.08	9.66	5.13	-13.08	4.87	1.31
Kuwait International	6.74	7.60	4.61	0.03	3.09	4.41
Al Hilal Bank	2.54	1.92	-194.30	0.82	2.83	-37.23
Boubyan Bank	10.53	11.56	9.59	5.35	6.39	8.68
Dubai Islamic	18.66	14.66	15.59	73.25	10.62	26.55
Ajman Bank	6.28	6.94	3.35	2.13	4.40	4.62
Qatar Islamic International	12.20	12.91	11.36	11.26	11.52	11.85
Warba Bank	3.85	4.70	5.61	2.01	3.83	4
Masraf Al Rayan	15.24	15.87	15.48	14.94	16.12	15.53
Abu Dhabi Bank	13.87	14.09	13.61	8.37	11.33	12.25
ABC BANK	5.73	5.74	5.25	-1.80	3.02	3.58

Source : Prepared by researchers based on the annual reports of the Islamic banks under study.

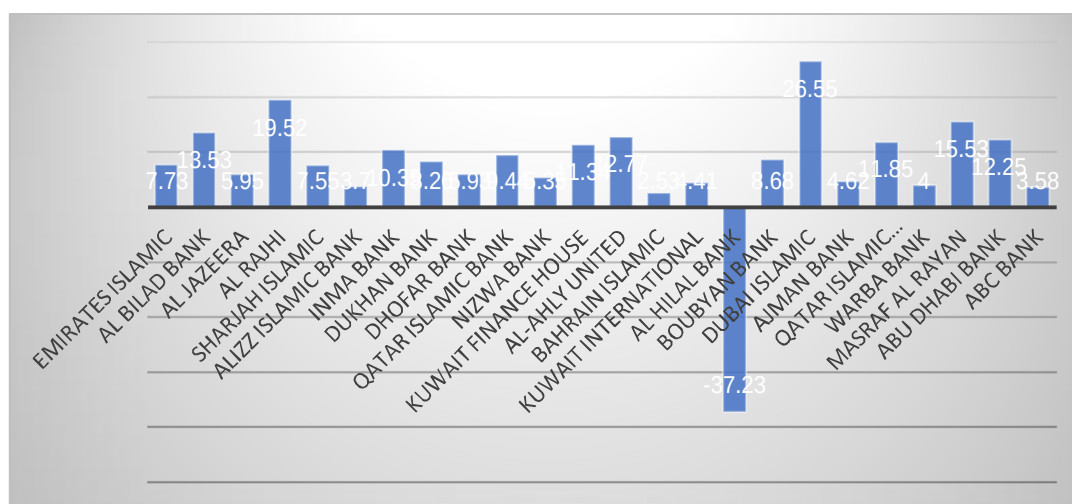
Analysis of the data contained in the previous table :

- ✓ We note from the previous table that the highest percentage of return on equity ratios for Islamic banks in the Gulf Cooperation Council countries after adopting financial technology is estimated at 73.25 percent and was recorded by Dubai Islamic Bank in 2020 AD, while the lowest percentage is estimated at -194.30 percent, recorded by Al Hilal Bank in 2019 ;
- ✓ We note that there are five banks that recorded negative ratios according to the rate of return on equity index during the period of adopting financial technology. These banks are Alizz Islamic Bank, Emirates Islamic Bank, and Bahrain Islamic Bank, in addition to Al Hilal Bank and ABC BANK. As for the remaining banks, which are estimated at 19 banks, they Positivity rates ranged between 3 and 26 percent ;
- ✓ The banks that recorded positive ratios during the period of adopting financial technology according to the rate of return on total equity index, their ratios were

fluctuating, as was the case in the previous period, meaning that the ratios rise at times and decrease at other times ;

- ✓ When comparing the recorded percentages with the calculated standard percentage estimated at 7.85 percent, it becomes clear that half of the recorded percentages according to this indicator are equal to or better than the calculated standard percentage, and the other half of the recorded percentages were less than the standard percentage;
- ✓ Due to the large difference and variation in the ratios of this indicator among the banks under study during the period of adoption of financial technology, we were not able to determine the general trend of these ratios, whether it is an increase or a decrease.

Figure. (6) : Individual rate ratios of the rate of return on equity of Islamic banks in the Gulf Cooperation Council countries after adopting financial technology.



Source : Prepared by researchers using the data contained in the previous table.

Notes about the previous figure :

- ✓ We note that the highest value of the individual rate ratios for the rate of return on equity of Islamic banks in the Gulf Cooperation Council countries after the

adoption of financial technology is estimated at 26.55 percent and was recorded by Dubai Islamic Bank, while the lowest value was recorded by Al Hilal Islamic Bank and was estimated at -37.23 percent ;

- ✓ Although there were five banks that recorded negative annual rates according to this indicator in this period, i.e. the second period, we noticed the presence of one bank that recorded a negative individual rate, which is Al Hilal Islamic Bank. This is a positive indicator if this is compared to the first period, in which we recorded the presence of four rates. Negative individuality for four banks according to the rate of return on total equity index ;
- ✓ When comparing the values of these individual rates to the standard ratio estimated at 7.85 percent, we notice the presence of fourteen banks that recorded rates better than the standard ratio or very close to it. On the other hand, we note the presence of ten banks that recorded rates clearly lower than the standard ratio ;
- ✓ When comparing these individual rates recorded in the second period with what the individual rates were in the first period, we notice a slight and relative increase in the rate of return on equity in the banks under study.

4.4 Calculating the annual averages of the rate of return on total equity of Islamic banks in the Gulf Cooperation Council countries before and after adopting financial technology techniques :

In the following table, we review the annual averages of the rate of return on total equity of Islamic banks in the Gulf Cooperation Council countries, before and after adopting financial technology techniques, and then we comment on what is stated therein, or compare the values recorded during the two different periods.

Table (9) : Annual averages of the rate of return on total equity of Islamic banks in the Gulf Cooperation Council countries, before and after adopting financial technology techniques.

Year	Before adopting financial technology	Year	After adopting financial technology
2012	6.39	2017	8.93
2013	8.53	2018	10.22
2014	8.74	2019	9.13
2015	9.32	2020	8.38
2016	8.39	2021	8.34
General Average	8.07	General Average	9.8

Source : Prepared by researchers based on data provided in the previous two tables.

Notes about the previous table :

- ✓ First, we notice that the annual averages of the rate of return on total equity of Islamic banks in the Gulf Cooperation Council countries, before adopting financial technology techniques, have increased continuously throughout the years of the first period, with the exception of the last year, i.e. the year 2016 AD, which witnessed a decline in the value of the average annual;
- ✓ As for the annual averages after the adoption of financial technology, they increased between the years 2017-2018 AD and then decreased continuously, although the decrease was not significant, but as we said, it continues ;
- ✓ We note that the average ratios in the second period, i.e. the period of financial technology adoption, despite their continuous decline, were greater than the average ratios in the first period. The same is true when comparing the general rates for both periods, we find that the general average in the second period, i.e. the period of financial technology adoption, is greater;
- ✓ When comparing the annual averages with the standard percentage, estimated at 7.85 percent, we find that all annual averages after adopting financial

technology were greater than the standard percentage, while we find that the annual average for the year 2012 was less than the standard percentage, that is, in the stage before adopting financial technology;

- ✓ Based on our previous observations, we say that the reliance of Islamic banks in the Gulf Cooperation Council countries on financial technology has had a positive impact on the ratios of the rate of return on their total equity in a very limited manner, because although the ratios of this indicator during the period of adoption of financial technology were relatively greater than the ratios of this The indicator was before the adoption of financial technology, but the percentages recorded during the period of adoption of financial technology were constantly declining, and based on that we say that financial technology had a positive and slight impact on the efficiency in generating profits from shareholders' funds, and the increase in the percentages of this indicator during the period of adoption of financial technology is evidence The banks under study make good administrative and operational decisions, but only to a limited extent.

5. RESULTS AND DISCUSSION :

5.1 Evaluation based on the results of the profit margin index :

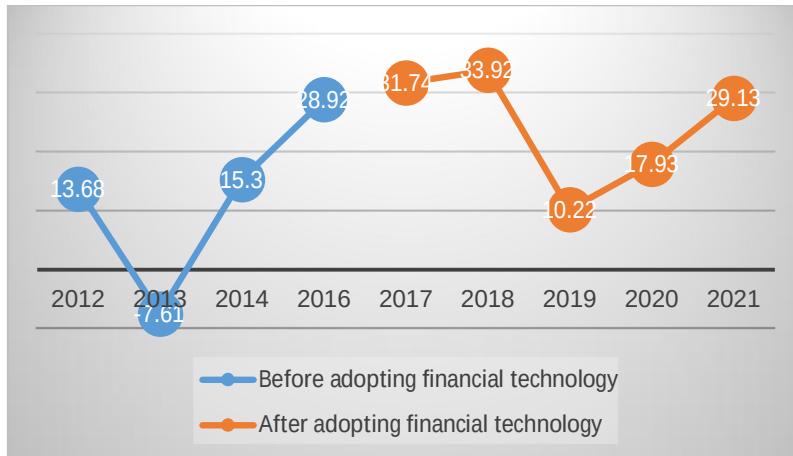
- ✓ Through the results obtained from calculating and analyzing the profit margin index ratios of Islamic banks in the Gulf Cooperation Council countries during the period of adopting financial technology, and in comparison with the results recorded in the first period, that is, before adopting financial technology, Through the results obtained from calculating and analyzing the profit margin index ratios of Islamic banks in the Gulf Cooperation Council countries during the period of adopting financial technology, and in comparison with the results recorded in the first period, that is, before adopting financial technology,

Therefore, it can be said that financial technology had a positive impact on the profit margin ratios of the banks under study, and thus the performance of these banks improved through the improvement of their profit margin ratios, meaning that the banks achieved good profits from their banking activities after adopting financial technology, or it can be said Financial technology techniques helped them access profitable investments. It can be said that the studied Islamic banks during the period of adopting financial technology demonstrated an ability to effectively deploy their resources in profit-generating investments, or they exhibited managerial efficiency in generating profits from operational activities, with the exception of Al Hilal Bank. Despite a sharp decline in profit margin ratios for all the banks under study in the year 2019, which is one of the years of financial technology adoption, this decline is attributed to the impact of the COVID-19 pandemic and its repercussions, affecting not only Islamic banks but also global economies as a whole;

- ✓ Therefore, it can be said that financial technology had a positive impact on the profit margin ratios of the banks under study, and thus the performance of these banks improved through the improvement of their profit margin ratios, meaning that the banks achieved good profits from their banking activities after adopting financial technology, or it can be said Financial technology techniques helped them access profitable investments;
- ✓ This positive effect that we are talking about is not large because most of the Islamic banks under study, before adopting financial technology, also had the ability to invest their resources in investments that generated profits for them, or they had administrative efficiency in achieving profits from operational businesses, so that this ability would improve or Efficiency is greater after adopting financial technology, and the performance of the banks under study improves accordingly.

The following figure summarizes our results related to the profit margin index.

Figure (7) : Annual averages of profit margin ratios before and after Islamic banks in the Gulf Cooperation Council countries adopted financial technology.



Source : Prepared by researchers using the annual reports of the concerned banks.

5.2 Evaluation based on the results of the rate of return on total assets index:

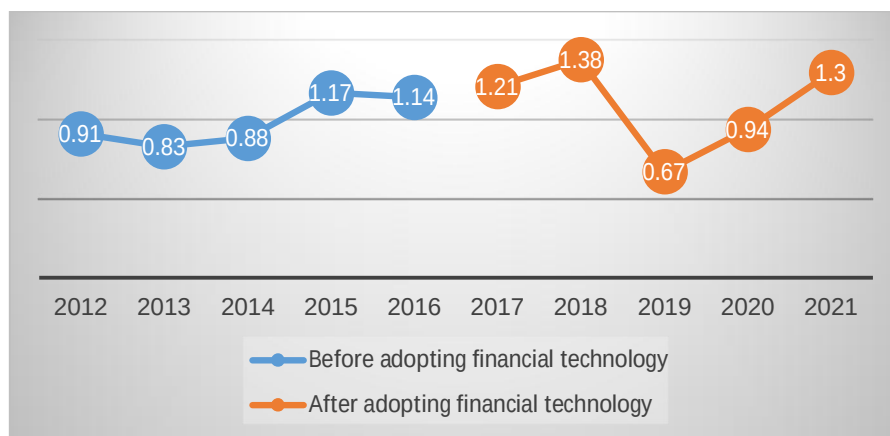
- ✓ Through the results obtained from calculating and analyzing the ratios of the rate of return index on total assets of Islamic banks in Saudi Arabia, during the period of adoption of financial technology, and in comparison with the results recorded in the first period, that is, before the adoption of financial technology, it can be said that the Islamic banks under study witnessed in years... The adoption of financial technology increased the percentages of this indicator compared to the years of the first period, with the exception of the year 2019 AD, which witnessed a decrease in the percentages of this indicator in the banks under study, as was the case with the results of the previous indicator, and the reason is the same as the Corona pandemic and its repercussions;
- ✓ That is, during the period of adopting financial technology, the banks under study achieved good returns on assets. Therefore, financial technology had an impact and influence in improving the profitability of banks, facilitated

investment in profitable assets, and also improved the efficiency of investment decisions of the banks under study;

- ✓ The positive impact of financial technology on the ratios of the rate of return on total assets of the banks under study is slight, because the increase in the ratios of this indicator during the period of adoption of financial technology was limited, and the ratios recorded in the first period, although relatively lower than the ratios recorded in the second period. However, it has been on the rise. In general, we return to saying that financial technology has had a positive impact on the efficiency of banks' investment management in generating profits through their assets, or has a positive impact on their efficiency in exploiting their assets, and accordingly we say that there is an improvement in the performance of the banks under study according to this indicator.

The following figure can summarize what was achieved through the indicator of the rate of return on total assets.

Figure (8): Annual averages of the rate of return on total assets before and after Islamic banks in the Gulf Cooperation Council countries adopted financial technology.



Source : Prepared by researchers using the annual reports of the concerned banks.

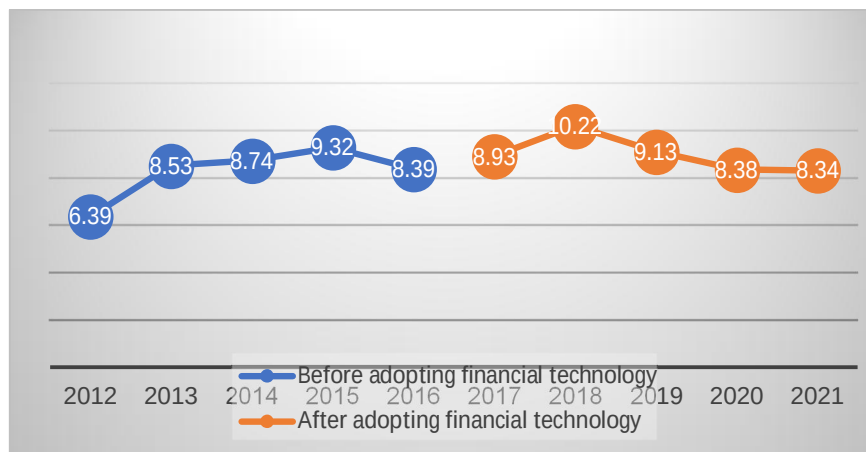
5.3 Evaluation based on the results of the rate of return on equity index:

- ✓ Through the results obtained from calculating and analyzing the ratios of the rate of return on equity index for Islamic banks in the Gulf Cooperation Council countries during the period of adopting financial technology, and in comparison with the results recorded in the period that preceded that, we noticed an increase in the rate of return on equity for banks in the Gulf Cooperation Council countries. Islamic banks after adopting financial technology techniques.
- ✓ Therefore, it can be said that the increase in the rate of return after adopting financial technology indicates that these technologies have contributed to improving the efficiency of banking operations and providing more attractive banking services to customers, which translates into growth in return.
- ✓ In other words, it can be said that this rise or increase in the rate of return was linked to developments in banking technology, improving the efficiency of their operations, and the increasing number of customers as a result of providing easier banking services and expanding the scope of banking services, which indicates that financial technology techniques have contributed to Increasing the revenues of Islamic banks in the region, a positive impact that can be linked to increased efficiency, improved customer experience, and expanding the scope of banking and other services.
- ✓ The positive impact of financial technology on the ratios of the rate of return on total equity of the banks under study is limited, because although the ratios of this indicator during the period of adopting financial technology were relatively larger than the ratios of this indicator before the adoption of financial technology, the ratios recorded in the period The adoption of financial technology has been declining continuously, and in general

financial technology has had a positive impact on the efficiency in generating profits from shareholders' funds. Accordingly, we say that the performance of banks has improved after adopting financial technology according to this indicator and according to all profitability indicators.

The following figure explains some of what we have achieved.

Figure (9) : Annual averages of the rate of return on equity before and after Islamic banks in the Gulf Cooperation Council countries adopted financial technology.



Source : Prepared by researchers using the annual reports of the concerned banks.

6. CONCLUSION

By analyzing and evaluating the results of profitability indicators of Islamic banks in the Gulf Cooperation Council countries, we concluded that financial technology has contributed to increasing the profitability of banks, by improving the quality of services provided after relying on financial technology techniques, given that it has enabled banks to attract new customers because of their Among its unique features and characteristics, banks that relied on financial technology achieved good profits based on their banking activities according to the profit margin index, and the efficiency of

their investment management in generating profits through their assets according to the rate of return on total assets index increased, and their efficiency in generating profits also increased of shareholders' funds according to the index of the rate of return on total equity, and this increase in the profitability of banks after their reliance on financial technology is a limited increase, and thus the performance of Islamic Banks improves according to the three profitability indicators relied upon in the analysis, even if in a relative manner.

7. Bibliography List:

1-Official websites of Islamic banks in the Gulf Cooperation Council countries:

- 1- Kuwait Finance House : <https://www.kfh.com>.
- 2- ABC Bank's official website : <https://www.bank-abc.com>
- 3- Abu Dhabi Islamic Bank's official website : <https://adib.ae.com>.
- 4- Ithmaar Bank's official website : <https://www.ithmaarbank.com/>.
- 5- The official website of the Emirates Islamic Bank : <https://www.emiratesislamic.ae/ar>
- 6- The official website of Ahli United Bank : <https://www.ahliunited.com.kw/>
- 7- The official website of the Bahrain Islamic Bank : <http://www.bisb.com/ar>
- 8- The official website of the Bank of Bilad : <https://www.bankalbilad.com/>
- 9- The official website of Bank Al Jazira : <https://www.bankaljazira.com/ar-sa/>
- 10- Al Rajhi Bank's official website : <https://www.alrajhibank.com.sa/>
- 11- The official website of Masraf Al Rayan : <https://www.alrayan.com/en>
- 12- The official website of Sharjah Islamic Bank : <https://www.sib.ae/ar/>.
- 13- Alizz Islamic Bank's official website : <https://alizzislamic.com/>
- 14- The official website of Kuwait International Bank : <https://www.kib.com.kw/home/Personal.html>
- 15- Al Hilal Bank's official website : <https://www.alhilalbank.com>
- 16- The official website of Inma Bank : <https://www.alinma.com/>.
- 17- Boubyan Bank's official website : <https://boubyan.bankboubyan.com/ar/>
- 18- The official website of Dubai Islamic Bank : <https://www.dib.ae/ar>
- 19- Dukhan Bank's official website : <https://www.dukhanbank.com..>
- 20- Bank Dhofar's official website : <https://www.bankdhofar.com/ar/>
- 21- The official website of Ajman Bank: <https://www.ajmanbank.ae>

22- The official website of Qatar International Islamic Bank : <https://www.qib.com.qa/ar/>

23- The official website of Qatar Islamic Bank : <https://www.qib.com.qa/ar/>

24- The official website of Bank Nizwa : <https://www.banknizwa.com>

25- Warba Bank's official website : <https://www.warbabank.com/>.

2- Arabic references :

- 1- بن عامر زين الدين، تقييم كفاءة التورق المصرفي في إدارة سيولة المصارف الإسلامية "المصارف الإسلامية المالية نموذجاً للفترة 2008-2016، أطروحة دكتوراه، جامعة غرداية، الجزائر، 2019م.
- 2- محمد نواف عابد واياذ زملط، أثر مؤشرات السيولة والربحية على مؤشرات الأداء السوقية للمصارف المدرجة في بورصة فلسطين، مجلة العلوم الاقتصادية وعلوم التسيير والعلوم التجارية، المجلد 12، العدد 1، 2019م.