



(RESEARCH ARTICLE)



Impact of the local economic crisis on Islamic banks performance in Yemen: an empirical study

Yasser Saleh Ali Almonifi * and Vasant K Bhosle

School of Management Sciences, Swami Ramanand Teerth Marathwada University, Nanded, 431606, Maharashtra, India.

International Journal of Science and Research Archive, 2023, 08(01), 638–648

Publication history: Received on 17 December 2022; revised on 31 January 2023; accepted on 02 February 2023

Article DOI: <https://doi.org/10.30574/ijrsra.2023.8.1.0092>

Abstract

This study aims to evaluate the performance of Islamic banks in Yemen pre and post the local economic crisis during the period 2011-2020. The study sample consists of two banks: Al Tadhamon Islamic Bank and Shamil Bank of Yemen & Bahrain due to availability of the financial statements and reports. The results of the study showed that there is no negatively significant impact of the local economic crisis on the Islamic banks performance.

Keywords: Islamic banks; Local economic crisis; Banking Performance; Performance Ratios

1. Introduction

The evaluation of financial performance in Islamic banks is an important topic and needs evaluation from several aspects, especially the financial aspect in order to identify and enhance strengths, and find appropriate solutions to overcome weaknesses, so this requires a set of tools, methods and techniques that facilitate the evaluation process, these methods as analysis of financial statements, financial indicators and profitability analysis. The analysis of financial statements and financial indicators is used to determine the actual impact of policies and methods adopted by banks to manage their financial resources and expenses on liquidity, profitability and security (Boulahia & Bojomaiah 2016). Islamic banks have the ability to respond to financial and economic crises and provide their services and activities continuously during the crises. So the Islamic banks were able to manage its activities in an effective manner during the financial and economic crisis of Covid-19 (Rehman, Almonifi & Gulzar, 2021).

Islamic banks in Yemen have achieved a great development in volume of activities, number of branches and play major role in development of banking and fiscal sector, it cover about between 30% to 40% of banking activity in Yemen. Yemeni Islamic banks have witnessed a development over past years, the volume of Islamic banking assets amounted to about \$3.8 billion in 2013, about 30% of the total banking assets, and volume of deposits amounted to \$2.7 billion which is about 27% of the total deposits, and the capital amounted to about 369 million dollars equivalent about 35% of the total capital of banking sector (Union of Arab Banks, 2014).

The importance of the study is addressing issue of Islamic banks performance in Yemen during the period from 2011 to 2020, and comparing the performance pre and post the local economic crisis that actually occurred at the beginning of 2015 as a result of the war and turmoils in the economic, social and financial system that led to an extensive economic and financial crisis .The research is considered a scientific contribution in the field of evaluating the performance of Islamic banks in Yemen, and it is useful in Islamic banking in general. The economic crises arise as a result of a partial or total imbalance in the economic sector, as a result of the decline in the local currency price against global currencies, external dominance, and inability to make decisions because broking out the wars and political crises, as it is currently happening in Yemen. The analysis results must compare Islamic banks performance in Yemen pre and post the local

* Corresponding author: Yasser Saleh Ali Almonifi

economic crisis, the researcher conducted this study on the financial statements of two Islamic banks: Tadhamon Islamic Bank and Shamil Bank of Yemen & Bahrain.

2. Literature Review

Al-Qurashi (2010) identify the application of governance mechanisms in Yemeni banking sector and their impact on the performance of banks, the results showed that banking sector in Yemen applies governance mechanisms. Report indicates that real Islamic financial instruments are more capable to face the financial crises and it is considered a strong alternative to conventional banking system (Organization of the Islamic Conference, 2009). The CAMELS method depends in to evaluate the performance of Islamic banks which obligated to apply new and developed supervisory tools that contribute to addressing deviations; also it is possible to add the Sharia safety criterion to evaluate the performance of Islamic banks (Bourkba, 2011). Islamic banks more stable than conventional banks during crisis 2007-2008 because the requirements of Islamic Sharia (Zehri, Abdelbaki & Bouabdellah, 2012). Hence, Islamic banks have a high growth rate, higher profitability than conventional banks and the Islamic banks have high liquidity during the period 2007 – 2009 (Usman & Khan, 2012). In investigate the effects of the global financial crisis on the Islamic banking system and how Islamic banks were able to overcome it, the Islamic banks are more resilient than conventional banks in facing the global financial crisis (Addawe, 2012). In Pakistan during the period 2001 to 2007, the data were consistent and there is a small positive impact for Al Baraka Islamic Bank and it has less profitable compared to five conventional banks (Ayub, Sohail & Mumtaz, 2012). The performance of Islamic banks during the global financial crisis is better than conventional banks, the risks are less in Islamic banks and the demand for Islamic financial system is increased in western countries (Shafique, Faheem & Abdullah, 2012). During the global financial crisis 2009, there was no significant difference in profitability and credit risk, and Islamic banks held more liquid assets than their conventional counterparts in Malaysia (Abdulle & Kassim, 2012). Yemeni Islamic banks apply the principles of governance for improving their performance (Farhan & Abdul Qadir, 2014). The government's contribution in Yemen, Egypt and Indonesia expand and develop the Islamic microfinance sector (Girona, Aghina & Boundaoui, 2014). There is a very strong relationship between the variables of governance and the financial performance in the Islamic banks the study sample (Bourkba & Ghargi, 2015). Islamic banks are a important sector in the global economy, and more efficient and adopted as successful banks in worldwide (Shabani, 2015). Islamic banks own good margin and has the necessary liquidity to meet its financial obligations, especially short-term obligations and achieved acceptable profitability, and continuous growth in operating expenses which reflect net income earned (Bourdima, 2016). As well as, Islamic banks achieve acceptable performance in most of their activities after the global financial crisis, especially in indicators of profitability and efficiency in managing costs and using financial resources (Boluahiah & Bogomayah, 2016). Also, the Islamic banks were not significantly affected, and the impact on small banks is higher than that of top Islamic banks (Anfal, 2016). The crisis implications have been reviewed and discussed about the Islamic banking, because most of the applications and financial tools that help to emergence the crisis are not adopted under Islamic banking principles (Alqahtani & Mayes, 2017). The global financial crisis affected positively on Islamic banks, such as the increasing confidence in Islamic banks, and helped Islamic banks enter the global banking sector (Al- Qadi, 2017). While there are no statistically significant differences between the performance Islamic banks, there is only a difference in indebtedness indicator (Rana M. Airout1 & Rula M. Airout, 2017). There no statistically significant differences between solvency, assets quality, profitability and liquidity of the Islamic banks pre and post-crisis (Ben Katfa & fadsy, 2018). The Islamic banking industry in Saudi Arabia which has high growth rates has not affected by crisis of 2008, Al Rajhi Bank is the most efficient bank, followed by Al Jazira Bank, Alinma Bank in third level, and Bank Albilad in fourth level (Hassan, Khan, Amin & Khohkar, 2018). According to Charaf & Doofi (2018), there wasn't impact of the crisis on Islamic banks. When assess impact of the global financial crisis 2008 on Islamic banks, more of them achieved good performance and high profitability because the Islamic finance system is based on the partnership finance system which consists of real assets (Bennachi, Abed & Ghawas, 2018). Through compare the efficiency between Islamic and commercial banks in Yemen using DEA analysis pre and post financial reforms, there is no evidence to refute that the financial reforms have improved the efficiency of Yemeni banks in short term., however, the efficiency recorded trends for banks refers that banks have obtained long-term efficiency improvements through reforms (Maram & Badeb, 2019). Comparing the financial performance between conventional and Islamic banks in Bangladesh during 2010 – 2018, showed that funds in other banks, investing in securities, total loans, borrowings from other banks and total deposits contributions to the operating profit of the conventional banks group, while funds in other banks, investment in securities and total deposits contributed to the operating profit of the Islamic banks group (Hedayet Ullah, Kamruzzaman & Rahman, 2019). Al-Homaidi, Tabash & Ahmad (2020) examine the relationship between the voluntary disclosure level and the profitability of Islamic banks in Yemen, they found that background of Islamic bank, company's social disclosure and age of the bank has a negative impact on profit after tax. There is growth in equivalent rates to financing returns each year and accumulation of income and financing amounts (Sumarti, Andirasdini, Ghaida & Mukhaiyar, 2020). Covid-19 crisis doesn't effect on Islamic banking system in Saudi Arabia strongly, and Islamic banks performance was effective performance during Covid-19 crisis and responded to economic and financial crises (Almonifi, Rehman & Gulzar, 2021).

Islamic banks succeeded in providing better financing and investment channels than conventional banks (Badis, Djeghri & Zermane, 2021). Islamic banking sector has achieved substantial results and it has become competitive alternative to the traditional banking system worldwide (Rehman, Wani, Khanam, & Almonifi, 2021). According to (Rehman, et al., 2021), Islamic banks in GCC countries have ability to respond to the financial and economic crises, and able to provide their services and financial activities efficiently during the crises.

2. Methodology

2.1. Research population and sample

The population of the study consisted of the main Islamic banks operating in Yemen, namely Tadhamon Islamic Bank and Shamil Bank of Yemen & Bahrain according to the availability of financial data and reports. The study covers the period of pre- local economic crisis 2011-2014 and post- local economic crisis 2015-2020. The sample was selected in judgment sampling- selecting sample deliberately pre-determined criteria.

2.2. Analysis Method

The content analysis process must include reliability and validity, and the coded data must be reliable and consistent in order to make the conclusions from the research valid and not to appear inconsistencies (Elena, Mehmet, Rob & Sabri, 2018). The following test statistics have been used to analyze the data:

- Measuring Banking Performance Ratios
- Tests of Normality by Kolmogorov-Smirnov Test and Shapiro-Wilk Test
- Group Descriptive Statistics
- Levene's Test for Equality of Variances
- T-test for Equality of Means

2.3. Variables of the study

According to the financial and economic literature and the study problem, we will apply the banking ratios namely Return on Assets (ROA), Quick Liquidity Ratio (QLR), Investment Assets/Total Assets (IA/TA) and Resources Investing Ratio (RIR) as a dependent variable in measuring the impact of the economic crisis on the performance of Yemeni Islamic banks and the local economic crisis is the independent variable (LEC).

2.4. Hypotheses and Model of the study

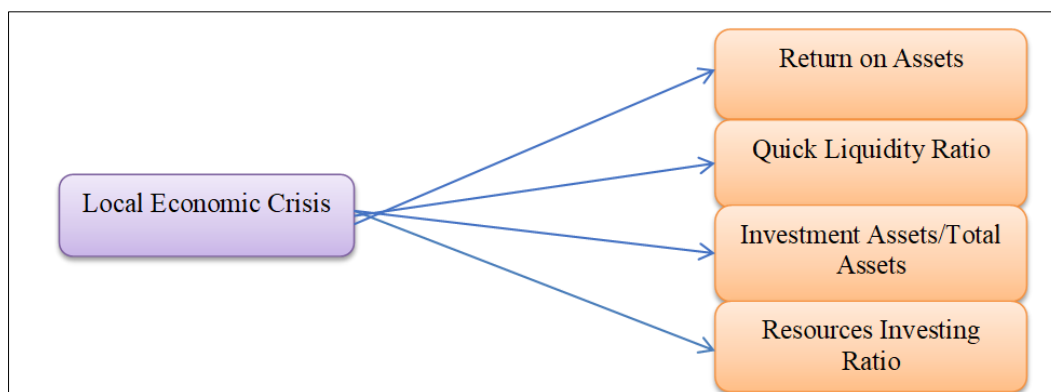


Figure 1 Research Model

H1: There is no statistically significant difference in Return on Assets ratio in Islamic banks pre and post-economic crisis in Yemen

H2: There is no statistically significant difference in Quick Liquidity Ratio in Islamic banks pre and post-economic crisis in Yemen

H3: There is no statistically significant difference in Investment Assets/Total Assets in Islamic banks pre and post-economic crisis in Yemen

H4: There is no statistically significant difference in Resources Investing Ratio in Islamic banks pre and post-economic crisis in Yemen.

3. Empirical Analyses and Results Discussion

This section presents the aspects in which research methodology tools are specified.

3.1. Measuring Banking Performance Ratios

These ratios refer to the banks Performance and management's ability in generating revenues from the banks activities (Charaf & Doofi, 2018); the ratios are obtained and shown in table No.1 is given below:

Table 1 Banks Performance Ratios

Tadamon Islamic Bank										
Ratio	Before the Local Crisis				After the Local Crisis					
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Return on Assets	-0.51	5.44	0.26	-0.14	-0.65	1.27	0.33	-0.16	0.44	0.18
Quick Liquidity Ratio	39	92.66	46.46	51.97	83.64	106.9	126.6	111.8	120.3	126.1
Investment Assets/T. Asset	59.70	55.41	53.27	62.49	58.11	57.41	54.58	48.23	48.31	48.60
Resources Investing Ratio	80.06	64.75	76.63	78.88	67.49	65.37	62.50	66.74	42.33	52.42
Shamil Bank of Yemen & Bahrain										
Return on Assets	0	0	2.14	0.56	0.82	1.88	1.36	1.50	1.78	2.47
Quick Liquidity Ratio	82.92	93.21	69.72	76.52	87.05	105.0	119.8	120.9	137.8	132.5
Investment Assets/T. Asset	37.85	30.38	29.77	32.31	69.40	30.30	22.23	22.43	25.63	19.27
Resources Investing Ratio	41.73	34.63	47.09	49.35	42.81	44.51	34.50	21.39	15.24	8.93

Source: estimates are computed by author based on the annual reports of banks

3.2. Tests of Normality

Normality test should be chosen according to the power and simplicity of the testing process, and it must be taken into account that symmetric data with small sample sizes, as in our current study, authors should choose Kolmogorov–Smirnov, modified Kolmogorov–Smirnov (Yazici & Yolacan, 2007), so we used Kolmogorov–Smirnov and Shapiro–Wilk.

Kolmogorov–Smirnov formula:

$$D^+ = \max \left\{ \left(\frac{i}{n} \right) - z_i \right\}, \leq i \leq n;$$

$$D^+ = \max \left\{ z_i - \frac{i-1}{n} \right\}, \leq i \leq n;$$

$$D^+ = \max (D^+, D^-);$$

Shapiro-Wilk formula:

$$w = \frac{\left\{ \sum_{i=1}^k a_{(n-i+1)} (x_{(n-i+1)} - x_{(i)}) \right\}^2}{\sum_{i=1}^n (x_i - \bar{x})^2}$$

Table 2 Tests of Normality

Tadamon Islamic Bank						
	Kolmogorov-Smirnov^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Return on Assets *	0.275	10	0.176	0.807	10	0.068
Quick Liquidity Ratio	0.186	10	0.200	0.878	10	0.123
Investment Assets/Total Assets	0.184	10	0.200	0.927	10	0.420
Resources Investing Ratio	0.192	10	0.200	0.922	10	0.371
Shamil Bank of Yemen & Bahrain						
Return on Assets	0.150	10	0.200	0.937	10	0.519
Quick Liquidity Ratio	0.163	10	0.200	0.937	10	0.517
Investment Assets/Total Assets**	0.320	10	0.015	0.763	10	0.115
Resources Investing Ratio	0.214	10	0.200	0.888	10	0.162

Source: estimates are computed by SPSS ;* The results of tests of normality post-crisis included the most observations; ** The average of normality for pre and post-crisis = 0.115 ;A significance level of 0.05 indicates that the data follow a normal distribution of all dependent variables, and the P-value > α.

3.3. Hypotheses Testing

The independent sample t-test is a hypothesis test to determine whether the means of two groups which are statistically different, included two independent samples, and have normal distributions of the data, for analyzing the data statistically and correctly, we must understand the mathematical formula of the test (Kumar, 2022).

$$t = \frac{(\bar{w}_1 - \bar{w}_2) - (u_1 - u_2)}{Sp \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

Also the independent sample t-test is an inferential statistical test for specifying whether there are significant differences between means of independent groups, if there is a correlation between means of two groups, the hypothesis of the t-test is as follows:

$$H_0: u_1 = u_2$$

In some cases, we may reject the null hypothesis and accept the alternative hypothesis, when there is a difference between the means of two groups, so the hypothesis of the t-test is as follows:

$$H_a: u_2 \neq u_2$$

So we either reject or accept the null hypothesis according to level p-value 0.05. We test the homogeneity of variance using Levene's Test of Equality of Variances within the t-test procedures in our current study sample as shown in table No. 4, and it is calculated manually by the following formula:

$$F_{Levene} = \frac{(n-k) \sum_{i=1}^k n_i (\bar{w}_i - \bar{w})^2}{(k-1) \sum_{i=1}^k \sum_{j=1}^{n_i} (w_{ij} - \bar{w}_i)^2}$$

Hypothesis that the two variances are equal is rejected if:

$$F > F_{\alpha, n_1-1, n_2-1}$$

For an upper one-tailed test:

$$F < F_{1-\alpha, n_1-1, n_2-1}$$

For a lower one-tailed test: (our current study)

$$F > F_{\alpha/2, n_1-1, n_2-1}$$

Table 3 Group Statistics

	Tadamon Islamic Bank				
	Period	N	Mean	Std. Deviation	Std. Error Mean
Return on Assets	pre-crisis	4	1.4250	2.67947	1.33974
	post-crisis	6	0.3700	0.47464	0.19377
Quick Liquidity Ratio	pre-crisis	4	57.5225	24.02038	12.01019
	post-crisis	6	112.558	16.17834	6.60478
Investment Assets/Total Assets	pre-crisis	4	57.7175	4.15579	2.07790
	post-crisis	6	52.5400	4.70948	1.92264
Resources Investing Ratio	pre-crisis	4	75.0800	7.03211	3.51606
	post-crisis	6	59.4750	10.04635	4.10141
Shamil Bank of Yemen & Bahrain					
Return on Assets	pre-crisis	4	0.6750	1.01171	0.50586
	post-crisis	6	1.6350	55432.	22630.
Quick Liquidity Ratio	pre-crisis	4	80.5925	9.99025	4.99512
	post-crisis	6	117.182	18.64101	7.61016
Investment Assets/Total Assets	pre-crisis	4	32.5775	3.67795	1.83897
	post-crisis	6	31.5433	18.92124	7.72456
Resources Investing Ratio	pre-crisis	4	43.2000	6.54626	3.27313
	post-crisis	6	27.8967	14.86120	6.06706

Source: estimates are computed by SPSS

Interpreting the data as shown in Table No. 3 as follows:

For Tadamon Islamic Bank, the average Return on Assets pre-crisis (1.4250) is higher than the average post-crisis (0.3700), only average Quick Liquidity Ratio pre-crisis (57.5225) is lower than average post-crisis (112.5583), the average Investment Assets/Total Assets pre-crisis (57.7175) is higher than the average post-crisis (52.5400), the average Resources Investing Ratio pre-crisis (75.0800) is higher average post-crisis (59.4750). While Shamil Bank of Yemen & Bahrain, the average Return on Assets pre-crisis (0.6750) is lower than the average post-crisis (1.6350), the average Quick Liquidity Ratio pre-crisis (80.5925) is lower than average post-crisis (117.1817), the average Investment Assets/Total Assets pre-crisis (32.5775) is higher than the average post-crisis (31.5433), the average Resources Investing Ratio pre-crisis (43.2000) is higher than average post-crisis (27.8967).

As shown in table 4, the results of T. test display that there is no significant difference between means of Return on Assets pre and post- local economic crisis where $P = 0.490$, for Quick Liquidity Ratio, the $P = 0.002$ indicates significant difference between the means, while Investment Assets/Total Assets has $P = 0.113$ that refers to no significant difference between means, also the significance level of Resources Investing Ratio is 0.028 which shows a significant difference between means pre and post- local economic crisis, therefore hypotheses H_1 and H_3 are accepted, while hypotheses H_2 and H_4 are rejected.

Table 4 Independent Samples Test/ Tadamon Islamic Bank

	Levene's Test for Equality of Variances		T-Test For Equality Of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
								Lower	Upper
Return on Assets	9.203	0.016	0.971	8	0.360	1.05500	1.08650	-1.4505	3.56046
			0.779	3.13	0.490	1.05500	1.35368	-3.1564	5.26641
Quick Liquidity Ratio	0.663	0.439	-4.37	8	0.002	-55.03583	12.58229	-84.051	-26.021
			-4.02	4.82	0.011	-55.03583	13.70649	-90.659	-19.413
Investment Assets/T. Assets	0.888	0.374	1.78	8	0.113	5.17750	2.91108	-1.5355	11.8905
			1.83	7.18	0.109	5.17750	2.83093	-1.4830	11.8380
Resources Investing Ratio	1.037	0.338	2.68	8	0.028	15.60500	5.83184	2.1568	29.0532
			2.89	7.92	0.020	15.60500	5.40224	3.1255	28.0845

Source: estimates are computed by SPSS

Table 5 Independent Samples Test/ Shamil Bank of Yemen & Bahrain

	Levene's Test for Equality of Variances		T-Test For Equality Of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Interval of the Difference	
								Lower	Upper
Return on Assets	1.382	0.274	-1.960	8	0.086	0.96000-	0.48985	-2.0896	0.16959
			-1.732	4.220	0.155	0.96000-	0.55417	-2.4676	0.54756
Quick Liquidity Ratio	1.357	0.278	-3.552	8	0.007	-36.58917	10.29981	-60.341	-12.838
			-4.019-	7.818	0.004	-36.58917	9.10306	-57.666	-15.512
Investment Assets/T. Assets	2.258	0.171	.106	8	0.918	1.03417	9.76454	-21.483	23.5512
			.130	5.553	0.901	1.03417	7.94045	-18.781	20.8492
Resources Investing Ratio	6.976	0.030	1.910	8	0.093	15.30333	8.01313	-3.1750	33.7817
			2.220	7.303	0.060	15.30333	6.89366	-8.6149	31.4682

Source: estimates are computed by SPSS

For Shamil Bank of Yemen & Bahrain, as in table 5, the significance level of Return on Assets is 0.086 which indicates there no differences between the means, while p-value of Quick Liquidity Ratio is 0.007 shows a significant difference in means. Also the results display that there is no significant difference between means of Investment Assets/Total Assets pre and post- local economic crisis where p-value = 0.918, while the significance level of Resources Investing Ratio is 0.060 which don't refers to a significant difference between the means. Therefore hypotheses H₁, H₃ and H₄ are accepted, while hypotheses H₂ is rejected.

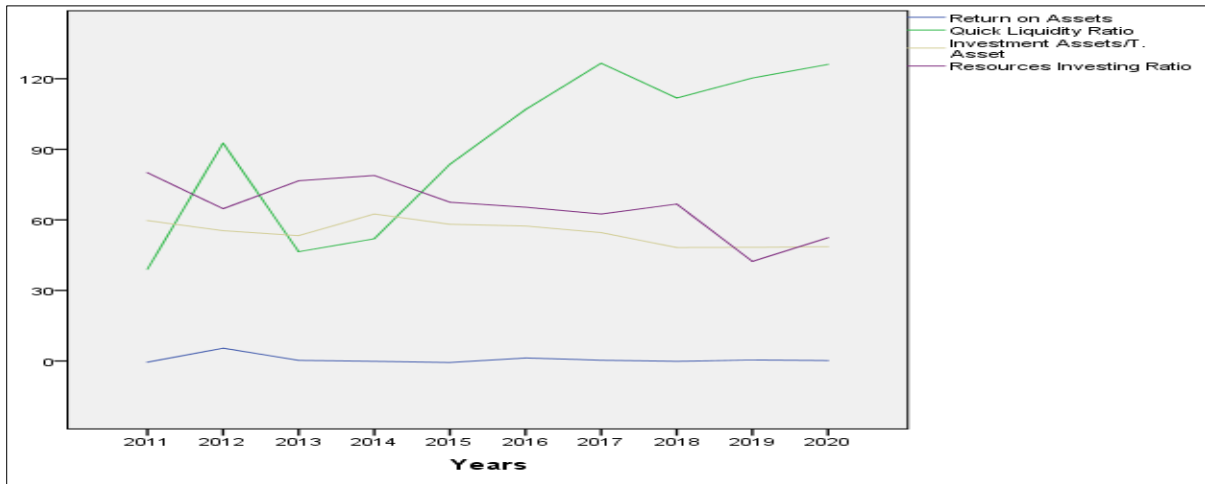


Figure 2 Performance Indicators of Tadamon Islamic Bank

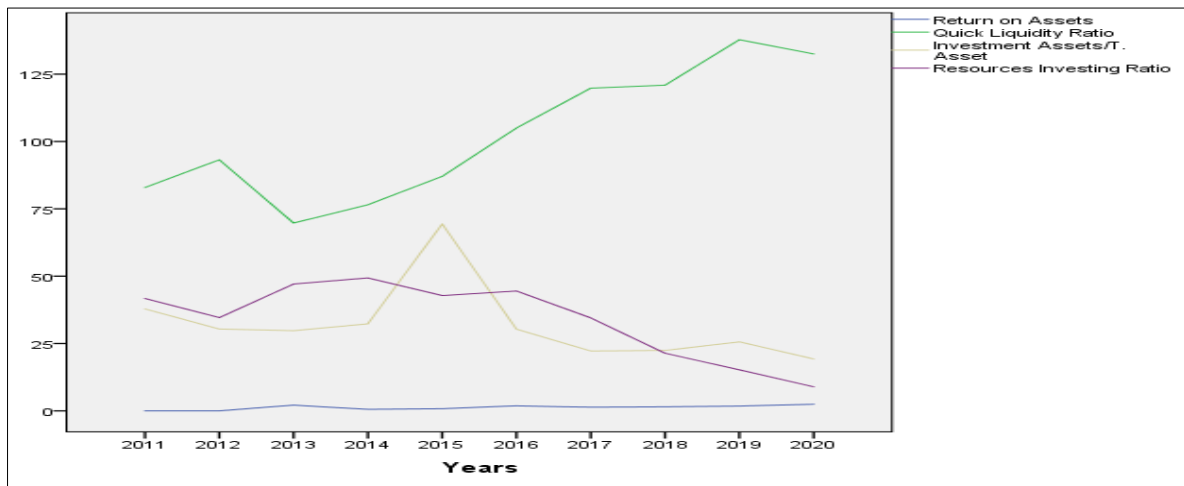


Figure 3 Performance Indicators of Shamil Bank of Yemen & Bahrain

4. Conclusion

The research purpose is to examine the impact of the local economic crisis on Islamic banks performance in Yemen during the period 2011-2020. Previous studies don't independently discuss the impact of local crisis on Islamic banks performance in Yemen. So in the current study, we have paid attention on the banking performance indicators pre and post- crisis to know if there were differences in banks performance indicators. The results showed that Quick Liquidity Ratio in Tadamon Islamic Bank was positively affected by the crisis with average recorded (112.5583) during the crisis, higher than pre-crisis (57.5225), also the crisis negatively affected Resources Investing Ratio where the average (59.4750) post-crisis less than pre-crisis (75.0800), while Return on Assets and Investment Assets/Total Assets weren't affected by the crisis. For Shamil Bank of Yemen & Bahrain, the Return on Assets, Investment Assets/Total Assets and Resources Investing Ratio weren't affected by the crisis and there are no differences in their means pre and post- crisis, while Quick Liquidity Ratio was affected positively where recorded (117.1817) during the crisis, higher than pre-crisis (80.5925). So the Quick Liquidity Ratio in both banks was positively affected by crisis as a result of the hedging policy.

Compliance with ethical standards

Acknowledgments

Thanks, and appreciation to Prof. Vasant K Bhosle, the supervisor of this scientific paper, for his advice, guidance and effort with us in order to prepare and revise this paper to make it scientific.

Disclosure of conflict of interest

No conflict of interest.

References

- [1] Alqahtani, F., & Mayes, D.G. (2017) The Global Financial Crisis and Islamic Banking: the Direct Exposure to the Crisis. *Banks and Bank Systems*, 12 (3), 100-112. DOI: 10.13140/RG.2.1.4012.2008.
- [2] Al-Homaidi, E.A., Tabash, M.I. & Ahmad, A. (2020) The Profitability of Islamic Banks and Voluntary Disclosure: Empirical Insights From Yemen. *Cogent Economics & Finance*, 8 (1), 1-22. <https://doi.org/10.1080/23322039.2020.1778406>
- [3] Al- Qadi, N.S. (2017) The Impact of Global Financial Crises on Islamic Banks. *International Journal of Financial Economics and Econometrics*. Retrieved May 7, 2022 from https://www.researchgate.net/publication/321304752_The_Impact_of_Global_Financial_Crises_on_Islamic_Banks
- [4] Addawe, S. (2012) What are the impacts of the global financial crisis on Islamic banking system and how Islamic bank spared from the crisis? (Master Thesis). Aalto University, Finland. <http://urn.fi/URN:NBN:fi:aalto-201202231248>
- [5] Al sukhri, K. (2017). Evaluating the Financial Performance of Islamic Banks and Conventional Banks: A Comparative Study Using Financial Ratios for a Sample of Banks Operating In Algeria for the Period 2010-2015(Master Thesis). Kasdi Merbah University of Ouargla, Algeria. <http://dspace.univ-ouargla.dz/jspui/handle/123456789/14854>
- [6] Abbadah, I. A. (2016). Islamic Banks Performance Indicators (Doctoral Thesis). Yarmouk University, Jordan. E-Marefa. <https://search.emarefa.net/en/detail/BIM-853882>
- [7] Al-Qurashi, A.A. (2010) Analytical Study for the mechanisms of Governance and Their Impact on the Banking Performance: An Empirical Study on the Yemen Banking Sector (Doctoral Thesis). Thamar University, Yemen. <https://yemen-nic.info/upload/study/7133.docx>
- [8] Almonifi,Y., Rehman,S., & Gulzar,R. (2021) The Covid-19 Pandemic Effect on the Performance of the Islamic Banking Sector in KSA: an Empirical Study of Al Rajhi Bank. *International Journal of Management*. 12(4), 533-547. DOI: 10.34218/IJM.12.4.2021.045.
- [9] Adam, M. (2014). Evaluating the Financial Performance of Banks Using Financial Ratios- A Case Study of Erbil Bank for Investment and Finance. *European Journal of Accounting Auditing and Finance Research*, 2(6), 162-177. <https://www.researchgate.net/publication/323987058>
- [10] Anfal, B. (2016) The Impact of the Global Financial Crisis on the Performance of Islamic Banks. *Partie: MÂAREF Sciences Economies*, 10(20), 92-106. <https://www.academia.edu/checkout?feature>
- [11] Abdulle, M.Y., & Kassim, S.H. (2012) Impact of Global Financial Crisis on the Performance of Islamic and Conventional Banks: Empirical Evidence from Malaysia. *Journal of Islamic Economics, Banking and Finance*, 8(4), 9-20. <https://www.researchgate.net/publication/272238375>
- [12] Ayub, S. Sohail, N., & Mumtaz, R. (2012) Performance Evaluation of Islamic and Conventional Banks in Pakistan. *World Applied Sciences Journal*, 20 (2), 213-220. DOI: 10.5829/idosi.wasj.2012.20.02.2321.
- [13] Bourdima, S. (2016) Evaluating the Financial Performance of Islamic Banks using Financial Ratios: A case of Albarka Global Group from 2011-2013. *Journal of Business and Economics*. 4(2), 213-229. <https://revues.imist.ma/index.php/jbe/article/view/6463>
- [14] Boluahiah, T., & Bogomayah, A. (2016). Evaluating the Financial Performance of Islamic Banks: An Applied study on a Group of Islamic Banks for the period (2009-2013). *Journal of North African Economics*, 12(14), 1-28. <https://search.emarefa.net/ar/detail/BIM-720266>
- [15] Ben Katfa, I. & Fadsy, Y. (2018) The Impact of the Global Financial Crisis on the Financial Performance of Islamic Banks: A Study Sample of Islamic Banks in UAE (Master Thesis). University Center Abdelhafid Boussouf, Algeria.
- [16] Berna, Y., & Senay, Y. (2007) A Comparison of Various Tests of Normality. *Journal of Statistical Computation and Simulation*, 77(2), 175–183. DOI: 10.1080/10629360600678310.

- [17] Bennachi, Z. Abed, S. & Ghawas, S. (2018) An Evaluation Study of the Impact of the Global Financial Crisis on the Performance of Islamic Banks: The Case of Al Baraka Bank and Jordan Islamic Bank (2006-2011). *Journal of Human Sciences*, 2 (1), 49-64. <http://revue.umc.edu.dz/index.php/h/article/view/2896>
- [18] Badis, N., Djeghri, B. & Zermane, K. (2021) The Importance of Islamic Banks in Avoiding Financial Crises. *Journal of Business and Trade Economics*, 6(2), 208-218. <https://www.asjp.cerist.dz/en/article/164696>
- [19] Bourkba, S. (2011) CAMELS Method in Evaluating the Performance of Islamic Banks. *Algerian Journal of Banking and Financial Studies*, 1 (1), 143-163. <https://www.asjp.cerist.dz/en/article/117236>
- [20] Charaf A. & Qarmia.D (2018) The impact of the Global Financial Crisis on the Performance of Islamic banks. *Journal of In-Depth Economic Studies*, 3(1), 1-27. <https://www.asjp.cerist.dz/en/article/76717>
- [21] Elena, P., Mehmet, A., Rob, D., & Sabri, M. (2018) The Impact of Corporate Social Responsibility Disclosure on Financial Performance: Evidence from the GCC Islamic Banking Sector. *Journal of Business Ethics*, 151:451–471. <https://doi.org/10.1007/s10551-016-3229-0>
- [22] Farhan. M., & Abdul Qadir. M. A. Q. (2014) Governance in Yemeni Islamic Banks An Empirical Study. *Islamic Economic Studies*. 20(2), 4-55. <https://ideas.repec.org/a/ris/isesar/0028.html>
- [23] Girona, E.F., Aghina, G. & Boundaoui, I. (2014) Islamic Microfinance in Yemen, Egypt and Indonesia. Retrieved August 09, 2022, from www.mastermicrofinance.com
- [24] Ghargi, A.A. & Bourkba, S.A. (2015) The Impact of Applying Corporate Governance Rules on the Performance of Islamic Banks: The Case of GCC Countries. *King Abdulaziz University Journal: Islamic Economics*, 28(3), 123-158. DOI: 10.4197/Islec.28-3.3.
- [25] Hedayet Ullah, M., Kamruzzaman, A.S.M, & Masudur Rahman, S.M. (2019) Performance Evaluation of Conventional and Islamic Banks in Bangladesh. *Journal of Business Studies*, 12 (2), 16-29. <https://www.researchgate.net/publication/349763878>
- [26] Hassan, M., Khan, M.N., Amin, M.F., & Khohkar, I. (2018) Measuring the Performance of Islamic Banks in Saudi Arabia. *Journal of Economics and Management*, 12 (1), 99-115. <https://www.researchgate.net/publication/326941568>
- [27] Islamic Finance Development Report (2020) Progressing Through Adversity. Retrieved from <https://icdps.org/uploads/files/ICDRefinitiv%20IFDI%20Report%20202016075028pdf>.
- [28] Islamic Finance & Wealth Management (2021) Annual Report 2021. Retrieved June 09, 2022 from <https://argaamplus.s3.amazonaws.com/86f171a0-dcdc-4a26-b7f1-35345c16f250.pdf>
- [29] Kumar, A. (2022, January 31) Two independent samples t-tests: Formula & Examples. *Data Analytics*. Retrieved August 21, 2022 from <https://vitalflux.com/two-sample-t-test-formula-examples/>
- [30] Maram, M., A., & Badeb.W.A. (2019) Efficiency Measurement in Yemeni Banks Using DEA Pre- and Post-Financial Reforms. *International Journal of Management and Human Science (IJMHS)*. 3(1), 50-63. <https://ejournal.lucp.net/index.php/ijmhs/article/view/796>
- [31] Organization of the Islamic Conference Report (2009) Global Finance Crisis 2008-2009. Retrieved May 6, 2022 from <https://sesricdiag.blob.core.windows.net/sesric-site-blob/files/article/377.pdf>
- [32] Rehman, S., Almonifi, Y. & Gulzar, R. (2021) Impact of the Covid-19 Pandemic on Islamic Bank Indices of GCC Countries. *International Journal of Islamic Banking and Finance Research*, 7(1), 1-17. DOI: 10.46281/ijibfr.v7i1.1381.
- [33] Rana, M. Airout & Rula, M. Airout (2017) Evaluation of Financial Performance of Islamic Banks in Jordan (2001-2010) "A Comparative Study". *International Journal of Economics and Finance*, 9(9), 166-174. DOI: 10.5539/ijef.v9n9p166.
- [34] Rehman, S., Wani, I., Khanam, M. & Almonifi, Y.S.A. (2021) A Brief Review of Growth and Development in Islamic Banking. *Journal of Economics and Finance*, 12(3), 15-25. DOI: 10.9790/5933-1203041525.
- [35] Shafique, A., Faheem, M.A., & Iqra Abdullah (2012) Impact of Global Financial Crises on the Islamic Banking System: Analysis of Islamic Financial System during Financial Crunch 2008. *Arabian Journal of Business and Management Review (OMAN Chapter)*, 1(9), 124-134. DOI: 10.12816/0002166.

- [36] Shabani, S. (2015) Islamic Banks: the Perfect Solution to Financial Crises Problems (2008 Global Financial Crisis as an Example). *Algerian Journal of Economic Development*, 6(2), 69-76. <https://journals.univ-ouargla.dz/index.php/ARED/article/view/543>
- [37] Sumarti, N., Andirasdini, I.G., Ghaida, N.I., & Mukhaiyar, U. (2020) Evaluating the Performance of Islamic Banks Using a Modified Monti-Klein Model. *J. Risk Financial Manag*, 13(43), 2-21. DOI: 10.3390/jrfm13030043.
- [38] Shamil Bank of Yemen & Bahrain (2011-2020) Annual Reports 2011-2020. <http://www.sbyb.net/financial-reports.php?lang=ar>
- [39] Tadamon Islamic Bank (2011-2020) Annual Reports 2011-2020. <https://www.tadamonbank.com/en/reports/2>
- [40] Usman. A., & Khan. M.K. (2012) Evaluating the Financial Performance of Islamic and Conventional Banks of Pakistan: A Comparative Analysis. *International Journal of Business and Social Science*, 3 (7), 253-257. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1084.3117&rep=rep1&type=pdf>
- [41] Union of Arab Banks (2014) Islamic banks in Yemen. <https://uabonline.org/ar/>
- [42] Zehri, C., Abdelbaki, A., & Bouabdellah. N. (2012) Effects of the Current Financial Crisis on Islamic Banks Compared to Conventional Banks. *Banks and Bank Systems*, 1 (7), 83-93. <https://www.researchgate.net/publication/299409336>