Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 2272 – 2278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.6048

Analyzing Financial Performance of Tunisian Banks Using Financial Ratios

Hanene Hamdani[1]

Abstract

Purpose: This paper assesses financial performance of Tunisian banks during the period 2010-2020. Design/methodology/approach The sample is composed by 10 banks observed over the period 2011-2020. We used the conventional/financial ratio approach to assess the financial performance. Findings: The results obtained stated that the level of profitability of the Islamic bank Al Baraka (TIBAB) is lower than the nine conventional banks introduced in this study. The liquidity analysis reveals that TIBAB seems to be statistically more liquid than those of conventional banks. In terms of solvency, TIBAB seems to be less risky and more solvent than other banks. Other measures also showed a risk of deterioration, but are not statistically significant. This implies that the TIBAB is much more liquid and therefore is exposed to a lower liquidity risk than conventional ones. Originality/Value: The originality stems from the examination of historical trends over a series of years covering the transitional period and the impact of COVID-19 in 2020, allowing the conduction of an analysis over specific periods.

Keywords: *Islamic Bank, conventional Banks, financial performance.*

Introduction

For more than 40 years, the Tunisian Islamic bank Al Baraka (TIBAB) has monopolized the Islamic branch in the Tunisian banking environment. The important subjacent power which led to the creation of this Islamic bank in Tunisia was the elimination of the interest (Riba). With the increasingly pronounced inclination towards Islamic values, there were a greater request for an Islamic banking and free-interest finance by Muslim consumers, traders, investors and businessmen. The Islamic banking in Tunisia was created in 1983 within the framework of the Tunisian policy of the government which aims at encouraging the Arab and Islamic investments in Tunisia and developing socioeconomic relations between Arab and Islamic countries. Since then, the TIBAB has introduced and marketed various free-interest products such as Murabaha, leasing (Ijara) and others.

However, there has been no study that dealt with the analysis of liquidity risk, profitability, risk and solvency of the TIBAB for 27 years. The banking performance evaluation is important for all the parties: depositors, bank managers and regulators.

In a competitive financial market, bank performance helps investors-depositors to determine whether it is better to invest or to withdraw their funds from the bank.

A great deal of studies concerning the profitability and the measurement of the performance of the Islamic banks compared to the conventional ones turn out to be insufficient because they used neither the statistical technique nor the intertemporal and interbank comparison (Samad (1999); Ariff (1989); Dirrar (1996); Mohiuddin (1991); Sum (1995); Hassan (1999)). However, the challenges of profitability, liquidity, risk and solvency of the bank during the period 2010-2020 were very important for both depositors and investors. Within this framework, this paper represents a contribution to the empirical literature since it aims to assess the financial performance of one Islamic bank (TIBAB) and to compare it with a set of Tunisian conventional ones using financial ratios. Then we seek to answer the following question: Are there any differences in terms of performance between Islamic and conventional banks?

[1] Imam Mohammad Ibn Saud Islamic University (IMSIU). Email: hmhamdani@imamu.edu.sa

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 2272 – 2278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.6048

This paper is organized as following: section 2 provides a review of the literature dealing with financial performance. Section 3 presents a detailed description of the methodology, and the empirical results are depicted in section 4. The main conclusions are presented in section 5.

Literature Review

The remarkable development of the Islamic banking environment throughout the world calls for an analysis of the Islamic banks' performance. Indeed, the evolution of performance is the key of a sustained high growth and the development of any organization. According to Samad and Hassan (1998), the evolution of bank performance is important for stakeholders, namely the depositors and the managers of the banks. For example, in a competing financial market, the performance of the banks provides the investors-depositors an opportunity of investing or of withdrawing their funds from the bank. Similarly, it gives bank executives instructions about the ways of improving their savings or loan service to increase their funding. Bank managers as well have used the analysis of the banking performance to regulate and evaluate their banks in order to preserve the stability of the banking industry and the financial system. The extensive literature on Islamic finance can be divided into theoretical and empirical dimension.

The earliest studies dealing with Islamic finance, are those of Mannan (1968), Siddiqui (1983), Ahmad (1984), Iqbal and Mirakhor (1987), Khan (1987), Ahmad (1987), Zineldin (1990) and Saeed (1996). These authors examined a large range of the institutional affairs, including the concepts and the principles which are subject to interpretation. Haron and Shanmugam (1997) analyzed the operation of the "Sharia" or the Islamic law in the Islamic banking system in various Moslem countries, such as Egypt, Iran, Malaysia, Pakistan, Sudan and Turkey. They have also developed different concepts of the Islamic financial products as Modaraba, Musharakah and Qard al-Hassan. They proposed instruments of Mudharabah type, to replace the interest-based discount rate, as an important tool of the monetary policy. The financial instruments used by the Islamic banks were examined by Aggarwal *et al.* (2000), who found that the Islamic banks seldom offer long-term financing to the entrepreneurs. The majority of the transactions of financial Islamic banks are towards the detail sale or the trade financing, and their model suggests that it was about a rational answer for the banks.

Zineldin (1990) examined the Islamic banks from a theoretical and practical point of view and noted that Islamic finance is a viable alternative for the existing traditional bank. Although there are a few empirical studies in this field, Ali (1996) leads a comparison between the effectiveness of the Islamic banking system and that of conventional bank in Bangladesh. He stated that the Islamic banks are relatively more effective than the traditional ones. Kazarian (1993) compared the Islamic banks with the classical ones in Egypt, by focusing on the capacity of innovation of the financial products of the Islamic banking.

The assessment of performance is an important prerequisite for sustainable growth and the development of any situation and particularly in Tunisian case. In general, the method of analysis which is used by the former studies in examining the financial performance of the Islamic banks using financial ratios can be classified in two categories (Widagdo *et al.* (20080), firstly the studies examining the performance of the Islamic banks during a certain period and secondly the studies examining the performance of the Islamic banks and comparing it with their rivals, the conventional banks.

As for the studies that examined the financial performance of Islamic banks over a certain period, Sarker (1999) analyzed the effectiveness of the Islamic banks compared to the conventional ones in Bangladesh. The results showed that the former ones could not work effectively if they operate within a conventional banking environment.

Furthermore, the author argues that the Islamic products had different risk characteristics, the process which requires various sets of prudential rules which are unique for each product. Wibowo and Saptutyningsih (2004) examined the financial performance of the two main Islamic banks in Indonesia (BMI and BSM) for the period 2000-2003. In terms of efficiency, the result revealed that the BMI displayed higher level of performance than that reached by the BSM. Rösly and Bakar (2003) examined the financial performance of the Islamic banking system and conducted a comparative analysis with the performance of

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 2272 – 2278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.6048

the conventional banks. The result showed that the conventional banks were more efficient than the Islamic ones. Hassan (1999) assessed the performance of the Islamic Bank in Bangladesh (IBBL) and compared it with the conventional banks in Bangladesh between 1993 and 1994. The result exhibits that in terms of savings and investment growth, the performance of the IBBL was better than those conventional banks. Besides, he founds that the main Islamic financial products, i.e., Mudharabah and Musharakah, have not been developed.

Furthermore, Mahmood (2005) has compared the financial performance of the Islamic banks with that of the conventional banks in Pakistan. He stated that the Islamic banks were more efficient than the conventional ones during a period of five years (2000 to 2004). Similar studies in other countries of the Middle East were also conducted as stated by Kader *et al.* (2007), from a study that compares financial performance of the Islamic and conventional banks in the UAE. The results indicated that there was no significant difference between the Islamic and the conventional banks in terms of profitability and liquidity. In the case of Bahrain, Samad (2004) examined the financial performance of Islamic and conventional banks for the period 1991-2001. The result also indicated that there is no significant difference between the Islamic banks and the conventional ones regarding profitability and liquidity.

Methodology and Data

The data used in this study are collected from the annual reports of the banks in the sample. For the TIBAB, the collection of data covers the period ranging from 2000 to 2010, while the data collected from the conventional banks (Amen, ATB, BH, BT, BIAT, BNA, STB, UBCI and UIB) are from 2011 to 2020.

The performance of the Islamic bank TIBAB was studied in three different ways. First of all, its performance during the first 10 years is compared with its following 11 years performance by using performance indicators as described below. Second, the performance of the Islamic bank is compared to two conventional banks, i.e., the smallest (UBCI bank) and the largest (STB bank) in terms of size. Third, the performance of TIBAB is compared with that of the banking environment represented by a group of 9 banks. To make our comparison more reliable and significant, the ANOVA test is used to test the null hypothesis of the average equality in each comparison.

According to Sabi (1996), this kind of interbank analysis is common in the study of the banking performance. In the financial competitive market, the performance of a bank can be understood better by an interbank comparative analysis. In this study, the analysis of the banking performance focuses mainly on the following ratios; profitability, liquidity, risk and solvency.

Profitability Ratios

Profitability can be measured by the following ratios.

i. Return on asset (ROA) = Profit after tax/ total asset

ii. Return on equity (ROE) = Profit after tax / equity capital

iii. Profit to expense ratio (PER) = profit/total expense

ROA and ROE are considered as an indicator of the managerial efficiency. ROA is net earnings per unit of a given asset. It shows how a bank could transform its assets into net earnings. A high ratio means a greater capacity and therefore an indicator of a better performance. Similarly, the ROE is net earnings per dinar equity capital. A higher ratio is an indicator of a higher managerial performance. However, profitability is only a part of the history of the banking performance. A high PER indicates that the bank is profitable and realize a higher profit with a given level of expenditure.

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 2272 – 2278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.6048

Liquidity Ratios

There are many measures of bank liquidity. In our study, we used the following ratios:

i. Cash to deposit ratio (CDR) = Cash/deposit. Cash in a bank is the most liquid asset. Therefore, the higher the CDR is the more the bank is relatively liquid than a bank with lower CDR. Depositors' trust in banks is enhanced when a bank maintains a higher cash deposit ratio.

ii. Loan to deposit ratio (LDR) is equal to Loan/deposit. A high loan to deposit ratio indicates that a bank takes more financial stress by making excessive loan. Therefore, lower loan deposit ratio is always favorable to higher loan deposit ratio.

iii. Current ratio is equal to current asset (CA) to current liability (CL). A high ratio indicates that bank has more liquid asset to pay back the trust (deposit) of the depositors.

iv. Current asset ratio (CAR) is equal to current asset to total asset. A high CAR indicates that the bank has more liquid assets. A lower ratio is a sign of lack of liquidity since the share of the long-term credits is high.

The liquidity risk of a bank refers to a comparison of its needs for deposit outflows and loan increases with the actual or potential sources of liquidity from either selling an asset it holds or acquiring an additional liability. The banks and the other institutions share the risk of liquidity, because the transactions of deposits and the savings accounts can be withdrawn at any time.

Risk and solvency ratios

A bank is solvent when the total value of its assets is greater than its liability. A bank becomes risky if it is insolvent. The following are the commonly used measures for risk and insolvency.

i. Debt ratio (DER) that is equal to Debt-to-equity capital. The capital of a bank can absorb the financial shocks. If the value of the credits drops or the loans are not refunded, the capital of the bank represents a protection against the loss of the loans. A small ratio is a good indicator for a bank.

ii. Debt to total asset ratio (DTA) is equal to Debt/total asset. Indicates the financial solidity of a bank to pay its debtor. A high DTA indicates that the bank is implied in risky businesses.

iii. Equity multiplier (EM) is equal to Total assets/ total shareholders 'equity. A high EM indicates that the bank borrowed many funds and the bank is implied in a high risk.

iv. Loan to deposit ratio (LDR) = loans/deposit. measures liquidity as well as credit risk for a bank. A high value indicates a potential source of illiquidity and insolvency.

Analysis of the Empirical Results

Table 1 above displays the means and standard deviations of the various measures of performance of the Islamic banking (TIBAB) between 2000-2010 and between 2011 and 2020.

The ratios PER, ROE and ROA in Table 1 indicate that TIBAB profitability progressed significantly during 2000-2020. This performance improvement is not statistically significant. In fact, the average ratios ROA, ROE and PER are different between the two periods. The highest yields may have been due to an increase in risky investments of the bank. This is supported by the increase in total debt and equity multiplier ratios representing the two major measures of risk and insolvency.

The Averages of the two periods for CDR and CR are not statistically different. This indicates that the position of the bank in term of liquidity remains unchanged between 2000-2010 and between 2011-2020.

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 2272 – 2278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.6048

This result indicates a reject of our hypothesis stating that the TIBAB holds less cash in the subsequent operating years when the bank reaches maturity.

An average profit of TIBAB is 17% while the average profit of eight conventional banks for the same period was 38%. This difference in profitability performance is not statistically significant. These results are consistent with those of Samad (1999) and Hassan (1999). There are several reasons for the decline of profitability performance TIBAB. First, TIBAB has no wide scope for investment in shares because of religious constraints. It may only invest in projects approved by the Sharia, even if it can earn higher rates of return. Sharia Board controls the investment of bank. Second, investment in bonds is a major source of income. The rate of return on bonds is lower than other types of investments. Third, to provide deposit insurance and depositors confidence, TIBAB maintains a more liquid position than conventional banks. This is evident from the comparison of interbank liquidity ratio.

In terms of liquidity, inter-temporal comparison displayed in Table 1 shows that among four measures of liquidity, there are two ratios that are statistically significant. The loan deposit ratio (LDR) and the ratio of current assets (CAR) are both statistically significant at 1% and 5%, while the average current ratio (CR) and the cash deposit ratio (CDR) are statistically different. For the CDR, the high average (1.47) for the period 2011-2020 showed the best liquidity position, against 0.56 for the period 2000-2010. However, this hypothesis will be rejected because our TIBAB will have less liquidity in the following years. In contrast, the CR of TIBAB increased slightly from an average of 1.12 in 2000-2010 to 1.25 during the following eleven years.

TIBAB maintained a more liquid compared to conventional banks. As noted above, this may be due to the ability of the bank to provide deposit guarantees and confidence (Amanah). This finding is displayed in Tables 2, 3 and 4.

In Table 2, the liquidity measures (CDR, LDR, CR and CAR) TIBAB versus UBCI are not significant so we accept the null hypothesis.

Thus, the average CDR (1.47), CR (1.25) and CAR (0.992) for TIBAB showed better liquidity positions compared to the ratios of UBCI (CDR (1.06), CR (1.15) and CAR (0.42). LDR is lower than that of the UBCI which shows a lesser dependence on borrowed funds (1.01 and 1.81 for TIBAB and UBCI respectively).

Similarly, in Table 3 bellow, the three liquidity measures (CR, CAR and CDR) for banks (TIBAB and STB) are statistically significant. CR is statistically significant at 5%, the CAR and CDR are significant at the 1%, while the LDR is not statistically significant. Regarding the comparison of the average of this measure, we can conclude that the average LDR and TIBAB (1.01) is higher than that of the STB (0.61). The TIBAB maintained a more liquid position than the nine conventional banks.

The TIBAB ratios (CDR, CR and CAR) are higher compared to the ratios of the nine conventional banks. However, the average LDR (1.01) for the nine TIBAB is lower in the conventional banks (1.08) which means a favorable position. The increase in the TIBAB liquidity ratio compared to the conventional banks is due to several factors. First, as mentioned above, unlike conventional banks, the investment framework of TIBAB is limited by the Sharia, i.e., Islamic law. The Islamic banks are not allowed to invest in non-Islamic opportunities such as gambling, pornography, alcohol and related projects, even if these investments can be very profitable.

The limited set of investment opportunities help the Islamic banks, in particular TIBAB, to hold more liquid assets. Second, most of the loans and investments of the Islamic banks are of short-term nature. Murabahah is a short-term investment and a lower risk for a bank. There is practically no risk involved in financing Murabahah where it is fully secured by the assets. Third, the TIBAB is relatively new on the market compared to conventional banks. It cannot afford to suffer losses and undermine the general reputation of the Islamic banking system.

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 2272 – 2278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.6048

The bank's performance and the solvency risk between 2000-2010 and 2011-2020 showed that participation of TIBAB in risky businesses, as measured by the debt-to-equity ratio (DER), the ratio of total debt (DTA), the multiplier clean background (EM) and the loans to deposits (LDR) ratios, decreased over years. Both DER and LDR ratios are statistically significant at 10% and 1% although showed a deterioration of risk. In contrast, the ratio of DTA and MS are not statistically significant. The average DTA and EM dropped from 0.04 to 0.012 and from 3.59 to 1.68 respectively.

All risk and solvency measures recorded by TIBAB bank are not statistically significant. Then, our results depicted that the TIBAB is less risky and solvent company. The averages of DER, DTA, EM and LDR of TIBAB are lower compared to those of the classical banks with 16,107(40,346), 0,962 (0,964), 16,733 (43,538) and 0.504 (0.729). The F-test suggests that the null hypothesis of the equality of the two averages for TIBAB and the group of eight banks is rejected. This implies that these performance measures are not equal. That is why we can conclude that the TIBAB exhibits a weak risk. TIBAB bank's investments in government securities are much larger than those of the conventional ones. Furthermore, TIBAB has more stockholders' equity compared to the assets represented by its EM. The increase in the stockholders' equity indicates a greater capacity to absorb shocks for the Islamic bank. It has better resilience to cope with a greater amount of credits or losses on loans granted compared to banks with less capital on their balance sheet. Nevertheless, the lack of data concerning the loan-loss provision and non-productive loans in the Islamic and conventional banks prevents us to draw more conclusive results.

Conclusion

The previous empirical analysis allows us to shed some light on the financial performance of the TIBAB for the period 2000-2010 as well as its position in comparison with the conventional banks in Tunisia. The study of various measures of financial performance and their inter-temporal change of TIBAB revealed that the bank showed a statistically difference in performance. This result can be attributed to the period chosen, where during the period 2011-2020, the TIBAB has made a great development raise in terms of growth of banking net profit (BNP) which reached 14.5 16.3 million Tunisian dinars (TND) in 2011 against 16.3 million Tunisian dinars (TND) (increase by 12.4%). Furthermore, the results obtained by the interbank analysis show that the level of profitability of the TIBAB is different compared to conventional banks. The profitability ratios show that the TIBAB is lower than the nine conventional banks. Regarding liquidities, this study reveals that the TIBAB seems to be statistically more liquid in the intertemporal and interbank analysis. In other words, the TIBAB was more liquid for the period 2000-2010 and maintained a better level of liquidity compared to the conventional banks. The solvency risk measures between 2000-2010 and 2011-2020 revealed that the risk of TIBAB decreased over this period. Other measures also showed a risk of deterioration, but are not statistically significant. Comparable results were obtained regarding conventional banks, where the TIBAB is relatively less risky and more solvent. This implies that the latter is much more liquid and thus exposed to a less liquidity risk than conventional banks.

References

Akkas, A. (1996), "Relative efficiency of the conventional and Islamic banking system in financing investment", Ph.D. dissertation, Dhaka University.

Arif, M. (1989), "Islamic banking in Malaysia: Framework, performance and lessons", Journal of Islamic Economics, Vol. 2 No. 2, pp. 67-78.

Ausaf, A. (1987), Development and Problems of Islamic Banks, Islamic Research and Training Institute and Islamic Development Bank, Jeddah.

Haron, S., Shanmugam, B. and Doran, H. (1997), "Determinants of Islamic bank profitability", Ph.D. dissertation, available at: https://hdl.handle.net/1959.11/6691

Hassan, M. K. (1999), "Islamic banking in theory and practice: The experience of Bangladesh", Managerial Finance, Vol. 25, pp. 60-113

Iqbal, Z. and Mirakhor, A. (1999), "Progress and challenges of Islamic banking", Thunderbird International Business Review, Vol. 41 No. 4-5, pp. 381-405.

Kader, J. M., Asarpota, A. J. and Al-Maghaireh, A. (2007), "Comparative financial performance of Islamic banks vis-à-vis conventional banks in the UAE", in Proceeding on Annual Student Research Symposium and the Chancellor's Undergraduate Research Award, available at: http://sra.uaeu.ac.ae/CURA/Proceedings (Accessed 10 December 2024).

Kazarian, E. G. (1993), Islamic versus traditional banking: Financial innovations in Egypt, Westview Press, Oxford.

Journal of Ecohumanism
2025
Volume: 4, No: 1, pp. 2272 – 2278
ISSN: 2752-6798 (Print) | ISSN 2752-6801 (Online)
https://ecohumanism.co.uk/joe/ecohumanism
DOI: https://doi.org/10.62754/joe.v4i1.6048

Mannan, M. A. (1968), "Islam and trend in modern banking: Theory and practice of interest-free banking", Islamic Review and Arab Affairs, Vol. 56, pp. 11-12.

Meister, D. and Elyasian, E. (1994), "An empirical test of association between production and financial performance: The case of the commercial banking industry", Applied Financial Economics, Vol. 4, pp. 55-59.

Neifar, M. and Gharbi, L. (2023), "The Tunisian Islamic and conventional banks: A performance comparative study", Islamic Economic Studies, Vol. 31 No. 1/2, pp. 152-175.

Rosly, S. A. and Bakar, M. A. A. (2003), "Performance of Islamic and mainstream banks in Malaysia", International Journal of Social Economics, Vol. 30 No. 12, pp. 1249-1265

Sabi, M. (1996), "Comparative analysis of foreign and domestic bank operations in Hungary", Journal of Comparative Economics, Vol. 22 No. 2, pp. 179-188.

Samad, A. (1999), "Comparative efficiency of the Islamic bank vis-à-vis conventional banks in Malaysia", Journal of Economics and Management, Vol. 7 No. 1, pp. 1-27.

Samad, A. and Hassan, M. K. (2006), "The performance of Malaysian Islamic banks during 1984–1997: An exploratory study", International Journal of Islamic Financial Services, Vol. 1 No. 3.

Sarker, M. A. A. (1999), "Islamic banking in Bangladesh: Performance, problems, and prospects", International Journal of Islamic Financial Services, Vol. 1 No. 3, pp. 15-36.

Van Greuning, H. and Iqbal, Z. (2007), Risk analysis for Islamic banks, The World Bank.

Wibowo, E. and Saptutyningsih, E. (2004), "Analysis of performance of Bank Muamalat Indonesia and Bank Syariah Mandiri", Journal of Economic Study, Vol. 5 No. 1, pp. 20-25.

Widagdo, A. K. and Ika, S. R. (2008), "The interest prohibition and financial performance of Islamic banks: Indonesian evidence", International Business Research, Vol. 1 No. 3, pp. 98-109.

.