

Comparative Financial Performance of Islamic and Conventional Banks in a Non-Muslim Country

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Abstract

This study examines and compares the financial performance of Islamic banks and conventional banks in Tanzania. The study uses univariate analysis to compare performance ratios for seven (7) years from 2013 to 2020. The study applies t-test to examine whether profitability, liquidity, and credit management ratios are different between Islamic and conventional banks. It was found that conventional banks outperform Islamic banks in Tanzania. Islamic banking is a recent phenomenon in Tanzania and the environment does not support its development as Tanzania is not an Islamic country and does not fully support the nature of Islamic bank operations due to the fact that some of its policies and laws are not in alignment with Islamic banking activities. Hence, it can only transact a limited number of products.

Keywords: Islamic, Conventional, Banks, Financial Analysis, Ratio, Shariah

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1. Introduction

Although there has been a rapid growth in Islamic banking around the world (Alam & Boon Tang, 2012), Islamic banking in Tanzania has not shown similar developments. Since the launch of its first Islamic banking product or window in 2008 by Kenya Commercial Bank, several other banks have opened an Islamic window thereafter. It was not until 2011, Amana Bank was established as the sole fully operational Islamic bank in Tanzania. However, Amana Bank could not stay competitive because of various operational and regulatory challenges it faced. In recent years, Amana Bank has reported a net loss of TZS 1.1 billion compared to similar medium size (tier 2) conventional banks that on average reported a net profit of TZS 73.75 billion by September 2023 in total (Christopher, 2023).

The losses have been mostly associated with operational challenges faced by Islamic banks in Tanzania. There is a lack of alignment between the policies and laws in Tanzania and the operations of Islamic banks. Furthermore, the lack of proper regulatory and supervisory guidelines on Islamic finance hinders the development of Islamic banking (Dolgun et al., 2019). Additionally, Islamic banks' income sources are limited to fees and commissions due to the absence of Shariah compliant liquidity instruments and interbank deposits (Rassool, 2018). Lastly, there is lack of knowledge and understanding of Shariah compliant products.

Islamic banking promotes and develops the practice of Islamic principles and laws related to all financial transactions and business affair. In the course of their operation, they avoid excessive speculative or untruthful transactions which can have adverse economic and social effects on the nation (Zuhaylī et al., 2011). This helps to promote a balance between social and economic justice dedicated to eradication of poverty (Beatus et al., 2013). Islamic banks share profits and losses with their customers. This profit-loss sharing builds customer confidence to start new projects that may generate more profit and reduce poverty.

This study was mainly motivated by the recent performance of the only fully-fledged Islamic bank, Amana

© IIUM Press Article history Received: 26 March 2024 Accepted: 28 June 2024 Bank, facing operation challenges in a non-Muslim country setting. It is therefore important to examine performance differences between Islamic and conventional banking, which may be caused by these challenges so that policy makers can propose policies that are more conducive for fully fledged Islamic banking to operate and perform well.

Empirical literature on Islamic banking is fairly well documented. However, limited studies have been conducted in non-Muslim countries. Studies focused on banks in Tanzania compared performance of the largest listed bank (CRDB) with a medium tier, unlisted bank (Amana Bank), which operates in different environments. This is contrary to the principles of financial analysis, where a comparison of firms should not only be based on the same industry but also the firm size as well. Other conceptual studies, such as that of Al-Tamimi et al. (2009) have compared Islamic and conventional banking to identify similarities, differences, and awareness of the products offered. However, this study focusing on distinguished features of Islamic banking in Tanzania, as some people have perceived Islamic banking as not being Islamic (Chalu, 2014). In addition, the Tanzanian environment poses both legal and governance challenges. For instance, legal framework and accounting standards are not supportive. Therefore, conducting a comparative study between Islamic and conventional banks will benefit researchers, policy makers and investors who are thinking of opening Islamic banks in Tanzania. This study therefore contributes to the literature on Islamic banking performance in non-Muslim countries.

This paper compares the performance of Islamic and conventional banks in three aspects: profitability, liquidity, and credit management ratios. The study is important to the Islamic community, the Bank of Tanzania (BOT) and policymakers, as it provides insights on Islamic banks' performance in Tanzania. The study contributes the following to the extent literature. First, it contributes to the existing literature on the challenges faced by Islamic banking operating in non-Muslim countries. Second, it contributes to the finance literature on the performance differences between Islamic and conventional banking in three aspects: namely profitability, liquidity, and credit management.

This study limits its scope to three (3) financial performance measures. These are profitability, liquidity management, and credit risk management. In profitability, Return on Assets (ROA), Return on Equity (ROE), and Cost to Income Ratio (CIR) are used. In measuring liquidity management, Loan to Asset Ratio (LTA), Loan to Deposit Ratio (LTD), Liquid Asset to Deposit Ratio (LATD) are analysed. Credit risk management has commonly used measures such as Equity to Asset Ratio (EQTA), Equity to Loan Ratio (EQL), Impaired Loan to Gross Loan (IMLGL) consistent with various scholars (Uddin et al., 2017; Wasiuzzaman & Gunasegavan, 2013; Zuhaylī et al., 2011). The next section provides the historical background of Islamic banking, then reviews prior literature on the comparative analysis between Islamic and conventional banking. Then, following it is a section on the methodology applied in this study, presentation of the results, and discussion. The paper concludes with a summary of the findings and recommendations regarding the enhancement of financial performance in Islamic banks.

2. Development of Islamic Banking

Islamic banking refers to Shariah banking, interest free banking, ethical and participative banking that follows, or complies with, Islamic principles, which alters its money lending into transactions based on palpable assets and actual services. It also refrains from immoral and illegal activities. It follows Shariah called *fiqh muamalat* (Islamic rules on transactions) which originates from the Quran and Sunna and other secondary sources of Shariah, for instance, personal reasoning, analogy and Islamic scholars' consensus.

Although Islamic banking is a phenomenon that has only appeared recently, it is as old as the Islamic religion itself. All its principles, rules and laws are derived from the Quran, which was divulged 1440 years ago. The first attempt to entrench an Islamic bank was in the 1950s which was established in the rural area of Pakistan (Obaidullah, 2005). At the early stages, Islamic banks were established for different purposes. For instance, some were established to fund the governments, for saving purpose to perform Hajj and encouraging social and economic development of its member countries (Fayed, 2013). In addition, the early Islamic banks were publicly owned until 1975, when the first Islamic private bank was established. In recent years, non-Islamic countries/banks have also resorted to Islamic banking by opening an Islamic banking windows which provides resistance to the financial crisis (Islamic Financial Services Board, 2017).

The surge of the Islamic banking prompted the need for regulating institutions. Therefore, in 1991, the Accounting and Auditing Organisation for Islamic Financial Institutions (AAOIFI) was established to enhance

the development of Islamic banking and to promote Shariah standards and principles. It is required to be followed by the financial institutions operating under the laws and rules of Islamic banking and all other participants under the Islamic banking industry. In 2003, the Islamic Financial Services Board (IFSB) was established to determine standards and guidance for institutions that regulate and supervise Islamic financial services. This was done to ensure that these supervisory agencies adhere to the principles of Shariah.

In Tanzania, Kenya Commercial Bank (T) was the first bank to be licensed by the Bank of Tanzania (BOT) to open an Islamic window to provide Shariah compliant products and services, followed by the National Bank of Commerce and Stanbic Bank which launched an Islamic window in 2010. In 2011, the Peoples' Bank of Zanzibar opened its first Islamic banking division in Zanzibar. During the same year, AB became the first fully fledged Islamic bank to operate in Tanzania.

3. Operations and financial performance of conventional and Islamic banking

3.1 Operational performance

Islamic banking follows Shariah principles. The Quran verses prescribe how Muslims should do their transactions, as in Surah Al Baqarah, Verse 275: "Allah has permitted trade and has forbidden usury (*riba*/interest)", and Surah Al Nisa, Verse 29 "O you who believe, eat not up your property among yourselves in vanities; but let there be amongst you traffic and trade by mutual goodwill". As prescribed by the Quran, it prohibits interest in any financial transaction. The main reasons are because it is unfair, it corrupts the society, creates unlawful appropriation of other people's property, results in a negative growth and it diminishes human personality.

Islamic principles, which originate from Shariah operates Islamic banking. Shariah "*it refers to the God's law, sacred and unchangeable principles and values revealed in the Quran and the example (Sunnah) of Mohammad*" (Esposito & Delong-Bas, 2018). There are two primary sources of Shariah. The primary sources; Quran and Sunnah and the secondary source; *ijma* and *qiyas. Ijma* means the common opinion of the learned Muslim scholars and *qiyas* means the legal reasoning where its main idea come from the Quran or Sunnah (Kunhibava & Rachagan, 2011).

Islamic banks operate differently from conventional banks, as their operations originate from Shariah, while conventional banks' operations originate from traditional ways of banking operations (Hanif, 2014). Islamic banks around the world operate in either of the following four structures. First, as a fully-fledged Islamic bank formed to provide only Islamic financial services. These banks operate under their own service delivery channels, and they have fully independent operating systems. They plan their own business strategies and policies under Shariah. Second, a conventional parent bank forms a subsidiary to provide Islamic financial services. The subsidiary may have its own dedicated service delivery channels or may use the delivery channels of the parent. Third, the Islamic bank operating as an Islamic window. In this model, a conventional bank provides Islamic financial services using their conventional and Islamic financial services. Last, is the branch model, which is like the windows model. However, Islamic financial services are offered through dedicated service delivery channels. This is when a conventional bank sets up a branch or several branches that provide only Islamic financial services (Mzee & Othman, 2020).

There are various theories on the operation of both Islamic and conventional banks. This study adopts the agency theory to understand the differences between Islamic and conventional banking. Agency theory is defined as a problem that arises when there is a conflict of interest between a principal and an agent who acts in his or her own interests without considering the interests of a principal (Jensen & Meckling, 1976). In the banking context, a principal is a bank, and an agent is a client who has the know-how and operates the business but does not have a capital (Ghayad & Hamdan, 2021). The agency problem applies to both Islamic and conventional banks. Islamic banking, however, can minimize this problem as it operates in profit-and-loss sharing and has the advantage of optimal risk allocation (Ke et al., 2011). Despite this advantage, Islamic banks still face the principal-agent problem, which arises because of asymmetric information, cost monitoring (Sarker, 1999) different objectives, and level of risk appetite between the bank and the client (Ghayad & Hamdan, 2021).

Islamic banks face difficulties in getting the insider information on the efficiency of activities, since borrowers may disclose partial information concerning the quality of their projects. Every borrower will claim success that may lead to adversative selection problems (Mills & Presley, 1998). High-risk projects or

businesses may be selected since they are the ones that may provide their inside information and those borrowers who will inflate their profit expectations hoping to be quoted a lower profit-sharing ratio by the bank (Nouman et al., 2019). This ensures that the borrowers do not deflate their profits. Islamic banks also spend extra expenses to verify the accuracy of borrowers' project or business profit claims. Therefore, this information asymmetry leads Islamic banks to face moral hazard problems.

i. Financial performance

Financial performance is the measure of the financial condition of a firm for a specified period. The most common method of measuring financial performance is conducting a financial analysis of the company on various aspects of its financial statement, such as analysis of its liquidity, capital adequacy, profitability, solvency, or market performance (Fatihudin, 2018).

There is an ongoing debate on the performance between Islamic and conventional banking. Some evidence shows that Islamic banks are sometimes better than conventional banks (Khasanjon, 2018; Usman & Khan, 2012) while others have found evidence that support that conventional banks may be superior (Rashwan & Ehab, 2016). Previous researchers have examined the management, functions, structures, operations, and performance to analyse the differences between the two banking structures.

Previous studies have argued that the functions of Islamic banking are not different from those of conventional banking. Although Islamic banks are Shariah compliant, mark up administrates their investment module lending (*Murahaba*) (Suzuki et al., 2017) and interest rate benchmarking is used to set pricing for their loans (Nouman et al., 2022). However, Beck et al. (2013) and many others found that Islamic banks differ from conventional banks in various aspects that have been widely investigated.

Other studies have used several measures to examine the performance of Islamic and conventional banks. Among these, Uddin et al. (2017) used capital adequacy, asset quality, management quality, earning ability and liquidity position using a CAMEL framework to compare bank performances. They found that there were no differences except for the management quality. The study compared 5 Islamic banks and 5 conventional banks using t-test for the periods between 2010-2014 in Bangladesh, making an annual comparison. This study used only four years' data and selected its sample randomly from a larger pool of banks without matching them to the size. Others found conventional banks to be more profitable than Islamic banks, although Islamic banks in Malaysia made the sector less risky and more efficient (Ibrahim, 2020). Ibrahim (2020) compared the efficiency, profitability and risk of Islamic and conventional bank using 16 Islamic and 21 conventional banks for the period 2003 to 2015. Khan et al. (2018) found that Islamic banking was better in profitability, liquidity and risk management.

ii. Profitability

Profitability is one of the most important objectives of any firm. However, it is a difficult element to evaluate and conceptualise (Ross et al., 2021). Profitability ratios portray the ability of a firm to generate revenues.

Comparative studies on profitability found that conventional banks are more profitable than Islamic banks in various countries, such as Oman (Bilal et al., 2016), Malaysia (Wasiuzzaman & Gunasegavan, 2013), United Kingdom (Onakoya & Onakoya, 2013), Egypt (Fayed, 2013), Pakistan (Hanif et al., 2012) and GCC countries (Hadriche, 2015). However, other studies found Islamic banks outperformed conventional banks. For instance, Tri Julian (2015) found that Islamic banks outperformed conventional banks in terms of Return on Asset (ROA). Similarly, Hadriche (2015) found that Islamic banks outperformed conventional banks using GCC countries in his sample. Other studies did not find any significant difference between Islamic and conventional banking (Sehrish et al., 2012).

Studies applied various measures and methodologies to analyse the performance of Islamic and conventional banks. The most common profitability measures used are ROA, ROE, and Profit margin (Bilal et al., 2016) compared to the banks' previous year's ratios, industry averages or with their competitors. However, their sample and analysis differ in size, duration, and counterpart. This could be the primary cause of the outcome of their results. In addition, comparison of firms needs not only be matched by year and industry but also by size (Fernández et al., 2019) to attain unbiased results.

iii. Liquidity Management

Measure of liquidity management in banking comprehends how fast a bank can meet its short-term obligation or if the bank will pay its obligations when due (Alkassim, 2005). Previous studies compared Islamic and conventional banking to identify which category is better off in managing liquidity risks. Hanif et al. (2012) who applied different ratios in comparing the liquidity, found that conventional banks are more liquid compared to Islamic banks. Onakoya and Onakoya (2013) and Fayed (2013) found similar results when they examined liquidity superiority between Islamic and conventional banking in the United Kingdom and Egypt, respectively.

However, the results were inconsistent with that of Wasiuzzaman and Gunasegavan (2013), who found that Islamic banks were better in terms of liquidity compared to conventional banks. The study was conducted between 2005 and 2009, using a sample of five (5) Islamic and nine (9) conventional banks in Malaysia. The study used descriptive statistics to understand the difference in characteristics and t-test to show the significant differences in comparing the liquidity between Islamic banks and three (3) conventional banks. Similarly, Usman and Khan (2012), who used t-test to compare three (3) Islamic banks and three (3) conventional banks. Also, the results were like those of (Tri Julian, 2015) who conversely conducted a comparative analysis of financial analysis between Islamic and conventional banks from 2004 to 2016 in Indonesia in terms of LDR.

Although Islamic banks seem to be more cost-effective in terms of liquidity, conventional banks outperformed Islamic banks in meeting their financial obligations on time as they have invested in short-term instruments such as the Treasury bill which is not easily liquidated. Islamic banks could not be superior since they could not invest in Treasury bills because they are interest-bearing instruments and they use assets like *Murabaha* which could not be converted easily into cash with a fixed duration.

The above studies show that conventional banks perform better than Islamic banks in terms of liquidity. Others concluded that there were no significant differences in terms of liquidity (Moin, 2008). In a study conducted in Tanzania, Peter (2017) used a CAMEL framework and concluded that conventional banks are better in terms of liquidity compared to Islamic banks. However, the comparison was based on banks of different sizes in terms of total assets.

iv. Credit Risk Management

Credit risk management is the practice of mitigating losses by understanding the adequacy of a bank's capital and loan loss reserves. It is a risk that a bank faces when a borrower cannot pay either partial or the total debt, that is a principal or interest, or both. Credit risk management is conducting a thorough analysis of a customer by assessing the correlation between the capital of a bank and reserves for loan losses at any period to manage the risk of a default (Afriyie et al., 2018). Credit risk management ratio analyses the performance of a bank by identifying the number of customers who have defaults from lending activities of a bank (Sufian, 2007).

Studies on credit risk management show that Islamic banks are dominating (Hanif et al., 2012) and are better at managing their credit risks and have low credit risks compared to conventional banks (Sehrish et al., 2012). However, conventional banks are better off in terms of credit risk management compared to Islamic banks. The ratios used were equity to total assets, equity to loan, and impaired loan to gross loan ratio.

3.2 Hypothesis development

Also, lack of legal support, negative perception of people towards Islamic banks, few specialists in the field and the accounting and auditing standards pose as challenges for an Islamic banks to flourish to suit the operation of Islamic banks. Therefore, their performance may not be similar or superior to that of conventional banks.

Comparative studies have mixed results on which banks had higher profits. Some studies found that conventional banks were more profitable (Bilal et al., 2016; Hadriche, 2015; Wasiuzzaman & Gunasegavan, 2013). Others found that Islamic banks were more profitable (Tri Julian, 2015) while some others did not find any significant difference (Sehrish et al., 2012). The hypothesis presented here is:

H1: There is a significant difference in financial performance between Islamic and conventional banking in Tanzania in terms of profitability.

In comparing the liquidity, researchers found that conventional banks are more liquid compared to Islamic bank (Fayed, 2013; Hanif et al., 2012; Onakoya & Onakoya, 2013). However, the results were inconsistent to that of (Usman & Khan, 2012; Wasiuzzaman & Gunasegavan, 2013), who found that Islamic banks were better in terms of liquidity compared with conventional banks. Others concluded that there were no significant differences in terms of liquidity (Moin, 2008). The hypothesis presented here is:

H2: There is a significant difference in financial performance between Islamic and conventional banking in Tanzania in terms of liquidity management.

Comparative studies in credit risk management show that Islamic banks are dominating (Hanif et al., 2012). Although, conventional banks are better off in the managing of credit risks. The hypothesis presented here is:

H3: There is a significant difference in financial performance between Islamic and conventional banking Tanzania in terms of credit risk management.

4. Conceptual Framework

Figure 1: Conceptual framework - Islamic Vs conventional banking performance



5. Research Methodology

5.1 Data and sample selection

The study used secondary data obtained from individual banks annual reports for the period of seven (7) years starting from the year 2014 to 2020. There are nineteen (19) medium-size banks in Tanzania, according to Ernst & Young banking sector overview report (Ernst and Young LLP, 2023). Their total assets range from 7 billion to 250 billion. Only one bank, Amana Bank, is a full-fledged Islamic bank in Tanzania. The study excluded three (3) banks from our analysis; PBZ, Stanbic and KCB as they operate Islamic window in their banks. In addition, DCB is removed as it is listed in the Dar es Salaam Stock exchange. In addition, the study compares Amana Bank with the average of the remaining fifteen (15) banks in the sample selection, as in Table 1. Using the average provides more stable results, as the exact match by the total asset amount for Amana Bank could not be obtained.

Description	Number of banks
All medium-size banks	19
Remove Amana full-fledged Islamic	1
Remove banks with Islamic window	3
Total	15 anks

Table	1.	Sample	se	lection
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5.2 Data Analysis

The study conducted financial ratio analysis and later applied univariate analysis to examine whether profitability, liquidity, and credit risk management ratios are statistically different between Islamic and conventional banking. For each of these three categories, three ratios were calculated. First, return on asset, return on equity and cost to income ratio were used to compare the profitability. Secondly, loan to asset ratio, liquid asset to deposit ratio and loan to deposit ratio were used for liquidity. Finally, credit risk management used equity to total assets, equity to loans and percentage of impaired loans. The ratios were then compared using t-test to evaluate whether there was a significant difference between the means of these two categories of banks in terms of profitability, liquidity management and credit risk management. The following variables were tested.

i. Profitability

Return on Asset (ROA) is a ratio which shows how effective a company or bank is in using its assets to generate returns. It is one of the main ratios used to measure whether a bank is profitable. Higher ratios indicate that the bank can generate more profit from investments in its assets. This ratio is determined by dividing net income by the total assets of a bank.

Return on Equity (ROE) shows the ability of a bank to generate profit from the shareholders' equity. It can be calculated by dividing the net income with shareholder's equity. Higher ratios indicate that a bank can generate more profit from its shareholders' funds.

Cost to Income Ratio (CIR) is a ratio which shows the relationship between the cost and income of a bank. This ratio is interpreted as the cost incurred per income generated and calculated by dividing Non-Interest Expense to Gross Income.

ii. Liquidity Management

Loan to Asset Ratio (LTA) shows the amount of the asset tied up in loans, meaning it measures the total loan the bank has provided as a percentage of the total assets of the bank. Higher ratios show the bank is illiquid because it has provided most of its cash as loan and therefore may not meet its current obligations.

Loan to Deposit Ratio (LTD) measures the liquidity of a bank, which is calculated by dividing the total loan to the total deposits of a bank. This ratio shows how well a bank can cover its loan losses and withdrawals by customers. Higher ratio shows the bank has low liquidity, since it uses most of its deposits to provide loans. It can also show whether the bank is at a high risk of default from the loans which have been provided.

Liquid Asset to Deposit Ratio (LATD) shows how liquid the bank is, which is funded by deposits rather than debts. This shows if a bank is liquid enough in terms of assets but funded by deposit from the customers and not otherwise. A higher ratio shows a bank has more liquid assets funded by deposits and hence a bank is liquid enough to meet its short-term obligations.

iii. Credit Risk Management

Equity to Asset Ratio (EQTA) is used to assess the credit risk management of a bank, which assesses the amount of equity used to finance the assets of a bank. It measures the amount of capital with which the bank must finance its assets. It also represents the percentage of protection that a bank provides to its assets and investments. The higher the ratio, the greater the bank can sustain its loan losses, that is the better the bank can finance its loan asset losses. The ratio is calculated by dividing the total equity with the total asset of the respective banks.

Equity to Loan Ratio (EQL) is used to assess the credit risk management of a bank, which assesses the amount of equity used to absorb the loan losses of a bank. It measures the amount of capital the bank has to finance its loan losses. It also represents the percentage cushion a bank must absorb its loan losses. The higher the ratio, the greater the bank can sustain its loan losses, that is the better the bank can absorb its loan losses. It can be calculated by dividing the total equity with the net loan of the respective bank.

Impaired Loan to Gross Loan (IMLGL) measures the percentage of impaired loans found in the gross loans of a bank and calculated by dividing the impaired loan with the gross loan. A higher ratio shows the bank has a high percentage of impaired loan, while a low ratio shows a bank has a low percentage of impaired loans. A low impaired loan to gross loss indicates that the bank may have low credit risk.

6. Results and Discussion

Table 2 shows the descriptive statistics of both Islamic and conventional banks in Tanzania. The descriptive statistics include mean, which is the average of the ratios for seven years from 2014 to 2020.

Variables	Islamic N= 7				Islamic N= 7 Conventional N= 99					
	Min	Мах	Mean	Std. Dev	Min	Max	Mean	Std. Dev	F	Sig. (2- tailed)
ROA	-0.033	0.005	-0.005	0.015	-0.129	0.044	-0.010	0.035	3.712	.740
ROE	-0.269	0.047	-0.044	0.126	-1.874	0.287	-0.078	0.290	1.376	.760
CIR	0.291	0.547	0.382	0.085	-0.712	2.041	0.379	0.282	2.064	.981
LTA	0.643	0.701	0.670	0.020	0.186	0.755	0.493	0.123	8.149	.000
LTD	0.726	0.810	0.777	0.028	0.329	2.097	0.866	0.277	5.003	.003
LATD	0.266	0.350	0.298	0.028	0.229	2.887	0.591	0.304	3.161	.013
EQTA	0.098	0.134	0.112	0.012	0.000	0.765	0.166	0.090	2.380	.119
EQL	0.144	0.204	0.168	0.020	0.000	3.106	0.382	0.355	2.119	.115

Table 2: Descriptive statistics and independent t- test

a. Profitability

In terms of ROA, on average, both Islamic and conventional banks are not generating adequate return for their asset invested. A conventional bank, on average, is generating a loss of TZS 0.01 shilling compared to an Islamic bank, which generates a loss of TZS 0.033 per shilling of asset invested. Similar results are observed in ROE, as both conventional and Islamic banks are losing their shareholders' money. However, the results show that conventional banks are losing more of their shareholders' money (TZS -0.078) per shilling invested compared to Islamic banks (TZS -0.044) per shilling invested by shareholders. The average CIR of Islamic and conventional banks is 38.2% and 37.9%, respectively, which means that conventional banks are better in terms of CIR compared to the Islamic counterparts. This shows that Islamic banks incurred a cost of TZS 0.382 per shilling of income generated, while conventional banks incurred a cost of TZS 0.379 per shilling of income generated. Hence, Islamic banks use more costs in generating income while conventional banks use less cost in generating income and therefore, conventional banks operate more efficiently compared with Islamic banks.

Overall, the results on profitability show that there is no significant difference between Islamic and conventional banks on ROA. Both generate a similar level of returns from their assets throughout the study period of seven years. These results are consistent to that of Samad (2004) and Tri Julian (2015). ROE shows similar results, whereby there is no significant difference in ROE between Islamic and conventional banking in terms of ROE. This means that Islamic banks and conventional banks generated similar levels of returns from shareholder equity during the study period, consistent with Samad (2004). Similarly, there is no significant difference between Islamic and conventional banks in terms of CIR. These results are consistent to that of Uddin et al. (2017) who conducted their research in Bangladesh and Samad (2004) who conducted his study in Bahrain.

b. Liquidity management

The average LTA of both Islamic and conventional banks are 67.0% and 49.3% respectively. This means that conventional banks are more liquid compared to Islamic banks. These results show that Islamic banks use most of their assets to provide loans. For every one shilling of Islamic banks' assets, TZS 0.673 is provided as a loan. Thus, making them less liquid compared to the conventional banks that provide only TZS 0.493 per one shilling of their assets. From Table 2, the t-test shows a significant difference between Islamic and conventional banks in terms of LTA. These results are contrary to that of Uddin et al. (2017) who conducted their study in Bangladesh.

The average LTD ratio of both Islamic and conventional banks is 77.7% and 86.6% respectively. This means that Islamic banking is more liquid compared to conventional banking because it uses fewer deposits to provide loans. From table 2, the t-test shows a significant difference between Islamic and conventional banking in terms of LTD. These results are contrary to that of Samad (2004) in Bahrain and Hadriche (2015) in GCC countries.

The mean of LATD ratio between Islamic and conventional bank is 29.8% and 59.1% respectively. This means that 59.1% of conventional bank's liquid assets are funded by customer deposits rather than other sources. This ratio is higher compared to that of Islamic bank, whose 29.8% of their liquid assets are funded by customers' deposits, and they utilize a small amount of their customer deposits to finance their short-term obligations. The t-test results show a significant difference between Islamic and conventional banking in terms of the LATD ratio. These results are contrary to that of Islam and Ashrafuzzaman (2016) and Hadriche (2015).

c. Credit Risk Management

On average, EQTA ratios of Islamic and conventional banks are 11.2% and 16.6% respectively. This means both conventional and Islamic banks are highly leverage at more than 80%. Conventional banks are financed by their own equity by only TZS 0.166 per one shilling of asset compared with Islamic bank, which has only TZS 0.112 of equity per one shilling. Thus, conventional banking is better at managing credit risk by using equity compared to Islamic banking, although both are highly leveraged. The mean of EQL ratio between Islamic and conventional banking is 16.8% and 38.2% respectively. This means that conventional banking has a higher ability to absorb loan losses using TZS 0.382 of equity per one shilling of loan loss compared to Islamic banks, which can use TZS 0.168 of equity per one shilling of asset to finance each loan loss. These results are consistent with Hanif et al. (2012).

7. Conclusion and Recommendation

This current study compares the financial performance between Islamic and conventional banks in Tanzania for seven years, from 2014 to 2020. The study focused on variables relating to profitability, liquidity management and credit risk management in comparing between these two categories of banks. To measure the three variables; profitability used ROA, ROE and CIR, liquidity used LTA, LTD and LATD, and credit risk management used EQTA and EQL. We extracted the data from the financial reports of the respective banks' websites to calculate their ratios.

The results were calculated in three steps. Firstly, the study conducted a financial ratio analysis. Next, the descriptive statistics were generated to showcase the mean, median, maximum, and minimum values for both banks. In order to determine if there is a significant difference between the means of Islamic and conventional banks, the final step involved calculating the t-test. On average, the results found the conventional bank was better than an Islamic bank in profitability ratios and liquidity management ratios, while Islamic banks are better at managing credit risk.

The results established that conventional banks make more profits, measured by ROA and ROE, compared with Islamic banks. However, the difference is not statistically significant between conventional and Islamic banks. In terms of cost to income ratio, conventional banks are better at managing their cost than Islamic bank and therefore retaining more income. The study also examined liquidity management ratios, whereby the results found out that there was no significant difference in terms of LTA and LTD, but there was a significant difference in terms of LATD, whereby the conventional banks outperformed the Islamic banks in this ratio. The credit risk management ratio showed no significant difference between Islamic and conventional banking.

The study concludes that Islamic banking is an emerging phenomenon and facing operational challenges in Tanzania. Among other factors contributing to this challenge are, unaligned policies and laws, lack of appropriate regulatory and supervisory guidelines on Islamic finance (Dolgun et al., 2019), absence of Shariah compliant liquidity instrument and interbank deposits (Rassool, 2018), lack of knowledge and understanding of Islamic finance (Islamic Financial Services Board, 2017).

To improve Islamic banking performance, the following recommendations should be considered. First, the government and other policy makers should introduce policies that fully support the operations of an Islamic bank in Tanzania. For instance, the Bank of Tanzania should allow the sale of more interest free products in Tanzania, such as investment products, to enable Islamic banks to diversify their income streams rather than relying solely on a limited number of sources, as they currently do. Second, increase public awareness of products and services offered by the Islamic banks and change the public perception on Islamic banking. Lastly, the Islamic community and banks should train their staff on Islamic finance to increase their knowledge and understanding.

This study has the following limitations. First, it is based on only one fully fledged bank compared to a group of conventional banks. Second, it has limited its analysis to three areas: profitability, liquidity, credit risk management ratios. More understanding of financial performance can be obtained by increasing the number of both groups; fully fledged Islamic banks and a group of conventional banks to gain better insights on their performance and broaden the analysis to other areas such as capital adequacy, efficiency and solvency ratios; and it should also include motivating factors such as customer behaviour and perception of Islamic in Tanzania. Whereas Islamic banking is still a fresh and emerging phenomenon in Tanzania, more studies should be conducted, to establish, amongst others, how Islamic banking should manage liquidity risk in Tanzania, the operation of Islamic banking and the role of Islamic banking in financial inclusion.

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