

A Study on Potential of Financial Inclusion through Islamic Banking in India



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The paper aims to study the feasibility of setting up of Islamic Banks in a developing country like India. This has been old topic of discussion and has undergone scrutiny many times. Countries in the middle east specially the GCC (gulf corporation council) have developed fully functional Islamic Banks. The concept of Islamic Banks dates back to the early 1900s with the very first bank being set up in Egypt. Since then the world has seen Islamic Banks evolve from purely retail banks to providing Liquidity management tools. In India the concept of Islamic Banking has not even sprouted in real sense. There are NBFC which work on the principle of the Shariah Law and have elements of Islamic Banking philosophy engrained in their framework. However the scope of having a fully functional establishment which is Shariah Compliant seem to be trodden with difficulties primarily from a legal standpoint. India has the 2nd largest Muslim population in the world 2010 and is expected to become the largest by 2050. With Ernst & Young estimating that Islamic banking assets would grow by an average of 19.7% a year to 2018, India is looking at an untapped Islamic financial market worth \$3 trillion (Ernst and Young, 2016) Conventional Banks in India don't function on the principle of interest free banking system. The Banking Regulation Act of India has categorically mentioned that no financial institution can function on the premise of an interest free financial framework. The researchers have tried to look at the efficiency and profitability of having such institutions in the country by carrying out a comparative analysis of top Indian Banks and Islamic banks. Secondary data from Bloomberg terminals were used for the purpose of study. Financial measures were statistically analyzed to come to a conclusive stand that Islamic Banks were more profitable as compared to their conventional counterparts. Recommendation of Inclusion of Islamic banking in India is done based on the comparison of performance financial ratios of the banks.

Keywords: Islamic Banking, Financial Inclusion, Banking, India

1. Introduction

Financial institutions like banks play an important role in the economy of a country. Growth for any economy depends on how stable the financial structure of its economy is thus financial performance of banks matter the most for an economy.

Dubai Islamic Bank- the world's first Islamic bank founded in 1975 triggered the growth for Islamic banks has been exponential. Since its inception, countries like Iran, Pakistan, Sudan and Malaysia have started offering Islamic products or Sharia compliant products along with the usual conventional banking structure.

Unlike the conventional banking system, Islamic banking has an interest free system. "Riba" or interest is an important feature of Islamic Banking Institutions, but as a financial institution holds much more than just interest free banking. At the core of Islam is a feeling of collaboration, to help each other as indicated by standards of goodness and devotion (however not to participate in underhandedness or malignancy). Islamic banks believe in the concept of eliminating misuse and help construct a society by incorporating Shariah or Islamic decisions in banking and monetary foundations. Islamic banks operate in the same way as conventional banks do, except that they have to operate within the ambit of Muslim law called "Shariah". Shariah law has been extracted derived from the Islamic religious precepts of the Quran and Hadith (texts pertaining to actions, words and habits of Prophet Mohammed).

Nasir Social Bank was the first Islamic bank experiment in Mit Ghamr, a town located in Egypt under the cover of a savings bank but there was no mention or reference of Islam. (Ready, 1981). The concept is based on a verse of the Holy Quran that states that only legitimate trade is allowed and prohibits any sort of activity that involves interest.

Objectives of Present Study

The present study has been undertaken with following objectives:

1. Differentiate Islamic banks from conventional banks
2. Calculating and interpreting financial ratios of conventional banks and Islamic banks.
1. Based on the above ratios propose suggestions for Islamic banking system in India

2. Islamic Banking in Practices

A plethora of research has been conducted to study the structure, operation and the management of Islamic bank. **Murjan and Ruza (2002), Turen (1995), Islam (2003), Essayyad and Madani (2003)** have worked extremely close. The research delved in to literature pertaining to Islamic Banks to substantiate understanding of the evolution working and the principle that guide the functioning of Islamic Banks.

Islam and the theory of Bank, a book written by Qureshi highlighted the aspect of social service that needs to be propagated by institutions like banks. He was the one believed that banks and respective stakeholders need work in partnership. However he never mentioned or discussed anything about the concept of profit sharing. **(Qureshi, 1946)**

Ahmad in his book Economics of Islam had a similar thought of line as Qureshi where he saw the possibility of having financial institutions in partnerships with their stakeholders with negligible liability. There were two separate accounts that he had emphasized on. One was the current account where the depositor need not pay any interest nor was the bank liable to pay any dividend. Second involved an account which contribution of capital based on partnership. **(Ahmad 1987)**

Siddiqui in his literature has defined in his model of Islamic Banks the concept of *mudaraba* and *musharaka*. He went ahead to describe the various technicalities and functionalities of Islamic Banking System. The thesis that he proposed was the Islamic Banking could be an alternative to Conventional Banking System. **(Siddiqi 1968)**

Mohsin was one of the first few to venture into the framework of Islamic Banking in the modern scenario. The model of Islamic Banks he describes of incorporates the finer aspects of conventional banking. Many non-banking services were also a part of the model that he described and fed in the optimism of the co-existence of both Islamic and Conventional Banking systems. **(Mohsin, 1982)**

Most of the studies that revolved around Islamic Banking harped on the basic principle of interest free banking. It was Chapra who tried to move beyond interest and study finer aspects of Islamic Banking. He highlighted the fact that Islamic Banks will have start differences in their modus operandi as compared to Conventional Banking System. Interest Free or outlawing of *Riba* as termed by Islamic Banks was just one aspect of Islamic Banking, instead banks should be seen as institution of social welfare. He envisaged the fact that Islamic Banks will emerge as an assimilation of financial institutions from commercial banks to financial institutions which would host a wide spectrum of financial services to their customers. **(Chapra, 1985)**

Further studies have also ventured into the realm of Islamic financial principles.

The first and the most important principle is the prohibition of interest or *Riba*, regardless of its form or source. The whole concept of abolishing interest is that any form of credit that involves interest results in unequal distribution of money in a society. *Riba* is neither considered a reward received for a constructive activity nor a payment for taking risk. In Islamic banks the concept of profit and loss sharing overrides the concept of interest but under the banking model mark-up for delayed payments is allowed. Islamic banks operate by participating in the profits resulting from the use of the funds the bank has. The concept of interest is replaced by a concept of profit and loss sharing, but a mark-up for delayed payments is allowed under the Islamic banking model.

The second principle of Islamic Banking is Risk Sharing states that financial institutions like banks need to operate on profit/loss sharing arrangements. *Mudaraba* and *Musharaka* are the two most popular forms used by Islamic banks. In *Mudaraba* (Profit sharing) the Islamic banks receive funds public that invest in them. It is the banks prerogative to use the funds in any activity which they feel appropriate and is not forbidden by the Islamic law. The borrowers (entrepreneurs) are entitled to use the funds as they prefer based on the guidelines approved by the banks (*Misharaka*). The profit and loss is shared between the entrepreneur and the Islamic bank according to a pre-determined ratio. The profits and losses from different investments are pooled in by the bank from which a certain percentage of profit is shared with the depositors based on a pre-determined formula. The depositors and entrepreneurs are partners with the Islamic bank where the risk is shared in-between them.

Khan in his paper mentioned that carrying out trade is encouraged but profits that accrue to this trade must be an outcome of assuming a correct proportion of risk involved in carrying out the trade and having an equity stake. The whole idea is that profits shouldn't be earned without any risk through a loan which is collateralised. **(Khan, 2010)**

For Islamic banks there is primary dependence on equity financing and customer's deposits which includes current, saving and investments whereas conventional banks use equity and debt to finance their investments. **(Karim and Ali, 1989)**

In Islamic banks the current account is considered a safe keeping account wherein no interest is paid. Depositors are able to withdraw money at any point of time and have instant access to these accounts. Similar to saving account in conventional banks, savings account in Islamic banks are profit sharing arrangements which cannot be cashed in before a maturity date failure to which there is substantial penalty. The ratio of the profit sharing in savings type deposits is dependent on future profits but the expected returns are comparable to those that are present in the conventional savings deposits account.

Islamic Banks replace loans that are riskier than loans with secured interest with investments. Loans that are usually riskier than secured interest-bearing loans are replaced with investments in Islamic banking. Entrepreneurs requiring funds under investments vehicles like *Musharaka* and *Mudaraba* must provide with enough documentation of the feasibility of their projects before the funds are given.

The cost of capital in Islamic banks replaces the cost of debt and equity in conventional banks by profit and loss which is shared by depositors and equity holders. The concept of default risk in Islamic banks is not present as compared to conventional banks however if Islamic banks fail to reward their depositors it could result in large scare withdrawal of deposits increasing the risk of bankruptcy.

The Internal Association of Islamic Banks provide the rational used by Islamic Banks to use the profit and loss sharing over interest has been described by the Internal Association of Islamic banks (1995):

- As the return on capital is dependent on productivity, the efficiency of the allocation of investible funds is guided by the soundness of the project.

- The expansion of credit results in the creation of money and is only possible when there is a strong corresponding increase in the supply of goods and services. In case of a situation where there is a loss, the repayment of capital to the bank is reduced by the same amount as the loss. As a result of this kind of arrangement, the supply of money can never overstep the supply of goods and services thus reducing inflationary pressures in the economy.
- The interest mechanism of Islamic banks is structured in a manner where only those projects whose profits will cover both the interest rate and added income are chosen. This results in an increase in the volume of investments which further results in employment creation.
- Distribution of wealth is equitable in a system where Islamic banks function because wealth creation takes place only when it has been put to actual use.
- With the restriction of forward transactions clubbed with the abolition of interest, speculation is reduced marginally. But yet based on the principle of profit sharing a secondary market for trading of shares and other investment certificate exists.

3. India and the Islamic Banking System

It was under Dr. Raghuram Rajan in 2007 where the planning commission of India had formed a high level committee on financial sector reforms to provide one of the most important recommendations of the inclusion of interest free banking in India. (Raqeeb, 2010). The stance that the committee had taken was that an interest free banking system would be of help to the economically dis-advantaged segment of the society who do not have access to banking facilities in India. Mr. Duvvuri Subbarao had stated that the concept of having an interest free banking system is not possible as the banking principles being followed in India are based on interest payments however through a separate legislation Indian can witness the emergence of Islamic banks. (Khurram Ajaz Khan)

In the state of Kerala, significant development has taken place in the sphere of Islamic Banking. The Govt of Kerala has moved forward to form an Islamic Investment banking company called Al Barakah Financial Services Company, an NBFC under the Kerala State Industrial Development Corporation. This historic decision came forth after Ernst and Young an international consulting firm provided with a feasibility report. The only hindrance in converting this NBFC into a global Islamic Bank is the petition that was filed by Dr. Subramaniam Swamy which stated that the government of India stops the participation of Kerala Government. It is also required that the RBI amends the Banking Regulations to accommodate the nuances of Islamic Banking.

Though India hasn't seen the rise of Islamic banks it does have presence of Islamic Financial Institutions which are operating in India. The numbers are steadily increasing and according to 2013 statistics, have close to about 800 million in deposits. The Islamic financial banking institutions are registered and licensed under Non-Banking Finance Companies Reserve Bank Directives, RBI Amendment Act 1997 and work under the principle of Islam of profit and loss sharing and are not under the normal banking regulations. As stipulated earlier, the RBI does not allow interest free banking which is the core for Islamic banking.

The study conducted on the Financial inclusion of Muslim by TESIS (Taqwaa Advisory and Shariah Investment Solutions) concluded that the Deposits and the advances have increases continuously from the period 1998-2002. The annual growth rate of deposits was recorded at 18% while for advances the figure was 14.04% signalling a great potential for the growth of Islamic banking in India.

Dr Raghuram Rajan submitted a report in 2008 to the planning commission on financial sector reforms. It cited 3 main reasons

- The need for financial inclusion in India
- To raise growth itself
- To provide protection for the economy against any unprecedented events which might hinder the growth of emerging markets as well as provide financial stability and flexibility.

The committee in its report states that the presence of Islamic banks across India needs to be up scaled beyond what is being offered by financial institutions. The benefits of Islamic banking system are many fold and in a country like India, the access to financial resources is extremely less. The philosophy that drives Islamic banks resonates with the drive to have financial inclusion in the country. This, they state will be possible by creating a sound financial framework within the country. "Due to certain religious faiths, the large scale adoption of financial inclusion is difficult as instruments which bear interest cannot be used. Indian banking system does not permit financial products to be provided without interest thus the non-availability of such products causes some Indians who are economically disadvantaged to refrain from availing banking products and services."

Even though NBFC's provide interest free banking but their scale of operation is small and needs improvement for providing interest free products and services on a large scale. The Raghuram Rajan committee recommended the use of the regular banking system to enhance the scale of operation.

To the above mentioned proposal a working group constituted by the Indian Banking Association also published a report highlighting the pros and cons for installing the Islamic financial framework in the country. One of the primary amendment that would be required to be considered is aligning the Islamic banking system with the Indian Banking Regulation Act. The entry for Islamic banks would require the Indian government to have separate regulations and guidelines for the smooth functioning of the Islamic banks.

Needs of Islamic Banking in India

As mentioned across the study that has been conducted one of the primary benefits that Islamic banks hold for India is the financial inclusion of people who don't have access to financial resources. Islamic banks not only just have a segmented benefit to the Muslim Population in India but across geographies and religion for people who would want to avail the benefits that it has to offer. Some of the statistics that would help substantiate the far flung effects that it would have on the Indian Economy are mentioned below.

- Only 40% of household have bank accounts in India and only 38% of the bank branches of scheduled commercial banks in the rural areas function. **(Iqbal, B. A., & Sami, S , 2017)**
- Second largest religion in India with 14.2% of the population following Islam. **(Chandramauli, C. (2011).**
- It has been mentioned earlier that Islamic Banking aids in reducing inflation. Also with the framework in place, it will have accounts where accounts will be on participation basis between the investor and the entrepreneur.
- Indian economy would benefit from inflow of funds from the GCC (Gulf Cooperation Council) countries and will result in the inflow of funds as it would be influencing the foreign direct investment. **(Kurian Vinson, 2011)**
- With microfinance spreading its wings in the rural domain, an Islamic bank framework would help aid spread its presence with its interest free philosophy. **(Al Jarhi, et al., 2001)**
- It has also been stated that Islamic banking framework encourages the entrepreneurial spirit amongst individuals by providing them financial aid on the basis of profit and loss and risk sharing.
- Islamic Banking can work in consonance with Conventional Banking. There have been numerous financial crisis and it has been noted that Islamic Banks are led affected as compared to conventional banks. Syed in his paper has quoted that Islamic banks survive the US sub-prime mortgage crisis because it has a strong commitment towards credit rating systems and doesn't allow economic agents to avail any form of debt finance. This kind of an arrangement protects the economy. **(Syed Rahman, 2009)**
- Islamic Banking will revolutionise the field of agriculture and the unorganised sector because it will solve the problem related to both capital ratio and labour. This they propose to solve by equity finance. In a country like India which is agriculture intensive the capital labour ratio improvement will help the unorganised sector to be at par with the organised sector. This will prove to help financial disparity amongst Indian workforce community. **(YS Team, 2009).**

4. Research Methodology

Source of Data: The data for the study was obtained from various online databases. Bloomberg was used extensively for obtaining financial data of banks.

Banks under Study: The research attempted to study 5 Indian national banks and 5 Islamic banks. The 5 Indian banks were selected based on the research done by "embibe" as well as their asset size.

Table List of Indian Banks

INDIAN BANKS	ASSET SIZE (In USD Billion)
SBI	460
ICICI	109
PNB	96
AXIS	78
HDFC	66.7

Source: <https://www.embibe.com/exams/top-10-largest-banks-in-india/>

Global finance based on their study of Islamic banks rolls out a list of top Islamic bank contenders across different categories. Based on this research the following 5 Islamic banks were chosen.

Table List of Islamic Banks

ISLAMIC BANKS	Asset (in USD Billion.)
Maybank	164.1
Al Rajhi Bank	90.5
SAMBA	61.7
Kuwait Finance House	53.9
Dubai Islamic Bank	47.6

Source <https://www.gfmag.com/magazine/may-2017/best-islamic-financial-institutions-2017-winners-write-ups>

Time Line for Study

For every bank, 10 years of data from 2007 to 2016 was taken as shown in the table below.

Total Number of Banks as Sample for the study

Table Total Sample Size

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
Islamic	5	5	5	5	5	5	5	5	5	5	50
Indian	5	5	5	5	5	5	5	5	5	5	50
Total	10	10	10	10	10	10	10	10	10	10	100

Statistical Analysis

To proceed further researchers decided to derive appropriate ratios that can be taken for the comparison.

Segregation of Financial Ratios for Interpretation

The financial ratios used in the study as given in the table below. These ratios fall into 5 different categories namely profitability, efficiency, risk, asset quality and liquidity.

All meaningful comparisons across the Middle Eastern banking company have had focus primarily on profitability and bank efficiency. In a paper written by (Rosly and Abu Bakar, 2003) Return on assets, return of deposits and profit margin were studied to determine bank profitability. Return on equity (ROE) and Return on shareholder capital (ROSC) are the two other probability measures that the study has decided to incorporate. Based on the analysis of a couple of studies on Islamic banking, it has been noted that profitability ratios tend to be higher than those for conventional banks.

Demirguc-Kunt and Hizinga (1999) and Essayyad and Madani (2003) have focused on interest spread as the measure of efficiency for Islamic banks. The measure - Interest spread is on the similar lines of Net interest margin (NIM) and Interest income to expense ratio (IEE). For the study we have also included

- Net non-Interest Margin (NNIM)
- Operating expense to revenue (OER)
- Operating expense to asset (OEA)
- Net Operating margin (NOM)
- Interest income to expenses (IEE)
- Operating income to assets (OIA)
- Net interest margin (NIM)
- Asset turnover (ATO)

Based on the analysis of a couple of studies on Islamic banking, it has been noted that efficiency measures are lower for Islamic banks as compared to conventional banks.

In our study we have included another indicator – Asset quality. This particular indicator has the following measures

- Loan Ratio (LR)
- Loan to deposits (LTD)
- Provision to earning assets (PEA)

If the values of asset quality indicators are high it implies than the bank possesses higher reserves for emergences which are unforeseen and bad loans. There could be another explanation to high value i.e. the bank maintains reserves to protect itself from expected losses.

Further more liquidity ratios have been considered to evaluate the liquidity position of the banks to service their debts. Ratios like Cash to assets (CTA) and Cash to deposits (CTD) have been used in the study to determine these qualities.

If Islamic banks are perceived to be riskier than their conventional counter parts, it is assumed that these ratios will be higher as they will be more risk averse. Thus their financing will be focused towards equity rather than debt financing resulting in lower Total liabilities to equity (TLE) and Total liability to shareholders equity (TLSE).

The list of ratios used is given below

Table Defining Financial Ratio

Type	Ratio	Description	Defining Financial Ratios
			Formula
Bank Profitability Ratios	ROA	return on assets	net income/ average total assets
	ROE	Return on Equity	net income/ average stockholders' equity
	NOM	Net operating Margin	operating profit or income/ interest income
	ROSC	Return on shareholders capital	net income/ shareholder contributed capital
	ROD	Return on deposits	net income/ average total customer deposits
	PM	Profit Margin	net income/ operating income
Banks efficiency ratios	OEA	operating expense to assets	operating expenses/ average total assets
	OIA	operating income to assets	operating income/ average total assets

	NIM	net interest margin	(net interest income–net interest expenses) / average total assets
	ATO	Asset turnover	interest income/ average total assets
	IEE	Interest income to expenses	(interest income–interest expenses) / average total loans and advances
	NNIM	Net non-interest margin	(net non-interest income–net non-interest expenses) / average total assets
Asset quality indicator	LR	Loan ratio	average total loans and advances / average total assets
	LTD	Loans to deposits	average total loans and advances / average total customer deposits
	PEA	Provision to earning assets	provision for loan losses / average total loans and advances
Liquidity ratios	CTA	Cash to Assets	cash / average total assets
	CTD	Cash to deposits	cash / average total customer deposits
Risk Ratios	EM	equity multiplier	average total assets / average stockholders' equity
	ETD	equity to deposits	average shareholders' equity / average customer total deposits
	TLE	total liabilities to equity	average total liabilities / average stockholders' equity
	TLSC	total liabilities to shareholder capital	average total liabilities / shareholder contributed capital
	RETA	retained earnings to total assets	retained earnings / average total assets
	DTA	deposits to assets	average total customer deposits / average total assets

Hypothesis Testing

Hypothesis 1

H_0 - There is no significant difference between the profitability ratios of Islamic banks and Conventional banks

H_1 – Islamic Banks are more profitable than Conventional banks.

Hypothesis 2

H_0 – There is no significant difference between the efficiency ratios of Islamic banks and Conventional banks

H_1 - Islamic banks are less efficient than Conventional banks

Hypothesis 3

H_0 – There is no significant difference between risk for Islamic and Indian Banks

H_1 – Islamic Bank are more risky than Indian banks

Analysis

In order to evaluate the ratios, data derived from specific reports from Bloomberg for each bank was used.

- Each financial ratio for each bank was calculated using the data extracted from Bloomberg attached in the annexure.
- Mean value for Indian as well as Islamic banks for each ratio was calculated
- Similarly standard deviation for was calculated for the same.
- Using MS-EXCEL, the t-values and degree of freedom was calculated.
- Using the formula stated below, the t-values were computed.

$$t = (X_1 - X_2) / [(S_1^2/n_1) + (S_2^2/n_2)]^{0.5}$$

Where,

X_1 = Mean of financial ratios for Islamic Banks

X_2 = Mean of Financial ratios for Conventional Banks

S_1 = Standard deviation for Islamic Banks

S_2 = Standard deviation from Conventional Banks

n_1 = Number of observations for Islamic Banks

n_2 = Number of Observations for Conventional Banks

- Using the above computed values, the degree of freedom (df) is computed $df = [(S_1^2/n_1) + (S_2^2/n_2)]^2 / [(S_1^2/n_1)^2/(n_1-1) + (S_2^2/n_2)^2/(n_2-1)]$
- Using the t-value and the degree of freedom, p-value can be computed.
- The values are evaluated at 10% level of significance.
- The t-test for equality of means between the Islamic and Conventional banks was done. The t-test was done to estimate the statistical differences between the measures under study.
- The t-test that was carried out is based on the assumption that the measure under study are not of equal variance as some of the values of one set of data are twice as large as the other group.

The statistical analysis has been documented in the tabular format below

Table Statistical Analysis of Ratios

Variable	N		Mean		Standard Deviation		t-test	Degree of freedom	P-value
	Indian	Islamic	Indian	Islamic	Indian	Islamic	T-values		
Bank Profitability Ratios									
ROA	50	50	0.015	0.019	0.004	0.008	2.31	74	0.02368
ROE	50	50	0.152	0.175	0.044	0.047	2.57	98	0.01168
PM	50	50	0.608	0.612	0.032	0.035	0.59	97	0.55656
ROD	50	50	0.029	0.038	0.040	0.005	1.58	51	0.12029
ROSC	50	50	0.383	0.373	0.426	0.125	-0.15	57	0.88129
NOM	50	50	0.372	0.454	0.101	0.085	4.41	95	0.00003
Bank Efficiency Ratios									
IEE	50	50	-0.012	0.029	0.100	0.110	1.95	97	0.05406
OEA	50	50	0.024	0.025	0.004	0.002	1.61	67	0.11210
OIA	50	50	0.018	0.019	0.005	0.005	1.04	97	0.300925
OER	50	50	1.387	1.357	0.803	0.660	-0.20	94	0.904739
ATO	50	50	0.033	0.031	0.003	0.005	-2.72	81	0.007986
NIM	50	50	0.027	0.017	0.045	0.011	-1.48	55	0.144579
NNIM	50	50	-0.006	-0.003	0.010	0.009	1.84	97	0.068826
Asset quality indicators									
PEA	50	50	0.011	0.012	0.006	0.005	1.00	97	0.319799
LR	50	50	0.589	0.596	0.034	0.046	0.86	91	0.392049
LTD	50	50	0.870	0.846	0.074	0.068	-1.67	97	0.098143
Liquidity Ratios									
CTA	50	50	0.071	0.064	0.028	0.030	-1.21	98	0.229219
CTD	50	50	0.095	0.121	0.088	0.119	1.24	90	0.218199
Risk Ratios									
DTA	50	50	0.602	0.661	0.299	0.189	1.18	83	0.241371
EM	50	50	7.014	8.002	3.637	3.017	1.48	95	0.142182
ETD	50	50	0.122	0.149	0.176	0.250	0.63	88	0.530327
TLE	50	50	12.342	12.090	1.637	1.017	-0.92	82	0.360271
TLSC	50	50	24.708	18.857	20.416	4.112	-1.99	53	0.051761
RETA	50	50	0.029	0.022	0.008	0.009	-4.33	95	0.000037

5. Conclusion

The following ratios have elucidated the objective where we have been able to prove that only financial ratios are sufficient enough to distinguish Islamic banks and Conventional banks.

Bank Profitability Ratios

Under this particular aspect of study, we have calculated ROA, ROE, PM, ROD, ROSC and NOM of which ROA, ROE and NOM have shown statistically significant p-values at 10% significance level.

The values are mentioned below

ROA (Islamic Bank) – 1.9% ROA (Indian bank) – 1.5%
 ROE (Islamic Bank) – 17.5% ROE (Indian Banks) – 15.2%
 NOM (Islamic Bank) – 45.4% NOM (Indian Banks) – 37.2%

Thus a comparative analysis of these significantly accepted measures concur with the literature review which states that the profitability ratios of Islamic bank are better when compared to conventional banks.

Bank Efficiency Ratio

Under this aspect, 7 different ratios were evaluated – IEE, OEA, OIA, OER, ATO, NIM and NNIM. The ratios differ but their difference is not as drastic as those shown by the profitability ratios. The ATO is slightly larger for the Indian banks as they rely on interest income earned through loans while the Islamic banks are less dependent on similar forms of fees and

commissions. Islamic banks rely more on non-interest income thus the value for NNIM is better for Islamic banks. Apart from ATO there was no other financial ratio which showed statistically a significant p-values at 10% significance level. Bank efficiency as a sole measure will not be able to conclusively determine if Islamic banks are less efficient than Indian banks as the ratios are mean of both the banks for different ratios are very similar.

Asset Quality Indicator

Under this indicator, 3 ratios were evaluated PEA, LR and LTD. The PEA is significantly smaller for Islamic banks signifying that Indian banks (conventional banks) maintain a higher reserve to cater to bad loan but alternatively Islamic banks can be assumed to be operating at higher risk as they maintain lower level of reserves for bad loans thus providing insufficient conclusion.

Liquidity Ratio

Under this aspect, 2 ratios were evaluated – CTA and CTD. Neither have shown any significance at 10% significance level but it can be concluded from both the ratios that Islamic banks maintain a higher cash reserve for deposits than conventional banks.

Risk Ratio

Under this aspect 6 ratios were evaluated – DTA, EM, ETD, TLE, TLSE and RETA. These ratios help in highlighting the difference in the operational characteristics for both the types of banks. For LTD, as compared to Indian banks, Islamic banks tend to extend more loans. According to the statistical analysis the difference has been measured at a significance level of 10% which implies that there is greater risk for Islamic banks. It is also noted that the TLSC is significantly smaller for Islamic banks. One of the probable reasons for this value is as Islamic banks depend highly on the initial shareholder capital thus reducing the value of TLSC for Islamic banks. This signifies that Islamic banks are less risky than conventional banks. Amongst all the ratios, RETA has the largest t-value. The RETA value for Islamic banks is comparatively lower at 10% significance which implies that profits are distributed rather than retained. RETA as compared to the TLSE ratio signifies a higher risk for Islamic banks. Also though the EM is larger for Islamic banks, but the value tends to be significant only at 15% significance level.

As ROE is a multiplicative factor of ROA and EM, the larger value of EM pushed the value of ROE higher, signifying that the usage of deposits as a leverage by Islamic banks results in a higher ROE. Even though there is higher risk, this risk gets shared amongst the depositors and the bank. This larger value of risk is also evident through ROD.

The study attempted to differentiate between Islamic and the Indian banks through the analysis of the financial measures which included profitability ratios, bank efficiency ratio, liquidity ratio, risk ratios and asset quality indicator. Through the detailed analysis the report is conclusive of the fact that these ratios are a good measure to understand and differentiate the functionality of both Islamic and Indian banks.

The feasibility of establishing a Sharia compliant bank in India purely based on financial measures can yield benefits to the economy however there are other external and internal factors which hinder the establishment of such banks in India. Based on the in-depth analysis of the literature that highlights the development of Islamic banks have states that majorly the problem in implementation lies in the banking laws framed for India under the Banking Regulation Act 1934. Few identified problems stated in the Indian Banking law are stated below.

- Law prohibits any bank to invest with its stakeholders on a profit loss sharing basis which is the core principle of Islamic Banking (Section 5 (b) and Section 5(c))
- Banks in India are not allowed to indulge in any sort of buying, selling or even bartering of goods.(Section 8)
- In Islamic Banking Law, Ijarah involves the use of property by Banks which is not allowed in the Banking Regulation Act.(Section 9)
- It is clearly defined in the Banking Regulation act Section 21 that interest of payment is the guiding principle of Indian Banking law which again defies the Shariah law.

Thus for Islamic bank to establish its presence in India, the Banking Regulation Act needs to be amended to incorporate the finer aspects of Shariah Law within its framework.

The study concluded and met the two objectives undertaken for the study

- Through secondary resources mentioned in the literature review, we have been able to highlight difference between Islamic and Conventional (Indian) Banks thus the first objective was validated.
- The ratios presented above have elucidated the objective where we have been able to prove that only financial ratios are sufficient enough to distinguish Islamic banks and Conventional banks.
- The discussion proposed Islamic banks in India should get presence for better financial inclusion like rest of the world and banking regulation law should be amended.

Practical Implication

Though RBI has taken its stand about the topic but researchers propose policy makers to relook at the policy for better financial inclusion in India. It will also encourage Indian Banks to get more investment for other Islamic countries and In turn contribute in economic development.

6. Limitations of the Study

1. The study covers only top 5 Indian Banks and Islamic Banks. It does not cover other Multinational Banks.
2. The ratios selected are limited and based on the proposed literature.
3. Study does not cover customer perception or banker's perception about the topic.

Scope for Future Study

1. The study can be taken forward by including more banks Indian and Multinational under the study.
2. The financial ratios for more number of years can be taken for the purpose of study.

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