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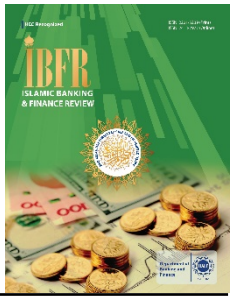

Title: **A Comparative Analysis of Profit Rates on Deposits in Islamic and Conventional Banks in Pakistan**

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A Comparative Analysis of Profit Rates on Deposits in Islamic and Conventional Banks in Pakistan

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Abstract

The study examined if there is a difference in the respective profit rate and interest rate offered by Islamic and conventional banks to their customers, respectively. The aim was to determine whether Islamic or conventional banks offer a higher return rate to their customers on deposits. It also aimed to analyze the relationship between inflation and profit rate on deposit, whether customers are in profit or loss in real terms. This study used data from five Islamic banks (IBs) and four conventional banks (CBs) operating in Pakistan. Monthly data ranging from January 2008 to May 2022 was collected through the websites of these banks. The analysis was carried out on saving account and one-year term deposit account of both types of banks, keeping in view the inflation rate in the economy. Moreover, t-test was used to check whether there was a significant difference in the monthly profit rates of Islamic and conventional banks. The study revealed that conventional banks offer higher returns to their customers on saving accounts, while Islamic banks offering higher returns to their customers on one-year term deposit accounts. The comparison of profit rates with inflation rate showed that both Islamic and conventional banks offer low returns on saving account to their customers. However, as far as on one-year term deposit account is concerned, IBs offer higher returns than the inflation rate, while CBs offer slightly lower returns than the inflation rate.

Keywords: conventional banking, Islamic banking, inflation, interest rate, profit rate

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Introduction

New techniques of business and marketing are rapidly evolving due to the expansion of financial services. Banking sector has transformed the dynamics for growth and administration of the economy across the globe. Before 1975, the financial sector functioned entirely on interest basis, which contradicted Islamic injunctions and was particularly displeasing for Muslims (Hanif et al., 2012).

In Pakistan, a Muslim majority country with 97% Muslim population, there has been a long debate among scholars about bank interest. The matter was also debated in the Federal Shariat Court in 1991 to determine whether or not the bank interest constitutes Riba. The court, in its historical judgment, acknowledged that bank interest constitutes Riba and henceforth is prohibited in the Shariah. Afterwards, this decision was opposed in the Shariat appellate bench of the Supreme Court of Pakistan (SCP).

In 1999, Shariah appellate bench of SCP declared that bank interest is Riba, which is prohibited. However, instead of implementing the decision in its true spirit, the government of Pakistan managed to refer this case again to the Federal Shariat Court, which has been pending for a long time and on 28 April 2022, the Shariat court held that the bank interest to be illegitimate and ordered the government to replace the interest based banking into interest free banking. Based on the judgement of SCP given in 2002, Islamic banking was initiated in Pakistan. The first license to conduct Islamic banking was issued to Meezan Bank, which started Islamic banking with only 5 branches.

Islamic banking has gained considerable traction and popularity in Pakistan during the past 20 years. According to the Islamic Banking Bulletin Report 2021, 19.4% percent of total banking is carried out under the principle of Shariah complaint Islamic banking[1]. Islamic banks (IBs) claim to exercise all their business functions without involving Riba. They use trade-based, leasing-based, and partnership-based modes and avoid loan-based activities. There are three main types of accounts used by IBs, namely current account, profit and loss account, and term deposit account.

However, it has been claimed that in practice, IBs follow a system which allows them to align their profit rates with the interest rate offered by

[1] https://www.sbp.org.pk/ibd/Bulletin/2021/Dec.pdf.

conventional banks (CBs). IBs try to manipulate the depositor's share in profit in a manner that their return on deposit remains closer to the interest rate of CBs. IBs accept deposit on Mudaraba basis. However, instead of sharing the actual returns, they write off some amount in Profit Equalization Reserve (PER) and Investment Risk Reserve (IRR) to balance the profit/loss situation in order to compete with CBs. When IBs earn more profit, they transfer a particular percentage of profit to PER and IRR accounts. Similarly, when loss occurs, they transfer some amount as gift (hiba) from these accounts to mitigate the risk of return. This is based on Maslaha (public interest), a secondary source of the Shariah.

Such alignment of the profits of IBs with interest rate creates doubt about the legality of Islamic banking and provides the challengers an opportunity to claim that there is no difference between Islamic and conventional banking, as it has been observed that there is no difference in the profitability and liquidity of Islamic and conventional banks (Samad, 2004).

In light of the above discussion, an effort is made in this study to measure the magnitude of two different types of profit rates on two different types of deposit accounts (saving and one-year term deposit accounts) and to determine which type of bank offers a higher return rate to its depositors in different months. Furthermore, real return rate is also calculated keeping inflation rate in view.

There is no comprehensive comparative study available regarding profit distribution in Islamic and conventional banks in Pakistan. Past studies investigated profit and loss distribution separately in either Islamic or conventional banks, while some studies analyzed data on the basis of performance indicators including Return on Assets (ROA) and Return on Equity (ROE), such as Javaid et al. (2011), Anbar and Alper (2011), and Bader et al. (2008). The current study is an attempt to fill the research gap by comparing the profit rate (distributed by IBs) and interest rate (offered by CBs) with inflation rate and to check the long-run relationship among them.

The study is divided into the following chapters: Chapter 1 comprises the introduction, Chapter 2 discusses the literature review, Chapter 3 presents the methodology and data analysis, Chapter 4 showcases the results and discussion and finally, Chapter 5 concludes the current research.

Literature Review

Several studies have compared the profitability of IBs and CBs by using ROA and ROE. Although, these variables do not identify the amount of the profit distributed to investors. However, we didn't find any study that compared the rates of return on investment of both types of banks. Both IBs and CBs provide different rates on different amounts of deposits. Our study compares the profit rates for comparable slabs of deposits.

A study was conducted in Bangladesh on 7 full-fledged Islamic banks using secondary data to examine the differences in return on deposits and to find out if there is any relationship between the profit rate on deposits and inflation rate. It was found that there is a significant difference in the returns of IBs in Bangladesh. However, an insignificant relationship was determined between inflation and profit rate in case of Mudaraba saving deposits, while it was significant in case of Mudaraba term deposits and rate of inflation (Kabir & Chowdhury, 2014).

Many empirical studies concluded that banks with a larger asset size remain more profitable (Ray & Das, 2010). These results are supported by Haron and Azmi (2008), who suggested that larger deposits of IBs are significantly correlated with higher profits and lower interest rate. Similarly, a study conducted by (Hassoune, 2002) concluded that IBs are more profitable in gold countries than CBs.

There is a significant difference in the profitability of Islamic and conventional banks Usman and Kashif (2012) in Pakistan. The authors selected three Islamic and three conventional banks for the period 2007-2009. On the other hand, no significant difference was found in both banking systems in terms of their profitability and efficiency by Bader et al. (2008) using Data Envelopment Analysis (DEA). The sample size used in the said study comprised forty-three (43) Islamic and thirty-seven (37) conventional banks in 20 countries operating over the period 1990-2005. (Berger et al., 1993) recommended that to improve their profitability, the banks need to be more efficient. Similarly, Awan (2009) analyzed the performance of Islamic and conventional banks g data for the years 2006-08. They selected six (6) IBs and six (6) CBs of similar sizes. The banks were selected from KPMG survey. The study concluded that IBs fare better in terms of profitability than CBs.

Haron and Azmi (1996) suggested that IBs earn more than CBs in competitive market. They found that the profit and loss sharing principle in IBs is advantageous for both banks and depositors. The above study was cross-sectional and pooled time series data was taken from the annual reports of the banks operating in different countries. External factors such as size, inflation, and interest rate were found to have a significant positive effect on the profitability of both Islamic and conventional banks.

Hanif et al. (2011) examined and compared the performance of IBs and CBs operating in Pakistan. The sample for the above study comprised twenty-two (22) CBs and five (5) IBs. External factors included behavior and customer perception about Islamic banking, while internal factors included liquidity risk, credit, and solvency. To determine the solvency, Bank-o-meter model was used. The study found that CBs dominate in profitability and liquidity, while IBs lead in solvency and credit risk. For CBs, the size of products and services is an encouraging factor, while Shariah compliance remains the motivating factor for IBs.

There is a negative relationship of inflation rate with both profit rate and interest rate in Islamic and conventional banking, respectively. An increase in inflation rate leads to reduced lending activities and market sector growth (Boyd et al., 2001). The GMM panel estimates prove the inverse of inflation rate. Inflation rate determines interest rate. According to Fisher's theory, a one percentage point increase in inflation rate increases the interest rate of CBs by 1%. Based on the above theory, a study was conducted in Turkey. The authors concluded that a one percentage point change in inflation rate leads to an increase in interest rate of more than 11% (Teker et al. 2012).

Methodology and Data

Sample Selection

The sample comprised five (5) IBs and four (4) CBs with comparable assests. The data used was secondary data, collected monthly basis for the period January 2008-May 2022. Profit rate and interest rate are monthly annualized rates. We transformed the data to monthly data by dividing it with 12 in order to make a series of data. CBs were selected based on their assets through KPMG survey, which ranks the banks according to their market asset size. The main sources of data were the websites and the head offices of the selected IBs and CBs situated in Pakistan.

The list of five (5) Islamic Banks (IBs) is as follows:

- Meezan Bank Ltd.
- Dubai Islamic Bank
- Al Baraka Bank
- Bank Islami Pakistan
- Bank of Khyber

The list of four (4) Conventional Banks (CBs) is as follows:

- Askari Bank
- Bank of Khyber Conventional
- Soneri Bank Limited
- Summit Bank

Variables and Data Sources

For comparison, we used two types of accounts, namely saving account and one-year term deposit account of IBs (Meezan IB, Khyber IB, Barakah IB, Islami IB, Dubai IB) and CBs (Khyber CB, Askari CB, Soneri CB, Summit CB) taken from their websites. Further, the inflation rate variable was taken from the website of the State Bank of Pakistan.

Similarly, if a person invests Rs. 500000 in Meezan Bank saving account and the bank offers 3% profit rate, that particular person will be eligible for Rs. 1232.87 for the first 30 days (500000*3%*30/365 = Rs. 1232.87), as calculated by Mujaddidi (2017). We have transferred annualized data into monthly data by dividing the rates by 12.

Statistical Tools Used

To measure the performance of profit rate on savings account and term deposit account, the equality test technique was used. One sample t-test was applied to check the statistical difference between the returns of Islamic and conventional banks. For all statistical calculations, computer aided E-View software was used.

Results and Discussion

The core objective of the current study is to measure and compare the profit rates offered by Islamic and conventional banks of Pakistan. Table 1 compares the average return rates of Islamic and conventional banks with inflation rate.

Table 1

Average Return Rate of Islamic and Conventional Banks of Pakistan on Saving Account

	Variables (Mean)	Islamic Banks				
		Meezan (0.34)	Khyber (0.36)	Barakah (0.35)	Islami (0.31)	Dubai (0.30)
Conventional Banks	Khyber (0.44)	-5.71***	-3.75***	-4.52***	-8.38***	-8.18***
	Askari (0.44)	-6.45***	-4.20***	-5.11***	-9.52***	-9.33***
	Soneri (0.34)	-0.22	1.38	0.22	-3.10***	-3.56***
	Summit (0.43)	-4.67***	-2.95***	-3.68***	-7.06***	-6.97***
	Inf MoM (0.56)	-2.61***	-2.25**	-2.46*	-2.71***	-3.08***

***= Significant at 1%, **= Significant at 5% and *= Significant at 10%

Table 1 summarizes returns of Islamic and conventional banks on their saving accounts and the t-statistics for the differential between returns of these banks. For example, the return of Meezan Bank on its saving accounts is 0.34 and that of Khyber Bank is 0.44. The Khyber Bank, which is a conventional bank is offering higher return on its saving account. The t-statistics for the differential between returns of two banks is -5.71, which is statistically significant at 1% level of significance. Similarly, the Table indicates that the Khyber bank offers a return of 0.35 on its saving accounts held under Islamic modes of saving and offers a return of 0.44 on the saving accounts held under conventional saving schemes. The same bank is offering higher return on the conventional accounts that the Islamic accounts. This differential is also statistically significant at 1% level of significance. In a similar way, we can see that in 14 out of 16 pairs summarized in the Table, the returns on conventional saving accounts is higher than the conventional counterparts and in all these cases, the differential is statistically significant. In two cases the return of Islamic saving accounts is higher, but this differential is not statistically significant. Overall, the results show that all CBs offer a higher return rate than SA Meezan IB, except SA Soneri CB that offers almost the same rate.

Overall, the results show that IB offers a lower return rate on saving account as compared to all CBs, and in cases where the returns of Islamic banks are higher, the difference is statistically insignificant.

Table 2

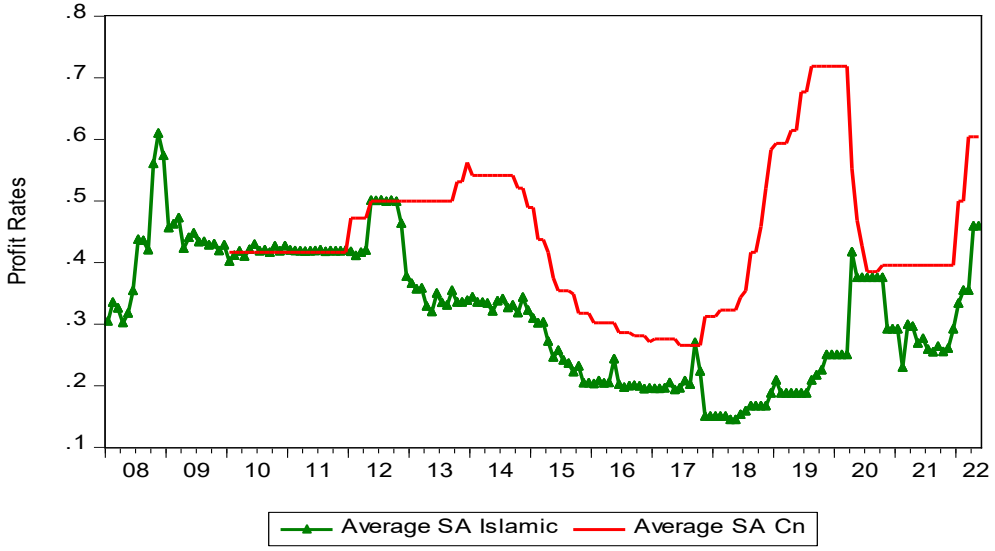
Average Return Rates of all IBs and CBs and Inflation Rate on Saving Account

Variables	Islamic Banks	Inf MoM	Conventional Banks
(Mean)	0.33	0.56	0.41

Overall, the results show that all Islamic and conventional banks are offering the returns lower than the rate of inflation. The differential of return from inflation is larger for the Islamic Banks than from the conventional banks. It indicates that the depositors are in loss in real terms with respect to the inflation rate. However, the comparison of IBs' saving account return rates with CBs' interest rate shows that interest rate is higher than return rates.

Figure 1

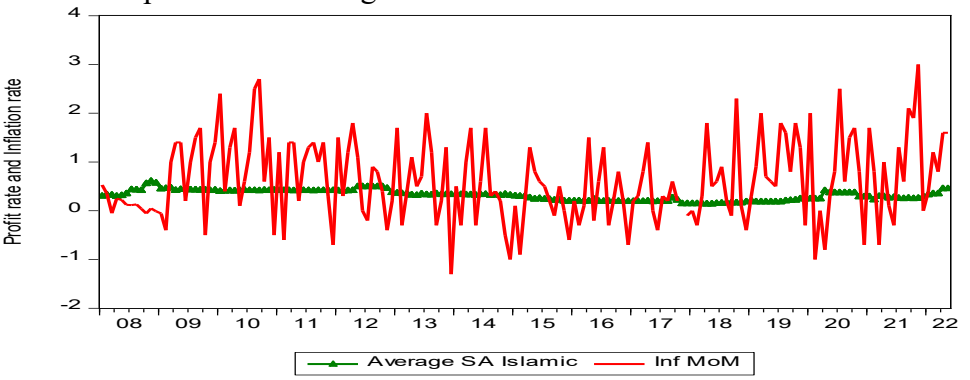
Relationship between average returns Islamic and Conventional Banks on Saving Accounts



The graph shows the relationship between average return rate of all IBs with average return rate of all CBs. Monthly returns of all IBs were added and divided by the number of banks to get the average return of all IBs on saving account. Similarly, the average was calculated for all CBs. It was found that on average, CBs offer higher return over time as compared to IBs.

Figure 2

Relationship between Average SA IBs with Inflation Rate



The above graph shows the relationship of average return rate of all IBs on saving account with inflation rate. The central bold line shows the average return of IBs, while the fluctuated line shows the inflation rate (MoM). It clearly indicates that on average, inflation rate is higher over the month as compared to the profit rate offered by IBs on saving account. It implicates that in real term customers are in loss.

Table 3

Comparison of Rates of Return on Saving Accounts for Islamic Banks

Variables (Mean)	Meezan (0.34)	Khyber (0.36)	Barakakah (0.35)	Islami (0.31)	Dubai (0.30)
Meezan (0.34)					
Khyber (0.36)	-2.04**				
Barakah (0.35)	-0.54	1.29			
Islami (0.31)	3.79***	5.40***	3.75***		
Dubai (0.30)	4.31***	5.84***	4.31***	0.74	

***= Significant at 1%, **= Significant at 5% and *= Significant at 10%

Table 3 presents comparison of profit rates for the Islamic banks. It is in fact obvious to rank the banks with respect to their average prift rate, however, the table is helpful evaluate the significance of differential between saving rates of these banks. The analysis reveals that the differential between returns of following pairs of banks is statistically insignificant (a) Meezan Bank and Bank Albarakah, (b) Khyber bank and

bank Albarakah, (c) Bank Islami and Dubai Bank. The returns for all other pairs is statistically significant. Khyber Bank offers the highest profits and Dubai Islamic Bank offers lowest profit on saving accounts

Table 4

Comparison of Returns Offered by Islamic and Conventional Banks on Term Deposits

	Variables (Mean)	Islamic Banks				
		Meezan (0.58)	Khyber (0.47)	Barakah (0.63)	Islami (0.64)	Dubai (0.58)
Conventional Banks	Khyber (0.44)	8.75***	1.29	8.67***	-8.38***	4.85***
	Askari 0.44)	5.58***	-1.75*	7.00***	-9.52***	3.24***
	Soneri (0.34)	1.72*	-3.14***	3.92***	-3.1***	1.32
	Summit (0.43)	3.02***	-1.43	4.51***	-7.06***	2.07**
	Inf MoM (0.56)	0.49	-0.86	0.51	1.22	0.51

***= Significant at 1%, **= Significant at 5% and *= Significant at 10%

Table 4 compares the returns offered on the terms deposits by Islamic and commercial banks. The return offered on term deposits offered by Meezan Bank averages to about 0.58, whereas, the return of Askari Bank averages to about 0.51. The differential between the returns of two banks is statistically significant on 1% level of significance. The average of return offered by Khyber banks on term deposits in Islamic and conventional accounts is 0.47 and 0.51 respectively, however, the differential is statistically insignificant.

It is interesting to note that in most of the cases, the returns offered by Islamic Banks on the term deposits are higher than what is offered by conventional banks, but on contrary, the returns offered by conventional banks were higher on saving accounts. Highest profit is offered by Bank Islami followed by Bank Albarakah, and the lest return is offered by Askari Bank. In most of the cases, the differential between retuns of bans is statistically significant. Some of the Islamic banks are offering the return higher than that of inflation rate, but the conventional banks offer return lower than the inflation rate on their term deposits.

Table 5 presents average return of all Islamic and commercial banks and the comparison reveals that average return of all Islami Banks is higher than the rate of inflation, but the average return of conventional banks is smaller than inflation, giving a negative real return.

Table 5

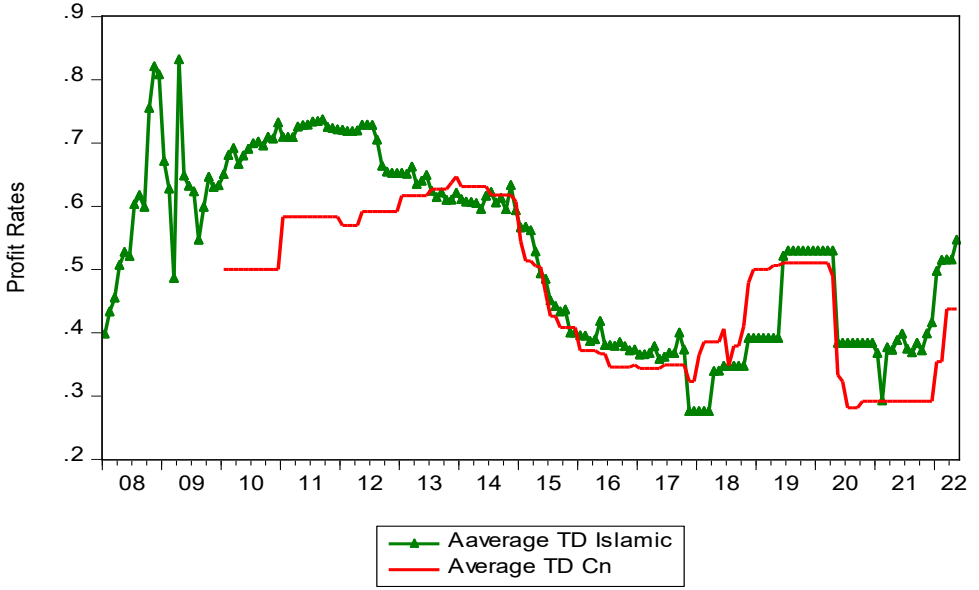
Average Return on One-Year Term Deposit of IBs, CBs, and Inflation

Variables	Islamic Banks	Inf MoM	Conventional Banks
(Mean)	0.58	0.56	0.51

Overall, the results show that IBs offer 0.02% higher return than inflation rate and 0.07% higher return than CBs on one-year term deposit accounts.

Figure 3

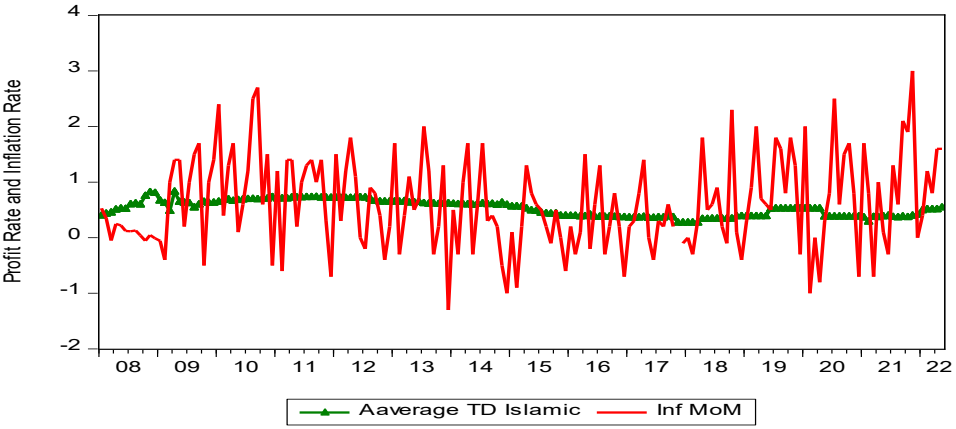
Relationship between average return rates of Islamic and conventional banks on one year term deposits.



The graph shows the relationship of Average TD of IBs with Average TD of CBs. Average return comprises the monthly return of IBs and CBs divided by the number of banks. The upper bold line shows the average return of IBs on one-year term deposit which reflects that on average, IBs offer a higher return than CBs.

Figure 4

Relationship of Average TD IBs with Average Inflation rate



The graph shows the relationship of average TD IBs with inflation rate. One-year term deposit shows that IBs offer slightly higher return on investment in one-year term deposit.

Table 6

Comparison of Rates of Return on term deposits for the Islamic Banks

Variables (Mean)	Meezan (0.57)	Khyber (0.47)	Barakah (0.63)	Islami (0.64)	Dubai (0.58)
Meezan (0.57)					
Khyber (0.47)	6.01**				
Barakah (0.63)	-3.39***	-7.72***			
Islami (0.64)	-4.86***	-8.73***	-0.60		
Dubai (0.58)	-0.31	-4.23***	2.02**	2.47**	

***= Significant at 1%, **= Significant at 5% and *= Significant at 10%.

Table 6 helps us analyze the significance of differential between returns of Islamic Banks on their term deposits. The Table show that the difference between returns of Meezan Bank and Dubai bank are statistically insignificant. Similarly, the differential of returns of Bank Albarakah and Bank Islami are statistically insignificant. In all other cases, the difference is statistically significant, and the highet returns are offered by Bank Islami, followed by the Bank Albarakah

Overall, the results show that TD Islami IB offers a higher return rate on one-year term deposit account and TD Khyber IB offers the lowest rate of return among all five (5) IBs.

Key Findings

The results reveal that the on saving accounts, conventional banks offer better return than the conventional banks. In most of the cases, the differential is statistically significant, indicating that the differential is not a product of chance, rather, it is indication of better profitability of conventional banks.

On the term deposits, the Islamic Banks are offering better returns than that of conventional banks. The difference is statistically significant. The highest returns are offered by Dubai Bank and the Barakah Bank. The lowest return is offered by Askari Bank

The comparison with inflation reveals that the on saving accounts, both Islamic and conventional banks offer lower return than rate of inflation. On the term deposits, Islamic banks offer better return than inflation but the commercial banks have returns lower than inflation. The findings are in line with the findings of Usman and Kashif (2012) and Hassoune (2002).

Conclusion

Islamic banking and finance industry has made considerable progress during the last 30 years. It fulfills the basic need of the Muslim community to have a Shariah compliant banking and financial system, distinct from the interest-based banking system. In Pakistan, the first scheduled Islamic financial institution (IFI) started working in 2001 with the name of Meezan Bank Limited. Afterwards, many IBs and other IFIs started their operations in the country.

The study and analysis of IBs is vital and significant. It was deemed necessary to study, analyze, and compare the profit rates of IBs with those offered by CBs on saving accounts and term deposit accounts. Moreover, the current study also found that the depositors were well compensated in real terms, keeping in view the inflation rate and interest rate. Inflation is also an important factor in determining whether or not Islamic or conventional banks offer equal rates in real term profit to their investors. To determine which bank offers a higher return rate, we applied the equality

test for the analysis of the average return rate of banks and t-test to check whether the difference was statistically significant or not?

Policy Implications and Recommendations

The Islamic banking industry, a fast-growing financial industry, has played a significant role in financial market since the global financial crisis (2008-09).

The current study suggests various policy implications for a policy makers.

1. Depositors are unaware about PER and IRR account. Hence, IBs must disclose information about their PER and IRR accounts in account opening forms or on their websites.
2. IBs must distribute profit at least equal to or more than the inflation rate on saving account to their depositors.
3. Real return rates are negative, and it gives a bad impression to investors. Moreover, profit should be fairly distributed among depositors.
4. IBs offer lower profit to their depositors than CBs on saving account, which acts as a deterrent for them.
5. IBs offer a higher return rate than CBs on one-year term deposit account which also exceeds the inflation rate. So, the profitability of IBs may attract more customers to invest in one-year term deposit account**.**

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