



Impact of Deposit Mobilization Services on Bank Performance with Special Reference to Peoples Bank in Sri Lanka

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ABSTRACT

Money market includes state and private sector banks and different formal and informal financial institutions which play a major role in the financial market as a financial intermediary. Specially banks accept deposits and channel those deposits into lending through deposit mobilization services. Thus, this study investigates the impact of deposits mobilization services on bank performance for a period of twenty years from 1995 to 2014 and People's Bank was selected as the sample of the study. Interest rates and promotion cost were considered as independent variables representing deposit mobilization while return on assets and total deposits were considered as dependent variables under bank performance. The study obtained secondary data from annual reports of Central Bank and People's bank. Descriptive analysis and regression analysis was employed to study the behavior and relationship among the variables and testing hypotheses. According to descriptive analysis, it was found that interest rate variable has varied in a very broad range compared to other variables. Promotion cost and total deposit variables have shown a similar and lower variation than other variables while return on assets has varied moderately within the study period. As per the results of the study, it was found that promotion cost has a significant impact on bank performance while there was no such relationship between interest rate and bank performance. There are number of micro and macro factors, influencing towards bank performances though this study has included only two independent variables.

KEYWORDS: Bank Performance, Deposit Mobilization, Interest Rate, Promotion Cost, Return on Asset, Total Deposits

1 Introduction

Banks play a major role in the financial market as a financial intermediary. A bank is a financial intermediary that accepts deposits and channels those deposits into lending activities, either directly or through capital markets. A bank connects customers with capital deficits to customers with capital surpluses. Banks mobilize deposits by making finances and by investing in various financial markets. Basically deposit mobilization is related to the creation of credits. All the banks are now trying to attract more deposits by introducing attractive savings scheme. The banks do have special campaigns where they interact with a lot of people and invite them to make deposits in their banks with a view to earn profits.

It is therefore of utmost importance for banking firms to win new customers, retain the existing customer base and protect themselves as different from the rival firms. As a result, the banks have introduced new products to the list of banking services.

According to Adams (1978) studies, that deposit mobilization represents a major source of funds for most self-sustaining financial institutions. Additional products such as savings also allow financial institutions to broaden and deepen their outreach, thereby expanding the client base. According to the study of Adams (1978) and Vogel (1984) mobilization service is very critical and specific for the finance industry in a developing country especially when the economy faces difficulties in raising capital in the international markets and also they revealed that economic growth is strongly correlated with financial deepening. According to a study of Abeyaratna (2004), it is revealed that financial and non financial institutions which involve in taking deposits from the public have shown a growth in terms of numbers as well as volume. According to previous studies, Simon (2002), Arshadi (2003) and Peter (1997) have tried to understand the relationship between deposits and bank performances. Thus, this study investigates the Impact of deposits mobilization services on performance of Peoples bank in Sri Lanka..

2 Literature Review

Banks are statutorily vested with the primary responsibility of financial intermediation in order to make funds available to all economic agents. The intermediation process involves moving funds from surplus units of the economy to deficit units, Uremadu (2007). Banks mobilize deposits by making finances and by investing in various financial markets. Basically deposit mobilization is related to the creation of credits.

Ashradi and Gons(2003) have identified that financial institutions in developing countries offer savings products. This paper examines different designs that provide incentives to clients to commit to save. Adams (1978) considers that most of this domestic savings come from the rural areas especially in countries with a dominant rural because there is a greater saving capacity and a growth potential. Bwirel and Mukungu (2006) in spite of these advantages, most of the saving potentials of rural communities in developing economies remain not mobilized especially in respect to the formal financial system on which an economy depends for growth. To permit an efficient and sustainable mobilization of savings in general and rural savings in particular, a number of factors must be fulfilled.

According to Demirguc (1999) revealed that effects of internal and external factors that might affect the bank profitability. Abdus (2004), examined the study of Bahrain's Commercial Bank Performances during 1994-2001, The main focus on this study is to examine empirically the performance of Bahrain's commercial banks with respect to credit (loan), liquidity and profitability. In analyzing how well any given bank is performing, it is often useful to contemplate on the return on assets (ROA) and the return on equity (ROE).

Arshadi and Gons (2003) has examined 67 cases of bank failures between 1966 and 1974 showed that internal factors such as bank cost, bank size, and composition of loans, were among the most significant factors in determination of new bank performance while exogenous variables were insignificant. Freigo (1997) has identified that there are several service delivery channels in financial institutions and they need to understand the impact of process variability on service performance.

Keynes (1936) despite arguing the quantitative importance of the interest rate effect believes that in the long run substantial changes in the rate of interest could modify social habits considerably, including the subjective propensity to save. Like conventional banks, Islamic banks also depend on depositors' money as a major source of funds. The evidence from studies conducted in Sudan and Turkey, shows that religion is not the main reason for customers selecting Islamic banks, Erol and El-Bdour, (1989). According to studies of Rasaih (2010) has expressed that Conventional bankers have learned that deposit pricing can be used to shape the kind of customer base each bank can best serve. Changing deposit prices affect not only spread between bank loan rates and deposit interest rates but also customer balances and deposit mix decisions, which in turn, influence both bank growth and profit margins. Edmister (1982), Rose, John and Peter (1991) points out deposit pricing is best used to protect and increase bank profitability, rather than to simply add more customers and to take market share away from competitors.

Consumer promotion is a category of sales promotion including free samples, winning contests, different price packs, and sweep stakes. Sales promotion is projected to increase the sales of final ultimate consumers of the product, Kotler and Armstrong (2002). Rizvi (2010) defines sales promotion as: "Marketing devices and techniques which are used to make goods and services more attractive by providing some additional benefit, whether in cash or in kind, or the expectation of such a benefit".

Sullivan (2007) reports that the ability to measure the internal marketing performance causes a significant impact on firm performance, profitability; stock return and marketing's stature within the firm. According to Elliot and Pallai (1997) and Marthur (2002) Promotions effectiveness lies in its capability to help stimulate or maintain sales. Thus, advertising is frequently used as an independent variable in explaining changes in sales. Clarke (1988) assumes that promotions effect on sales that it is short-term is yet prevalent. They further argue that the longer uses of advertising are better than less and shorter uses of it irrespective of the nature of contribution of advertisement to sales. Mathur (2002) using event study methodology concluded that investors react positively to announcements of promotions changes leading to higher market value for the firms.

In analyzing, how well any given bank is performing, it is often useful to contemplate on the return on assets (ROA) and the return on equity (ROE) as used by Bourke (1999), Molyneux (1992) and Bovarid (2002). The literature review revealed that there are sufficient evidences from different countries relevant to the banking industry. Therefore it is vital to conduct a data based study to fulfill some of the gap of knowledge in bank performance in Sri Lanka since research done is non or least.

3 Research Problem

There are a large number of banks, financial institutions and informal organizations in Sri Lanka for deposit mobilization and there is a severe competition among them. In addition to the traditional savings and term deposits banks offer a wide range of products with a view to attracting funds. Rutherford (2000) by his study found that offering a financial service significantly enhances deposit and Bhattacharyay (1988) has found that it is a major challenge for managers and executives in banks to have knowledge of the most significant factors that would require to effect deposit mobilizations. It is also necessary for banks to identify what the relationship is between deposit mobilization and bank performances.

Therefore, it can affect the policy making decision and implementation processes due to lack of required information. Hence this study attempts to identify the various factors that would influence on bank performance.

3.1 Objectives of the Study

The main objective of the study is to identify whether the Mobilization Services affect the bank performances. The other specific objectives in this research study are to;

1. Identify the impact of deposit mobilization service on bank performance.
2. Identify the relationship between Interest rates and Promotion costs with Total Deposits
3. Identify the relationship between, Interest rates and promotion cost with ROA

4. Identify the most significant factors in deposit mobilization

3.2 Hypotheses of the Study

Most of the existing studies of impact of deposit mobilization on bank performances have discussed its different views and their arguments. The following hypotheses have been developed based on the literature reviewed for the purpose of studying and testing them to achieve the objectives of the study.

- H1 - There is a positive relationship between Interest rates and ROA
- H2 - There is a positive relationship between Promotion cost and ROA
- H3 - There is a positive relationship between Interest rates and Total deposit
- H4 - There is a positive relationship between promotion cost and Total deposit

4 Methodology

During the review of literature it was identified that factors such as interest rate , promotion cost have an impact on return on assets and total deposits which have been identified as dependent variables of the study. The methodology followed in studying the relationship between deposits mobilization services and bank performance is explained bellow.

4.1 Sample Designing

This study is based on Peoples bank which was established in 1961 currently having 347 branches and 383 service centers in 24 regions island wide. The People's bank was selected as the sample for the study and the population will be the same. The study period is twenty years from 1995 to 2014. For this purpose secondary data were collected through annual reports of the People's bank and Central Bank of Sri Lanka.

4.2 Variables of the Study

As mentioned earlier, there are two main variables in this study. Interest rate and promotion cost are the independent variables which are considered as indicators for deposits mobilization services. Total deposit and Return on Assets are the dependent variables of which data are used to measure the bank performance.

Interest Rates (IR); The IR which is paid to customers for the deposit money in the bank is considered for the study with annual average percentage values. IR is decided and declared by Central bank and fine adjustment for IR will be decided by the bank itself. **Promotion Cost (PC);** PC is related to the attraction of customers to bank products and PC is indicated as Rs. million in annual reports in Peoples bank were taken. The natural log transformation was used to mitigate the possible problems with the sample distribution of values. **Return On Assets (ROA);** ROA ratio is the one of key indicators of the profitability of bank. It matches net profits after taxes with the assets used to earn such profits. Assets consists both fixed assets and current assets value. So, ROA is considered as a percentage. **Total Deposit (TD);** TD is also considered as one of the dependant variable which include the total of saving deposit, current deposit and time deposit from a bank perspective and the natural log transformation was used to mitigate the possible problems with the sample distribution of values.

4.3 Research Model

4.3.1 Descriptive Analysis

A descriptive statistical analysis was done to identify the behavior of interest rate, promotion cost, total deposit and ROA within the period of study. Further correlation analysis was done to investigate the correlation among the study variables.

4.3.2 Regression analysis

For the purpose of data analyzing and testing hypothesis, study employed following multiple regression models with the help of SPSS-17.

4.3.3 Model specification,

$$ROA = \alpha + \beta_1 IR + \beta_2 \text{LogPC} + \epsilon \text{ -----(1)}$$

$$\text{LogTD} = \alpha + \beta_1 IR + \beta_2 \text{LogPC} + \epsilon \text{ -----(2)}$$

Where: ROA = Return on Assets and it is the dependant variable (Eq 1), α = Intercept, β_1 , β_2 = Coefficient of the regression estimate, ϵ = Error terms, IR = Interest Rates, PC = Promotion Cost and TD = Total Deposits and it is the dependant variable (Eq 2).

The multiple regression analysis was run to identify the relationships between the deposit mobilization and bank performances and to test the hypothesis. The criteria for rejection or acceptance of hypothesis depends on the value of the β_i coefficient of the regression estimate for both models 1 model 2 and alternatively P value approach was adopted to test the hypotheses. If P value > significant level, accept the null hypothesis and otherwise reject it and accept the alternative hypothesis.

5 Results And Discussion

5.1 Descriptive Analysis of Independent and Dependent Variables

Prior to the discussion of the results of regression analysis, it is useful to consider the descriptive statistics that represents the behavior of independent and dependent variables shown in Table 1 and Table 2 below.

Table -1 Descriptive Statistics of Variables

	N	Minimum	Maximum	Mean	Std. Deviation
Interest Rate (IR)	20	5.53	12.06	9.26	1.84
Log Promotion Cost (PC)	20	2.15	3.42	2.69	0.39
ROA	20	-0.90	1.70	0.877	0.72
Log Total Deposits (TD)	20	4.87	5.90	5.35	0.34

During the study period, the IR has varied from 5.53% to 12.06% with a mean value of 9.26% and the standard deviation was 1.84, the results indicated that the IR has reported the highest variance compared to other variables. PC has shown a minimum value of 2.15 and maximum value 3.42. The mean value of PC is 2.69 and standard deviation is 0.39. Hence, the results explained that PC has varied by 39% during this 20 year period with a lower variance. ROA has a minimum of -0.9 and maximum of 1.7 while it has a mean of 0.877 and standard deviation of 0.72. According to the results it can be identified that ROA also has reported a moderate variance. TD has a mean of 5.35 also varies by 34% within a minimum of 4.87 and maximum 5.90.

Table -2 Correlation between Variables of the Study

		ROA	Total Deposit
Interest Rate (IR)	Pearson Correlation	-0.239	0.059
	Sig. (2-tailed)	0.340	0.805
Promotion Cost (PC)	Pearson Correlation	0.640**	0.987**
	Sig. (2-tailed)	0.004	0.000

** Correlation is significant at the 0.01 level (2-tailed).

Results of the correlation analysis show that the IR has a negative weak correlation (-0.239) with the ROA and a positive weak correlation (0.059) with TD. The calculated significant values of ROA (0.340) and TD (0.805) are higher than critical significant value of 0.05. Therefore it also confirms the weak relationship of IR with ROA and TD and it is insignificant.

Correlation value related to PC and ROA shows a moderate positive relationship of 0.640. Further, calculated significant value of this correlation is less than the critical significant value and it confirms there is a correlation between these two variables. Table 2 shows that the PC has a positive and strong

relationship with the TD. The calculated significant value is less than the critical significant value (0.000) and it confirms the correlation between PC and TD. Hence it can be decided that the relationship is so strong.

5.2 Regression Analysis

5.2.1 Relationship between Dependent and Independent Variables

Table 3 shows that the relationship between ROA and independent variables; interest rate and promotion cost using regression analysis.

Table 3 Regression Analysis for ROA and Independent Variables

Model 1	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β_i	Std. Error	Beta		
(Constant)	-1.392	1.666		-0.836	0.416
Interest Rate (IR)	-0.936	0.640	-0.272	-1.462	0.164
Promotion Cost (PC)	0.531	0.151	0.654	3.521	0.003
F Value	7.026				0.007
R Square	0.484				

Table 3 above shows that R² is 0.484 means that IR and PC explain 48.4% of total variance of ROA while rest is due to some other variables. This predictability is further confirmed by showing a higher F value (7.026) with significant value of 0.007. The β_1 coefficient is -0.936 and its significant value is 0.164 which is higher than 0.05 significant level. Therefore there is no significant relationship between IR and ROA. But PC has a positive value ($\beta_1 = 0.531$) and significant because its P value is 0.003. It indicates that the PC has a strong effect on ROA than the effect of the interest rates declared by the bank.

Table 4 Regression Analysis for Total Deposits and Independent Variables

Model 2	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	β_i	Std. Error	Beta		
(Constant)	7.035	0.378		18.61	0.000
Interest Rate (IR)	-0.019	0.148	-0.005	-0.129	0.899
Promotion Cost (PC)	0.858	0.034	0.987	25.316	0.000
F Value	321.59				0.000
R Square	0.974				

The result generated by model 2 given in the above table shows R² of 0.974 means that the variance of total deposit is due to the effect of IR and PC. The result shows a large F value (321.59) and it is further confirmed that the model is very strong. But the coefficient of interest rate is a very small value with respect to that of promotion cost. The β value of IR is -0.019 means that there is a weak negative relationship between IR and total deposits but this relationship is insignificant because P value is 0.899 and it is higher than significant value of 0.05. The results revealed that PC has 0.858 β value also it is significant with a P value of 0.000 which is less than 0.05 confidence level. The coefficient of PC has a higher positive value than the value of the coefficient of IR which indicates that the PC has a strong effect on TD, than the effect of interest rate on total deposit of the bank.

5.2.2 Testing of Hypotheses

According to the results of regression analysis, the following table was developed to test the hypotheses and to achieve the objectives specified in the study.

Table 5 Results of the Hypothesis Testing

Model	Independent Variable	Hypothetical Relationship (β_i)	Actual (β_i)	P Value	Result
1 (ROA)	IR	Positive	Negative (-0.936)	0.164	insignificant
	PC	Positive	Positive (0.531)	0.003	significant
2 (TD)	IR	Positive	Negative (-0.19)	0.899	insignificant
	PC	Positive	Positive (0.858)	0.000	significant

According to the table 5, data analysis of model 1 shows that the coefficient for IR is negative insignificant value. Therefore, the results confirm that there is no significant relationship between IR and ROA and also the study rejects the first hypothesis. But the results show that there is a positive significant β coefficient for promotion cost with ROA and study accepts the second hypothesis that there is a positive relationship between promotion cost and ROA.

The result of model 2 shows that the β coefficient for IR is weak negative insignificant value. Therefore, the study rejects the third hypothesis that the results confirm there is no significant relationship between interest rate and total deposits. The results of model 2 analysis also shows that there is a positive and significant β coefficient for promotion cost with TD and study accepts the fourth hypothesis that there is a positive relationship between promotion cost and total deposits.

6 Conclusion And Recommendations

The objective of this study is to empirically examine the impact on deposit mobilization on performances in the people's Bank in Sri Lanka. In order to understand this relation, two independent variables, IR and PC and two dependent variables, ROA and TD were considered. The findings of the study are based on the results of different analysis. Descriptive statistical analysis and regression analysis were applied.

6.1 Conclusion

According to the data presentation and analysis under descriptive analysis, it was found that interest rate variable was varied in a very broad range during the study period. Promotion cost and total deposit variables have shown a similar and lower variation than other variables while return on assets has varied moderately within the study. It can be seen clearly from the data, Inflation rate and the deterioration of rupee value also affect to the increase in promotion cost and total deposit during the study period. Results of the correlation analysis examined interest rate have insignificant weak correlation with ROA and total deposits. Correlation value related to PC and ROA shows a moderate positive relationship. It is found that both ROA and total deposits has a strong positive and significant correlation with promotion cost variable. The results confirm the findings of previous studies that customers react favorably on promotions schemes. The results of the analysis partially supported for hypotheses. Therefore, the study concluded that there is a significant relationship between promotion cost and bank performance but interest rate will not affect to the bank performance.

6.2 Recommendations

This study considered only the quantitative variables and it is recommended to incorporate the qualitative aspects of the deposit mobilization services for further research. Though there are number of micro and macro factors influencing towards bank performance, this study has included only two independent variables; Interest rate and Promotion cost. Therefore, there is an avenue to extend the study incorporating factors like; inflation, customer behavior and pattern, world economy, technology, service quality dimensions and some other dependent variables such as non performing ratio,

liquidity ratio, total advance deposit ratio .

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