Dissertation
on
Effect of financial determinants on Return of Assets (ROA) in Islamic Bank of Bangladesh

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Letter of Transmittal

To
Dr. Sayedul Anam
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Subject: Submission of dissertation report on "Effect of financial determinants on Return of Assets (ROA) in Islamic Bank of Bangladesh".

Dear Sir,
I am pleased to submit my dissertation report titled **"Effect of financial determinants on Return of Assets (ROA) in Islamic Bank of Bangladesh"** as a partial requirement for the completion of my Bachelor of Business Administration program from the Faculty of Business & Entrepreneurship at Daffodil International University.

This report aims to analyze the to analyze the effect of financial determinants on Return of Assets (ROA) in Islamic Bank of Bangladesh. This report includes a background of the study how Return on Assets works, followed by a details analysis of Islamic banks effect on ROA if other financial indicators increase or decrease. This report also includes recommendations base on the findings.

As I submit this report, I am filled with gratitude for the invaluable guidance and support you have provided throughout my dissertation report. It is my sincerest hope that this report meets and surpasses your expectations, contributing to your deeper understanding of the topic at hand

Thank you for your time and consideration.

Sincerely

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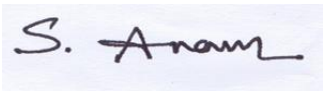
Letter of Approval

This is to certify that the dissertation report titled **"Effect of financial determinants on Return of Assets (ROA) in Islamic Bank of Bangladesh"** has prepared by Hriday Mondal, ID: 193-11-6366, BBA program, Department of Business Administration, Daffodil International University under my supervision and submitted for the requirement of the Bachelor of Business Administration (BBA) program, Major in Finance at Daffodil International University.

I have gone through the report and found it to be a well-written report. He has completed the information by himself. I hope he has a successful future.



Dr. Sayedul Anam
Associate Professor
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Student's Declaration

I, Hriday Mondal, ID: 193-11-6366, hereby declare that I have created the report titled **"Effect of financial determinants on Return of Assets (ROA) in Islamic Bank of Bangladesh"** as a part of my academic curriculum.

I confirm that this report is the result of my independent work and research all the information and data included in this report is authentic and genuine to be the best of my knowledge.

I also affirm that this report has not been previously submitted to any other university or organization for an academic degree or diploma nor will it be submitted elsewhere in the future.

Furthermore, I declare that this report has been compiled solely for my academic needs and is not intended for any other purpose. It shall not be used or reproduced, in part or in whole, for any other reason without my prior written consent.

Sincerely

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Acknowledgment

All paise to Almighty Allah, I am thankful to Allah that I am able to complete my dissertation at Islamic bank in Bangladesh.

First and foremost, I would like to thank my supervisor **Dr. Sayedul Anam,** for providing me with valuable guidance and feedback at every step of this report. His insights and expertise have been invaluable and I am grateful for his unwavering support and encouragement. He has taught me the methodology to carry out the research and to present the research works as clearly as possible. It was a great privilege and honor to work and study under his guidance. I am extremely grateful for what he has offered me

I would like to thank my department and the officers and staff of my department who helped me to fulfilled my report.

Lat but not the least, I am extremely grateful to my family for their love and support and I am very much grateful to my uncle Hafijur Rahman for his love, prayers, caring and sacrifices for educating and preparing me for my future.

Thank you all once again for your support, guidance, and encouragement. I am truly grateful to have had the opportunity to work on this report and your contributions have been instrumental in its success.

Abstract

ROA is an important metric for evaluating the financial performance and indicates the profitability and efficiency of an Islamic bank in utilizing its assets to generate profit. This study empirically examines the Effect of financial determinants on Return of Assets (ROA) in Islamic Bank of Bangladesh. The data for this study from 2015 to 2021 is based on the annual reports of each Islamic bank. The effect of financial determinants on Return of Assets evaluated using Fixed effect model and Random effect model under the Multiple Regression Analysis. The outcome of this study is that the relationship between financial indicators (EPS, capital adequacy, share price, cash, equity to total assets, book value per share, price to book value, and cost to income) and Return on Assets (ROA) in the Islamic banking sector of Bangladesh differs between the fixed effect and random effect models.

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CHAPTER ONE

INTRODUCTION

Introduction

Islamic banking is considered one of the fastest-growing sectors of the economy. There are over 300 Islamic financial institutions of hers in over 75 countries around the world. Islamic banking is another popular banking branch of the traditional banking system. Islamic banks operate according to the principles of Islamic law of Islam. This type of bank is well known in the Middle East and Muslim-majority countries due to its Islamic banking system.

The Sharia Based banking system is not new. Since the mid-70s Islamic banking has expanded, and now it is more than 75 counties. countries like Australia, Canada, UK, and Switzerland. Bangladesh is a country that has well established Sharia-based banking sector besides the conventional bank. Bangladesh entered the Islamic banking system alongside the conventional interest-based banking in 1983.

There are 59 Schedule Banks in Bangladesh; among them, only 8 banks are Islamic banks. Islamic bank covers more than 25% of the banking market share in Bangladesh. The full-fledged Islamic banks in Bangladesh are Islami Bank Bangladesh Limited, Shahjalal Islami Bank Limited, Al-Arafah Islami Bank Limited, First Security Islami Bank Limited, ICB Islamic Bank Limited, and Social Islami Bank Limited.

Shariah-based Islamic banking has been performing well in recent years, and it is growing well in the Muslim majority country. One of the reasons for its success is that it offers an alternative banking system that is based on Islamic religious principles. The Shariah-based Islamic banking system follows Islamic law principles. It is totally different from the traditional banking system. Islamic bank follows the interest-free and Profit-Loss Sharing (PLS) method. Islamic banking is based on ethical and religious belief principles that prohibit interest-based transactions, speculative activities, and investments in sectors that are considered harmful to society, like gambling and alcohol. who are committed to ethical and socially responsible practices may prefer Islamic banking as a way to align their financial activities with their values.

The Difference between conventional banking and the Islamic banking system. There is a big difference between these banks, Where the conventional bank has interest and charges, but the Islamic bank doesn't pay interest. Islamic banking is interest-free banking and it has the Profit and Loss Mode (PLS). Profit and loss sharing (PLS) are used instead of interest-based lending. This means the bank and the customer share the risk.

Some of the features of Sharia banking or Islamic banking are, this bank operates in accordance with the principles of Islamic law. They have specific features and practices that differentiate them from conventional banks. Here are some key features of Sharia banks:

Prohibition of Interest (Riba): Sharia banks have strict prohibitions of interest. Instead of charging or paying interest on loans and deposits, Sharia banks engage in profit-sharing

arrangements or use alternative financing methods based on the principles of risk-sharing. Asset-Backed Financing: Sharia banks focus on asset-backed financing, which means that their financing is based on tangible assets. They prefer funding projects or businesses with underlying assets, such as real estate or equipment. This ensures a more transparent and equitable arrangement compared to purely speculative transactions.

Prohibition of Speculative and Prohibited: Sharia banks avoid engaging in activities that are considered speculative or prohibited in Islamic law. This includes activities such as gambling, alcohol, and industries that are harmful to society or the environment. Ethical Investment Principles: Sharia banks adhere to ethical investment principles, considering the social and environmental impact of their investments. They strive to invest in projects and businesses that align with Islamic values and contribute positively to society.

There are two types of PLS modes: Mudarabah and Musharakah. In Mudarabah, the bank gives the money, and the customer provides the expertise or labour. Profits are shared between the parties, while a loss will be bear by the bank. In Musharakah, both the bank and the customer provide capital and expertise, and profits and losses are shared.

This study focuses on the Effect of fiscal determinants on the return of means (ROA) in the Islamic Bank of Bangladesh. ROA indicates how efficiently a company is using its means to induce profit. The more the ROA high, the more profitable the company is. ROA has been considered the most important and important determinant of the profitability of Islamic banks, Because of its significance in explaining bank performance. ROA is generally expressed as a chance, indicating the profitability of each bone invested in means. An advanced ROA indicates that the company is more effective in generating gains from its assets. It's important to note that ROA is a relative measure and should be compared within the same assiduity or sector. diligence with different capital structures or asset conditions may have varying ROA marks.

Islamic banks have shown higher ROA than conventional banks in many countries. This is because the PLS modes used in Islamic banking encourage entrepreneurship, which can lead to higher profits. Islamic banks tend to have a more stable customer base Because they avoid speculative investments, which can contribute to their financial stability and, ultimately higher ROA. Islamic banks operate on profit-sharing principles rather than conventional interest-based lending. The profit-sharing ratios between the bank and its clients can impact the ROA. If the profit-sharing arrangement is well structured for the bank, it can lead to higher profitability and ROA. Economic and market conditions, such as interest rates, inflation rates, and overall economic stability, can impact the performance of Islamic banks and their ROA.

CHAPTER TWO

LITERATURE REVIEW

Literature Review

ROA is an important metric for evaluating the financial performance of banks. It provides insights into a bank's profitability, risk profile, and efficiency in utilizing its assets. Banks that have a high ROA are generally seen as more financially stable and are more likely to attract investors and customers.

According to Deni Sunaryo (2020), fluctuations in the loan-to-deposit ratio (LDR) can affect a bank's return on Assets (ROA). Luh Kadek Budi Martini (2017) showed in his study that the loan-to-deposit ratio (LDR) has a positive impact on the return on investment (ROA). According to Pasaman Silaban (2017), his research found that non-performing loans have a negative impact on bank profitability (ROA). S. Annam et al. (2019) Return on Assets (ROA) is used to measure asset performance and utilization and also serves as a basis for measuring the revenue contribution of new asset investments.

Empirical studies on the performance of the banking sector have focused on return on assets (ROA), return on equity (ROE), and net interest margin. Research by Muhammad et al. (2016) explored the factors that changed bank profitability and showed that capitalization has a positive impact on the profitability of Islamic banks. Dr. Saeed Mohammed Ali Tirmiji et al. (2021) present the variables of capital adequacy, funding (liquidity) and investment in total assets from the perspective of investing in his ROA approach on a total assets basis. We further examine the relationship with the profitability of Islamic banks. According to Al-Qudah et al. (2013)

Empirical studies show that capital adequacy and bank size have a significant positive impact on return on assets (ROA). On the other hand, leverage, measured by total deposits relative to total assets, has a negative and significant impact on ROA. Liquidity does not significantly affect itinerary (ROA). Naceur and Goained (2001) point out that the best-performing banks have high deposit accounts relative to assets and high returns on capital.

Samad and Hassan, 2010: Higher ROA means higher returns and better asset utilization. This shows how banks turn assets into net income. A higher ratio indicates higher skill and, therefore, better performance. Akhtar et al. (2011), return on assets (ROA) should be considered as a measure of profitability for Islamic banks. This is because it is considered to be the true measure of a bank's operating performance.

However, there is hardly any study performed focusing on the Effect of financial determinants on the Return of Assets (ROA) in the Islamic Bank of Bangladesh. Most of the studies are on the profitability or growth of Islamic banks and not on the ROA of Islamic banks in Bangladesh. But in this research or study, we will find how an Islamic bank uses its assets to generate profit.

CHAPTER THREE

METHODOLOGY

Data Collection:

There are 61 scheduled banks in Bangladesh, among them there are 10 Islamic banks. From 10 Islamic bank only 5 is trading in the share market of Bangladesh, but we got all information of 4 fully-fledge banks, lack of information of that bank we could not include here. The Data for this study collected from Seven-years (2015–2021) of 4 fully-fledge Islamic banks in Bangladesh.

Here are all the annual reports with the year of the Islamic bank that we have used in this study.

Serial Number	Annual Report of	Year
1	Islami Bank Bangladesh Limited	2015
2	Islami Bank Bangladesh Limited	2016
3	Islami Bank Bangladesh Limited	2017
4	Islami Bank Bangladesh Limited	2018
5	Islami Bank Bangladesh Limited	2019
6	Islami Bank Bangladesh Limited	2020
7	Islami Bank Bangladesh Limited	2021
8	Al Arafah Islami Bank	2015
9	Al Arafah Islami Bank	2016
10	Al Arafah Islami Bank	2017
11	Al Arafah Islami Bank	2018
12	Al Arafah Islami Bank	2019
13	Al Arafah Islami Bank	2020
14	Al Arafah Islami Bank	2021
15	Social Islami Bank	2015
16	Social Islami Bank	2016
17	Social Islami Bank	2017
18	Social Islami Bank	2018
19	Social Islami Bank	2019
20	Social Islami Bank	2020
21	Social Islami Bank	2021
22	First Security Islami Bank Limited	2015
23	First Security Islami Bank Limited	2016
24	First Security Islami Bank Limited	2017
25	First Security Islami Bank Limited	2018
26	First Security Islami Bank Limited	2019
27	First Security Islami Bank Limited	2020
28	First Security Islami Bank Limited	2021

Multiple Regression Analysis

Multiple regression analysis is a model that linear relationship between a dependent variable and one or more independent variables. It is one of the most widely used statistical techniques ever. In banking and finance literature, regression analysis is a very common method for identifying the determinants of bank performance (On gore and Kuras, 2013; Sharifi and Akhter, 2016). In this study, we fit three models to three different dependent variables based on five common independent variables.

$$Y = b0 + b1X1 + b2X2 + ... + bnXn + e$$

where:
Y is the dependent variable
b0 is the intercept
b1, b2, ..., bn are regression coefficients
X1, X2, ..., Xn are independent variables
e is the error term

The regression coefficients (b1, b2, ..., bn) represent the slope of the line of best fit for each independent variable. The intercept (b0) represents the value of Y when all of the independent variables are equal to 0. The error term (e) represents the difference between the observed value of Y and the predicted value of Y.

Fixed effects model:

A fixed effects model is a statistical approach used in panel data analysis to account for individual or entity-specific characteristics that remain constant over time. Including fixed effects as dummy variables helps control for time-invariant heterogeneity and allows more accurate estimates of relationships between variables in panel data.

A fixed effects model estimates the relationship between independent and dependent variables by including a set of dummy variables representing each entity in the regression equation. These dummy variables capture fixed effects and allow entity-specific sections to be estimated. By considering fixed effects, the model effectively eliminates time-invariant heterogeneity between entities and focuses on intra-entity variability. Mathematically, the fixed effects model can be expressed as

Random effects model:

A random effects model is a statistical model that considers both fixed and random effects. It is often used to analyze hierarchical or nested data, where observations are grouped into higher-level units. In a random-effects model, fixed effects represent the average relationship between variables across all groups, and random effects capture the variation between groups. This model assumes that the random effects come from a population of possible values and that the variation between groups is modeled using probability distributions.

CHAPTER FOUR

DATA ANALYSIS

We consider the variables are:

ROA = Return on Assets
ROE = Return on Equity
ROI = Return on Investment
TA = Total Assets
TE = Total Equity
TL = Total Liability
TD = Total Deposit
EPS = Earning Per Share
PER= Price Earning Ratio
CA = Capital Adequacy
SP = Share Price
NOS = No of Shares
TOI = Total Operating Income
OE = Operating Expense
CASH = Cash
ETA = Equity to Total Assets
BVPS = Book Value Per Share
PBV = Price to Book Value
MC = Market Capital
CTI = Cost to Income

In this study we consider ROA is a dependent variable and ROE, ROI, TA, TE, TL, TD, EPS, PER, CA, SP, NOS, TOI, OE, CASH, RTA, BVPS, PBV, MC, CTI are independent variables.

Fixed Effect Model for Panel Data:

```
Fixed-effects (within) regression               Number of obs      =        27
Group variable: Serial                          Number of groups   =         4

R-sq:  within  = 0.8639                         Obs per group: min =         6
       between = 0.2648                                        avg =       6.8
       overall = 0.0980                                        max =         7

                                                F(19,4)            =      1.34
corr(u_i, Xb)  = -0.8463                        Prob > F           =    0.4288
```

ROA	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
ROE	.0249955	.0141987	1.76	0.153	-.0144263	.0644174
ROI	.3141506	.1668906	1.88	0.133	-.1492122	.7775133
TA	-3.05e-06	2.63e-06	-1.16	0.311	-.0000104	4.26e-06
TE	.0000385	.0000433	0.89	0.424	-.0000817	.0001587
TL	-1.05e-06	7.75e-07	-1.36	0.247	-3.20e-06	1.10e-06
TD	1.43e-06	8.20e-07	1.75	0.156	-8.44e-07	3.71e-06
EPS	.0165996	.0581793	0.29	0.790	-.144932	.1781312
PER	.0113489	.0222125	0.51	0.636	-.0503228	.0730206
CA	-.0045042	.0072925	-0.62	0.570	-.0247514	.015743
SP	.0650213	.0619817	1.05	0.353	-.1070676	.2371102
NOS	.0014475	.0007788	1.86	0.137	-.0007147	.0036096
TOI	.0000525	.0000446	1.18	0.304	-.0000713	.0001764
OE	-.0001383	.000062	-2.23	0.090	-.0003104	.0000339
CASH	-1.86e-06	3.64e-06	-0.51	0.635	-.000012	8.23e-06
ETA	-9.674403	10.48597	-0.92	0.408	-38.78812	19.43931
BVPS	-.0513359	.0492546	-1.04	0.356	-.1880884	.0854167
PBV	-1.371295	1.437356	-0.95	0.394	-5.362035	2.619445
MC	-1.46e-06	1.02e-06	-1.44	0.224	-4.28e-06	1.36e-06
CTI	-.7378912	1.019809	-0.72	0.509	-3.569336	2.093553
_cons	.8865793	2.005646	0.44	0.681	-4.681987	6.455146
sigma_u	.24178253					
sigma_e	.11475337					
rho	.81615434	(fraction of variance due to u_i)				

```
F test that all u_i=0:     F(3, 4) =     2.21                 Prob > F = 0.2297
```

ROA= 0.0249955ROE+0.3141506ROI-0.00000305TA+0.0000385TE-0.00000105TL+0.00000143TD+0.0165996EPS+0.0113489PER-0.0045042CA+0.0650213SP+0.0014475NOS+0.0000525TOI-0.0001383OE-0.00000186CASH-9.674403ETA-0.0513359BVPS-1.371295PBV-0.00000146MC-0.7378912CTI+0.8865793

In Fixed Effect Model,

If we increase one unit of ROE then ROA will increase 0.02499 unit,
Similarly, if we increase one unit of ROI then ROA will increase 0.3141506 unit,
If we increase one unit of TE then ROA will increase 0.0000385 unit,
If we increase one unit of TD then ROA will increase 0.00000143TD unit.
If we increase one unit of EPS then ROA will increase 0.0165996 unit,
If we increase one unit of PER then ROA will increase 0.0113489 unit,
If we increase one unit of SP then ROA will increase 0.0650213 unit,
If we increase one unit of NOS then ROA will increase 0.0014475 unit,
If we increase one unit of TOI, ROA will increase 0.0000525 unit.

Again,

If we increase one unit of TA then ROA will decrease 0.00000305 unit.
Similarly, if we increase one unit of TL then ROA will decrease 0.00000105 unit.
If we increase one unit of CA then ROA will decrease 0.0045242 unit.

If we increase one unit of OE then ROA will decrease 0.0001383 unit.
If we increase one unit of CASH then ROA will decrease 0.00000186 unit.
If we increase one unit of ETA then ROA will decrease 9.674403 unit.
If we increase one unit of BVPS then ROA will decrease 0.0513359 unit.
If we increase one unit of PBV then ROA will decrease 1.371295 unit.
If we increase one unit of MC then ROA will decrease 0.00000146 unit.
If we increase one unit of CTI then ROA will decrease 0.7378912 unit.

Random Effect Model:

```
Random-effects GLS regression                   Number of obs      =        27
Group variable: Serial                          Number of groups   =         4

R-sq:  within  = 0.6658                         Obs per group: min =         6
       between = 0.7370                                        avg =       6.8
       overall = 0.6724                                        max =         7

                                                Wald chi2(19)      =     14.37
corr(u_i, X)   = 0 (assumed)                    Prob > chi2        =    0.7619
```

ROA	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
ROE	.0327901	.0111671	2.94	0.003	.0109029	.0546772
ROI	.0843675	.1313309	0.64	0.521	-.1730364	.3417713
TA	-2.67e-06	2.41e-06	-1.11	0.267	-7.39e-06	2.05e-06
TE	.0000243	.0000296	0.82	0.413	-.0000338	.0000823
TL	-7.91e-07	7.38e-07	-1.07	0.284	-2.24e-06	6.56e-07
TD	2.67e-07	6.17e-07	0.43	0.665	-9.42e-07	1.48e-06
EPS	-.0093288	.0657979	-0.14	0.887	-.1382903	.1196327
PER	.0247538	.0212385	1.17	0.244	-.0168729	.0663804
CA	-.0007541	.0067339	-0.11	0.911	-.0139523	.0124441
SP	-.027647	.0462646	-0.60	0.550	-.118324	.0630299
NOS	.000463	.0005552	0.83	0.404	-.0006252	.0015512
TOI	.0000726	.0000497	1.46	0.144	-.0000249	.0001701
OE	-.0000832	.0000712	-1.17	0.242	-.0002227	.0000563
CASH	9.60e-07	3.44e-06	0.28	0.780	-5.78e-06	7.70e-06
ETA	-6.031409	7.216353	-0.84	0.403	-20.1752	8.112384
BVPS	.0115134	.0395765	0.29	0.771	-.0660553	.089082
PBV	.2535923	1.187378	0.21	0.831	-2.073627	2.580811
MC	-2.84e-07	9.71e-07	-0.29	0.770	-2.19e-06	1.62e-06
CTI	.8731375	.9520939	0.92	0.359	-.9929323	2.739207
_cons	-.5174214	1.154331	-0.45	0.654	-2.779869	1.745026
sigma_u	0					
sigma_e	.11475337					
rho	0	(fraction of variance due to u_i)				

ROA=0.0327901ROE+0.0843675ROI-0.00000267TA+0.0000243TE-0.000000791TL+0.000000267TD-0.0093288EPS+0.0247538PER-0.0007541CA-0.027647SP+0.000463NOS+0.0000726TOI-0.0000832OE+0.000000960CASH-6.031409ETA+0.0115134BVPS+0.2535923PBV-0.000000284MC+0.8731375CTI-0.5174214

In Random Effect Model,
If we increase one unit of ROE then ROA will increase 0.0327901 unit,

Similarly, if we increase one unit of ROI then ROA will increase 0.0843675 unit,
If we increase one unit of TE then ROA will increase 0.0000243 unit,
If we increase one unit of TD then ROA will increase 0.000000267 unit,
If we increase one unit of PER then ROA will increase 0.0247538 unit,
If we increase one unit of NOS then ROA will increase 0.000463 unit,
If we increase one unit of TOI then ROA will increase 0.0000726 unit,
If we increase one unit of CASH then ROA will increase 0.000000960 unit,
If we increase one unit of BVPS then ROA will increase 0.0115134 unit,
If we increase one unit of PBV then ROA will increase 0.2535923 unit,
If we increase one unit of CTI then ROA will increase 0.8731375 unit.

Again,
If we increase one unit of TA then ROA will decrease 0.0000026 unit,
Similarly, if we increase one unit of TL then ROA will decrease 0.000000791 unit,
If we increase one unit of EPS then ROA will decrease 0.0093288 unit,
If we increase one unit of CA then ROA will decrease 0.0007541 unit,
If we increase one unit of SP then ROA will decrease 0.027647 unit,
If we increase one unit of OE then ROA will decrease 0.0000832 unit,
If we increase one unit of ETA then ROA will decrease 6.031409 unit,
If we increase one unit of MC then ROA will decrease 0.000000284 unit.

```
. hausman fe re

Note: the rank of the differenced variance matrix (10) does not equal the number of coefficients being tested (19); be sure this
        is what you expect, or there may be problems computing the test.  Examine the output of your estimators for anything
        unexpected and possibly consider scaling your variables so that the coefficients are on a similar scale.

                 ---- Coefficients ----
              |      (b)          (B)            (b-B)     sqrt(diag(V_b-V_B))
              |       fe           re         Difference          S.E.
--------------+----------------------------------------------------------------
          ROE |    .0249955     .0327901       -.0077945        .0087691
          ROI |    .3141506     .0843675        .2297831         .102979
           TA |   -3.05e-06    -2.67e-06       -3.73e-07        1.06e-06
           TE |    .0000385     .0000243        .0000143        .0000316
           TL |   -1.05e-06    -7.91e-07       -2.60e-07        2.37e-07
           TD |    1.43e-06     2.67e-07        1.16e-06        5.40e-07
          EPS |    .0165996    -.0093288        .0259284               .
          PER |    .0113489     .0247538       -.0134048        .0065054
           CA |   -.0045042    -.0007541       -.0037501        .0027991
           SP |    .0650213     -.027647        .0926683        .0412471
          NOS |    .0014475      .000463        .0009845        .0005461
          TOI |    .0000525     .0000726         -.00002               .
           OE |   -.0001383    -.0000832        -.000055               .
         CASH |   -1.86e-06     9.60e-07       -2.82e-06        1.18e-06
          ETA |   -9.674403    -6.031409       -3.642993        7.607875
         BVPS |   -.0513359     .0115134       -.0628492        .0293208
          PBV |   -1.371295     .2535923       -1.624887        .8100152
           MC |   -1.46e-06    -2.84e-07       -1.18e-06        3.00e-07
          CTI |   -.7378912     .8731375       -1.611029         .365415
------------------------------------------------------------------------------
                           b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                 chi2(10) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =        7.52
                Prob>chi2 =      0.6756
                (V_b-V_B is not positive definite)
```

The results of the above table shows that H=7.52. Using the P-value (P-value=0.6756) reported above, we cannot reject the null hypothesis. This means that the coefficients of the random effects model are consistent as well as efficient. Hence, we would apply the random effects model.

Therefore, the expected multiple regression model is;

ROA=0.0327901ROE+0.0843675ROI-0.00000267TA+0.0000243TE-0.000000791TL+0.000000267TD-0.0093288EPS+0.0247538PER-0.0007541CA-0.027647SP+0.000463NOS+0.0000726TOI-0.0000832OE+0.000000960CASH-6.031409ETA+0.0115134BVPS+0.2535923PBV-0.000000284MC+0.8731375CTI-0.5174214

CHAPTER FIVE

CONCLUTIONS

Conclusions

In general, if the value of earning per share (EPS) will increase then return on Assets (ROA) will also increase. In our discussion, we got that similar issue in fixed effect model but unfortunately in case of the random effect model for Islamic bank of Bangladesh, the value of earning per share will increase then return on asset will decrease.

In general, if the value Capital Adequacy will increase then Return of Asset will also increase, In our discussion, unfortunately we got the opposites result, in the fixed and random effect both model showed that if we increase the Capital Adequacy then return on assets will decrease.

In the Fixed effect model if we increase the value of Share Price then the return of assets will also increase and in the random effect model unfortunately, we got the opposite result, if we increase Share Price then return on assets will decrease, but in general if the share price will increase then the Return on assets will increase.

In general, if the cash increase the return on assets will also increase. In our discussion, we got the similar issue in random effect but unfortunately in case of fixed effect model for Islamic bank in Bangladesh, the value of cash will increase then return on assets will decrease.

In general, if the value of Equity to Total Assets increases then Return on Assets will increase. In our discussion, unfortunately we got the different issues in fixed effect and random effect model, both models showed if the value of Equity of Total Assets increases then Return on Assets will decrease.

In general, if the value of Book Value Per Share will increase then Return on Assets will also increase, in our discussion, we got similar issues in random effect model but in case of fixed effect model for Islamic bank in Bangladesh, if the value of Book Value Per Share increase, then the Return on Assets will decrease.

In general, if value of Price to Book Value increase, then Return on Assets will decrease, in our discussion, we got the similar issues in fixed effect model but unfortunately in case of random effect model for islamic bank of Bangladesh, if the Price to Book Value increase, then Return on Assets will increase.

In general, if value of Cost to Income increases then Return on Assets will decrease, in our discussion, in fixed effect model we got the similar issues as general, but unfortunately in case of random effect model for islamic bank of Bangladesh, if the Cost to income increase then Return on Assets will increase

Appendices

Year	Serial	Return on Asset	Return on Equity	Return On Investment	Total Asset	Total Equity	Total Libabilities	Total Deposit	Earning Per Share	Price Earning Ratio	Capital Adequacy
2015	1	0.44%	6.28%	8.20%	8,59,201.00	47,200.00	6,78,621.51	6,15,359.21	1.88	12.54	11.66%
	2	1.08%	12.82%	11.70%	2,29,106.65	19,236.07	206870.58	1,69,887.08	0.032	6.36	15.30%
	3	2.08%	16%	3.93%	180112.11	12950.32	1,67,161.78	1,49,773.61	2.95	4.89	12.33%
	4	0.98%	10.78%	11.74%	1,37,870	12,254	125615.54	1,09,259	1.76	7.67	13.52%
2016	1	0.59%	9.28%	8.29%	7,97,699.66	50556.47	7,48,960.70	6,81,352.25	2.77	10.11	10.82%
	2	1.23%	15.67%	10.41%	267334.6519	23,704.16	267334.6519	200054.1977	3.06	5.2	14.41%
	3	2.06%	16.16%	2.39%	227704.1786	19,195.04	213516.3819	1,90,564.51	3.1	5.93	11.57
	4	1.02%	12.40%	1.49%	1,67,245	12,857	1,54,388.19	1,24,410	2.12	7.08	11.54%
2017	1	0.55%	9.63%	8.14%	8,99,960	57,958.08	849630.79	7,55,022.25	2.91	12.24	11.30%
	2	0.98%	14.07%	9.47%	3,14,596.97	25,104.77	293734.6177	245642.2308	3.09	8.01	12.28%
	3	10.27%	1.40%	3.39%	2,76,348.95	21,725.07	2,62,182.50	2,28,798.90	1.97	12.33	11.59%
	4	0.01	0.09	0.03	207886.37	19375.98	194568.59	145382.47	1.55	21.29	12.19
2018	1	0.64%	11.06%	8.60%	997430	69619	9,42,533	822573	3.77	6.87	11.97%
	2	0.73%	10.46%	9.83%	333262	30,564	3,11,673.06	2,66,205	2.31	8.63	14.68%
	3	0.54%	10.05%	3.54%	3,07,305.32	26,111.51	2,91,555.44	2,48,324.48	1.95	7.9	14.27%
	4	0.65%	10.47%	2.68%	2,43,659.89	176861.513	2,28,871	1,76,862	1.73	15.95	14.50%
2019	1	0.50%	9.39%	8.59%	11,41,493	79,080	10,82,841.29	9,46,291.53	3.31	7.05	12.95
	2	0.64%	10.05%	11.22%	3,81,052	24,307.96	3,53,603.78	2,97,241.81	2.28	7.56	13.88
	3	0.47%	9.21%	3.98	3,45,056.23	27901.79723	3,27,784.90	287936.6551	1.7	8.1	13.78
	4	0.67	10.98	10.07%	2,66,104	16,507	2,49,596	2,03,384	1.84	12.71	16.02%
2020	1	0.35%	7.38%	0.07	1416829	87253	26000	1179476	2.81	7.01	13.55%
	2	0.61%	10.1	9.68%	4,18,298.65	27,186.95	389374.5313	3,26,023.41	2.41	9.22	15.48%
	3	0.42%	8.78%	4.12%	3,84,999.71	30,368.89	3,66,961.32	322384	1.65	7.86	13.50%
	4	0.68%	11.08%	8.34%	2,93,518	17,949	2,75,569	2,18,443	1.95	11.76	14.19
2021	1	7.40%	7.19%	6.32	16,35,993	98,189.08	699.154979	1.38	2.88	11.11	13.54%
	2	0.46%	8.21%	8.08%	453473.3057	32,575.36	4,29,447.80	3,53,287.97	1.96	13.57	15.31%
	3	0.40%	8.91%	3.39%	4,08,203.16	32,447.95		341661.0643	1.69	8.78	11.60%
	4	0.85%	13.70%	3.46%	3,13,731	33,778	2,93,928	2,17,289	2.51	8.69	15.04%

Share Price	No of Shares	Total Operating Income	Opeating Expense(Tk in Million)	Cash	Equity to TA	Book Value per Share	Price to Book Value	Market Capital	Cost to Income
31.5	1,609.99	28065.05	13466	55,256.08	0.05	29.32	1.07	50714.685	0.75
14.7	946.95	9216.78	3,483.03	1777.48	0.08	20.31	0.72	13920.17	0.38
8.97	703.14	8,291.92	3400.08	1145.36	0.07	10	0.90	6307.18	0.41
9.18	734.69	5,155.64	2,778.20	1,106.55	0.09	17	0.55	6744.45	0.54
29.7	1609.99	32,212.34	17687.2233	71455.04	0.063	31.40	0.95	47816.72284	0.55
14.85	994.31	10,751.43	3,996.27	32,883	0.089	23.84	0.62	14765.45046	0.37
13.14	738.29	9629.998973	3,931.91	17946.83	0.084	26.00	0.51	9701.1306	0.41
10.2	734.69	5978.165949	2998.958713	9,577.89	0.077	17.50	0.58	7493.838	0.50
39.75	1,609.99	35556	18,751	83597.09	0.064	36.00	1.10	63997.1025	0.75
22.5	994.3	11,804.20	5101.141554	39,765.98	0.080	25.25	0.89	22371.75	0.43
17.35	738	10,852.44	4,686	23,826.66	0.079	29.4	0.59	12809.3315	0.43
23.56	771.42	6869.79	3541.88	1529.75	0.09	25.1	0.94	18174.6552	0.52
24.2	1,609.99	39597	19357	67,463.91	0.070	34.1	0.71	38961.758	0.49
19.51	1,044.02	12,195.35	5,983.81	25,710.00	0.092	20.8	0.94	20368.8302	0.49
12.09	812.12	11,551.53	5,408.41	26,080.06	0.085	20.8	0.58	9818.5308	0.468
21.67	848.56	8,653	4,076	13,565.83	0.726	21.8	0.99	18388.2952	0.471
23.25	1609.99	43,190	21,276	75,853.43	0.069	22.8	1.02	37432.3	0.49
17.2	1,065	14,044.40	6,242.63	3,052.68	0.064	23.8	0.72	18316	0.44
11.92	9.69	12,282.58	5,940.46	31,898.44	0.081	24.8	0.48	115.5048	0.48
20.21	933.42	10,506	4,641	17,859.42	0.062	25.8	0.78	18864.4182	0.442
26.8	1609.99	39706	24908	2,13,784.32	0.062	26.8	1.00	43147.7499	0.63
22.2	1,064.90	13,339.00	6,677.91	31,540.62	0.065	27.8	0.80	23640.78	0.50
11.79	938	155.11	123.05	33,373.48	0.079	28.8	0.41	11059.11931	0.79
20.77	980.09	8,805	4,711	15,166	0.061	29.8	0.70	20356.4693	0.54
32	1609.99	43,327	26,772	2,46,163.38	0.060	30.8	1.04	51519.70138	0.62
26.6	1064.90	14305.54904	6,959.66	3217.933106	0.072	31.8	0.84	28326.39812	0.49
	9.699	10,746.82	6,220.59	23491.24172	0.079	32.8	0.00	0	0.58
20.76	1,029.10	10,901	4,897	14,031.06	0.108	33.8	0.61	226304.76	0.45

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