



**FACTORS EXPLAIN THE PROFITABILITY OF
DHAKA BANK LIMITED & PRIVATE COMMERCIAL BANKS IN BANGLADESH**



Inspiring Excellence

BRAC Business School

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DHAKA BANK LIMITED & PRIVATE COMMERCIAL BANKS IN BANGLADESH**

Submitted to

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Fairuz Chowdhury
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Subject: Submission of Internship Report (Summer 2016)

Dear Sir,

With all due respect and this is my humble honor and privilege to submit to you my internship report on **“Factors Explain The Profitability of Dhaka Bank Limited & Private Commercial Banks in Bangladesh”** that I was assigned by you. Besides the worthwhile internship experience at “Dhaka Bank Ltd” in addition to working on this report gives me the opportunity to learn about the bank’s profitability factors in a more detailed and exhaustive manner.

My three month internship commenced in Dhaka Bank Ltd at Motijheel Branch from 2th of May to finish it on 31th of July, 2016. Perusal through the first section of the report will replicate an inclusive picture of “Dhaka Bank Ltd” with a description on the company and its background, present state of the organization, product offerings and analysis. Then the progression of reading will unfold the job description during my time of internship along with job responsibilities, aspects and observation regarding the performed tasks. After that, the next chapter of this report will disclose every steps of the research model format used for better extraction of information as well as for reaching a credible outcome of the model and analysis of the model.

In preparing this report I have tried to abide by the instructions you have rendered about writing and presentation of the report.

Thank you for giving me the opportunity to work on this topic and I hope this internship report will worth to meet your satisfactions.

Sincerely,

Md. Javed Kaisher

ID- 12104010

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A successful conclusion of internship report requires support from person and I was fortunate to have that support, direction and supervision in every aspect from my academic and on field supervisors.

My gratitude towards my Internship supervisor Mr. Fairuz Chowdhury; without her guidance and supervision it would be impossible to complete this paper. I would also like to express my thankfulness for her encouragement and directives towards working on this topic.

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Abstract

At present private commercial banks are dominant in respect of market share and profitability in the banking industry of Bangladesh. The profit growth of these banks seems to be very high. This paper seeks to examine the profitability determinants of Private Commercial Banks of Bangladesh in recent years. The study employs annual data for the 10 Private Commercial Banks of Bangladesh for the year 2011 to 2015. Multiple regression analyses were run for each of the year to capture the significant determinants of profitability and to test some hypothesis.

In this report attempt has been made to portray an analysis regarding Dhaka bank Ltd and 9 Private Commercial Banks (PCBs) in Bangladesh and its profitability. In addition, the research was conducted by gathering information from the secondary sources mainly annual reports, online journals, newspaper articles, research statistics of national and national think-tanks, guidelines from Bangladesh Bank (BB). After gathering the required data, MS Office and MS excel was used to find out optimum information from the sample and then analysis was done by following the critical reasoning method to figure out the outcome.

This report contains the evolution of Dhaka Bank Ltd and its growth and its expansion. Several profitability ratios have been analysis to understand the profitability factors of private commercial banks. Meanwhile, this critical analysis leads to more complex correlation and regression analysis for better understanding the determinants of the Dhaka Bank Ltd and other private commercial banks profitability.

The empirical findings from this study suggest that that NPL (Non Performing Loan) and NIM (Net Interest Margin) ratio does have significant effect on the profitability. But the impact of Net-Operating Margin on profitability was observed as the most significant among various variables. Furthermore, Loan to Asset ratio and Deposits to asset ratio of private banks also has positive impact on ROA. The findings suggest that bank with higher operating margin are tent to more profitable.

LIST OF ABBREVIATION

BB	Bangladesh Bank
CA	Capital Adequacy
CBD	Consumer Banking Division
DPS	Deposit Pension Scheme
DBL	Dhaka Bank Limited
DBBL	Dutch Bangla Bank Limited
DP	Deposit to Total Asset
EBL	Eastern Bank Limited
FDR	Fixed Deposit Rate
GDP	Gross Domestic Product
LA	Loan to Total Asset
LC	Letter of Credit
NIM	Net Interest Margin
NOM	Net Operating Margin
NPL	Non Performing Loan
PCBs	Private Commercial Banks
ROA	Return on Asset
ROE	Return on Equity
RWA	Risk Weighted Asset

CHAPTER 1 INTRODUCTION

Dhaka Bank Limited

History and Company Overview

The nation was just halfway of its age; the passion for history and heritage and an obsession for faster pace exerted a powerful force for change in the business world. Many budding hopes grew as a choice of the new generation in the shadows of banking reformation of the eighties. Dhaka Bank is such a dream that spread in profusion modern banking prospects with deep attachment to our community and culture. A host of visionary entrepreneur friends inspired by a futurist leader set forth the fight of this great corporate voyage that echoed the speed of technology on the inner soul of Bangladesh. Dhaka Bank was incorporated as a Public Limited Company on April 6, 1995 under Companies Act, 1994 (Dhaka Bank Limited, 2015). The company commenced banking operations on July 5, 1995. From the very year of its landmark journey, Dhaka Bank has truly cherished and brought into focus the heritage and history of Dhaka and Bangladesh from Mughal outpost to modern metropolis. Most of its presentation, publications, brand initiatives, delivery channels, calendars and financial manifestations bear Bank's commitment to this attachment. The Bank is widely recognized today for its exceptional service, simplicity, proximity and cutting-edge way of delivery. The Bank has stood out for its financial strength and operational craftsmanship marking its position as the potential market player in all core areas of banking in the country. It got listed in DSE and CSE in 2000 (Dhaka Bank Limited, 2015).

Alongside a lasting bond with the corporate world, DBL has got hold of a countrywide reach through a larger network of Branches, ATMs, SME channels, agricultural outreach and mobile banking. The Bank is now expanding far and wide to higher market share and big surge in assets. A great total of 439,544 customers' accounts now Dhaka Bank Ltd serve and seek to make them better-off as best as we can (Dhaka Bank Limited, 2015). Strong with 164 delivery centers, the Bank is still going strong with more expansion and inclusive banking programmers (Dhaka Bank Limited, 2015). Opening many gateways for financial freedom and services, DBL has made its vibrant presence at 87 locations including 2 Islamic Banking Branches, 1 Offshore Banking Unit, 3 SME Service Centers, 1 Business Kiosk, 53 ATMs and 19 ADMs across the country (Dhaka Bank Limited, 2015). Catering to the needs of Capital Markets, the Bank has established a subsidiary company named 'Dhaka Bank Securities Ltd.' having 6 countrywide Branches. Another subsidiary in the name of 'Dhaka Bank Investment Limited' is yet to start operation. This has strengthened its capital base to Tk. 15,408 million with a capital adequacy ratio of 10.46% (Dhaka Bank Limited, 2015). Sailing past all odds and uncertainties in 2015, DBL posted an operating profit of Tk. 3,504 million. In addition to our priority of operating profitably and successfully, even in the tough market environment, we are acutely aware of our

responsibilities that go beyond banking and reflect our commitment to our employees, society and environment. Above all, the clients are our fond obsession (Dhaka Bank Limited, 2015).

Dhaka Bank Limited is the brainchild of a host of committed entrepreneurs and farsighted dreamers of banking excellence. Since the establishment, the Bank is now an admired provider of financial services and has positioned itself as a strong brand in the mind of customers. **‘Excellence in Banking’** is our motto and to become the best performing bank in the country is our mission. As a leading private commercial bank in Bangladesh, Dhaka Bank Ltd eminence is backed by quality products and services, superior technology and highly motivated personnel to realize your dream. Dhaka Bank Ltd is recognized for our good governance practices, compliance with regulatory guidelines, and flexibility to growing needs and adaptability to the changing world. DBL expect to rise from the heart of Bangladesh as a stronger force in the market it serve. Dhaka Bank Ltd is committed to it goals to create superior shareholder value in its quest for excellence as Dhaka Bank Ltd grow and mature into a banking veteran.

Corporate Ethos

Vision of DBL

To be the premier financial institution in the country providing high quality products and services backed by latest technology and a team of highly motivated personnel to deliver Excellence in Banking (Dhaka Bank Limited, 2015).

Mission of DBL

At Dhaka Bank, we draw our inspiration from the distant stars. Our mission is to assure a standard that makes every banking transaction a pleasurable experience. Our endeavor is to offer you supreme service through accuracy, reliability, timely delivery, cutting edge technology and tailored solution for business needs, global reach in trade and commerce and high yield on your investments (Dhaka Bank Limited, 2015).

Our people, products and processes are aligned to meet the demand of our discerning customers. Our goal is to achieve a distinct foresight. Our prime objective is to deliver a quality that demonstrates a true reflection of our vision- Excellence in Banking.

Strategic Objectives

- Our objectives are to conduct transparent and high quality business operation based on market mechanism within the legal and social framework spelt in our mission and reflected in our vision.
- Our greatest concerns are our customers to provide them continually efficient, innovative and high quality products with excellent delivery system.
- Our motto is to generate profit with qualitative business as a sustainable ever-growing organization and enhance fair returns to our shareholders.
- We are committed to our community as a corporate citizen and contributing towards the progress of the nation as our corporate social responsibility.
- Our employees are our backbone. We promote their wellbeing through attractive compensation package, promoting staff morale through training, development and career planning.
- We strive for fulfillment of our responsibility to the government through paying entire range of taxes and duties and abiding by the other rules.
- We are cautious about environment and climatic change and dutiful to make our homeland a green and clean soil.

Corporate Values

- Customer Focus
- Integrity
- Quality
- Teamwork
- Respect for the Individual
- Responsible Citizenship

Ethical Principles

- We are compliant to our country's laws and regulations.
- We reject bribery and corruption.
- We avoid compromised gifts and entertainment.
- We speak up if we suspect any actual, planned or potential behavior that may breach any laws and regulations.
- We are compliant to Anti Money Laundering guidelines and other prudential regulations provided by our regulators.
- We resolve customer complaints quickly and fairly.
- We maintain confidentiality and fidelity of our customer.
- We treat our colleagues with fairness and respect; work with highly motivated team spirit and fellowship bond.

Our Strength

- A dynamic and vibrant Board of Directors.
- A strong and resilient capital base.
- Highly qualified team of management professionals.
- Forward looking strategies and management policies.
- Cutting-edge tools and technologies to support real time on-line banking.
- Well-diversified line of business.
- A good risk management and compliance culture.
- Deep focus on quality control.
- And a dedicated line of human resources.

Business Overview of DBL

DBL is operating its business with its four wings; Corporate, Consumer, SME and Islamic banking (Dhaka Bank Limited, 2015). To satisfy the diversified necessities of the customers and to encourage them in business and investment, the management of DBL has tailored its business according to the needs of its client base.

Corporate Banking

The corporate division of DBL provides facility of lease financing, term loans, working capital financing, project financing and other specialized products for capital expenditure and working capital to a broad range of corporate clients across the country. The division also offers Structured Finance (SF) solutions that include corporate bond issuances and debt syndication (Dhaka Bank Limited, 2015).

Product Offering of DBL

Table 1.1 Product of DBL Corporate Banking

Short Term	Financing Product	Working Capital Loan	Long Term	Financing Loan	Term Loan Financing
		Over draft (OD)			Medium Term (Max 5 years)
	Letter of credit				Long Term (Above 5 years)
	Demand Loan				
	Time Loan				

Source: Author's compilation from the annual reports of DBL

Regular Trade Services Products

- Letter of Credit (Documentary Credit)
- Back to back letter of credit
- Shipping guarantee
- Delivery order
- Export LC (Advising & Transfer)
- Letter of Guarantee
- Import Bill Handling
- Export Bill Negotiation/Collection
- Import Loan
- Letter of Trust Receipt (LTR)
- Time Loan

Specialized Trade Service Products

- EDF Loan (Export Development Fund)
- OBU Financing (Off Shore Banking Unit)
- Demand Loan

Cash Management Solutions

- Payment & collection solution
- Bulk cheque Processing
- Utility Bill collection
- Vendor/Salary Payment
- Cash pickup & Delivery
- Hajj Remittance Processing
- Managing IPOs as Lead Bank
- Act as Banker to the issue of IPOs

Consumer Banking

Consumer banking is a business model which continues to provide the needs of consumer customers only. Consumer customers are individuals' professionals, doctors, engineers, teachers, bankers, defense personnel, high net worth account holders etc. Consumer Banking Division (CBD) looks after individual demands and provides the solution according to demand (Dhaka Bank Limited, 2015).

Financial Highlight

Table 1.2 Financial Highlight of Consumer Banking

Sectors	Loans & Advances	Deposits
DBL Total	103,131.50	124,500.00
CBD Total	1,325.66	31,387.20
Percentage	1.29	25.21

Source: Author's compilation from the annual reports of DBL

In 2015, Bank further strengthened focus on customer segment through proper channeling of variety of consumer products and services to ensure quality asset/liability product innovation and brand building. As on December 31, 2015, consumer loan outstanding (including Credit Card) was Tk. 1,325.66 million which is 1.29% of total Dhaka Bank Limited loans & advance outstanding of Tk. 103,131.50 million. (Dhaka Bank Limited, 2015)

Consumer Banking Division (CBD) is composed of 4 units providing services through all 84 branches:

- Marketing & Business Development Unit (Cards & Loans)
- Risk Assessment & Credit Approvals Unit (Cards & Loans)
- Loan Operations & Disbursement Unit
- Legal & Recovery Unit

Product Offering of DBL

- Current Account
- Savings Account
- Bundle Savings Account
- Joma Savings Account
- Short Term Deposit
- Fixed Deposit Receipt (FDR)
- Gift Cheque
- Deposit Pension Scheme
- Special Deposit Scheme
- Deposit Double Scheme
- Kotipoti Deposit Plan
- Lakhopoti Deposit Scheme
- Honourable Seniors
- EduSavings Plan
- Students' Ledger
- Shopno Jatra
- Personal Loan
- Car Loan
- Home Loan
- Credit Card
- Locker Services

SME Banking

Dhaka Bank has formally stepped into financing SMEs in the country in 2003. At present, the Bank is catering SME banking services through its 87 regular Branches, 3 SME Service Centers and 1 KIOSK. The Bank focuses on diversification, differentiation, and segmentation in SME business. To this effect, manufacturing and service sectors as well as women entrepreneurs are given considerable focus. The Bank, in principle and as per guidance of the Board, has advised all small Branches to focus singly or preferably on SME business with a view to serving the underserved segment of the enterprises. The Bank targets manufacturing and service sector with more concentration on area based cluster industries. Bank's exposure to SME business is well diversified among as many as 4,450 clients cum entrepreneurs in varied sectors such as light engineering, handy crafts, cottage, power loom, agro-processing industries, poultry, dairy, boutiques, and embroidery and so on. The Bank helps create database of SME clients, carry out survey and other necessary actions by providing relevant information to Bangladesh Bank, SME Foundation, FBCCI, DCCI, BIBM and other institutions (Dhaka Bank Limited, 2015). The Bank was visible in almost all SME programmers such as SME Fair, Workshop, Seminar, Symposium, Focus Group Discussion (FGD) organized by Bangladesh Bank, SEDF, IFC and many other

national and international agencies to disseminate expertise, knowledge and information. SME Monitoring Unit has been equipped to oversee SME loan target, supervise delinquent SME accounts and enforce remedial effects as and when necessary and to maintain liaison with branches and SME clients. Area wise focal persons are working to meet SME related queries, share information and register complaints from SME clients.

Financial Highlights

Dhaka Bank's current SME portfolio stands at Tk. 12,226.73 million as on December 31, 2015. Bank's disbursement to SME sector during 2015 aggregated Tk. 12,529.76 million against the budgetary target of Tk. 15000.00 million. Percentage of Non Performing Loans to total SME portfolio has gone a bit high to 9.53% at the close of December 2015 from 9.18% of 2014. During 2015, the Bank has achieved refinance for Tk. 70.22 million from respective funds of BB, ADB, WE, EGBMP, SOLAR and BIO-GAS. (Dhaka Bank Limited, 2015)

Table 1.3 Refinance History for 5 years receipt of fund

BDT in Million				
2011	2012	2013	2014	2015
107.00	206.00	107.00	86.87	70.22

Table 1.4 Outstanding Balance of SME Refinance for 5 years

BDT in Million				
2011	2012	2013	2014	2015
126.50	280.80	279.21	216.10	170.16

Islamic Banking

Islamic Banking & Finance has turned into well accepted to the people and its' suitability has been rising in the country and all over the world enormously. Islamic Banking & Finance has already been proved its significance in the field of economy caring 30% business volume of the whole banking business. The sector is also standing at leading point by discharging its responsibilities in Corporate Social Responsibility (CSR). Highlighting on elevated ethical standards it builds a society with the honest, responsible & trustworthy people. The well structured Liability & Asset products based on Islamic Shariah principles save banks from the rapid raising of non-performing resources and ensure quality of the assets. Dhaka Bank Limited has been providing Islamic Banking services through its 2 (two) branches with adhere to the Islamic values & Integrity. One is Islamic Banking Branch, Motijheel, Dhaka inaugurated on July 02, 2003 and second one is Islamic Banking branch Muradpur, Chittagong was opened in May 22, 2004. Dhaka Bank Limited is the pioneer to establish Shariah based banking operations through Islamic Banking branches in the country. (Dhaka Bank Limited, 2015)

Product Offering of DBL

- Tawfeer Mudaraba (Savings Bond Account)
- Tawfeer Mudaraba (Deposit Pension Scheme)
- Tawfeer Mudaraba (Foreign Remittance Account)

At the end of the year 2015, the deposit and investment of Islamic Banking operations of Dhaka Bank Ltd. stand at 884, 74.17 & 474, 51.48 lac. (Dhaka Bank Limited, 2015)

Credit Rating Report

Dhaka Bank Limited was rated by Emerging Credit Rating Limited (ECRL) on the basis of audited Financial Statements as on December 31, 2014.

The summary of Rating is presented below:

Table 1.5 Credit Rating Report of DBL

Status	2014	2013
Long Term	AA-	AA-
Short Term	ECRL-2	ECRL-2
Outlook	Stable	Stable

Source: Author's compilation from the annual reports of DBL

In 2014, Emerging Credit Rating Limited (ECRL) awarded "AA-" (Pronounced as Double A minus) rating in the Long Term and "ECRL-2" in the Short Term to Dhaka Bank Limited. The Outlook is "Stable". Credit Rating report based on Audited Financial Statement as on December 31, 2015 is under process. (Dhaka Bank Limited, 2015)

Online Banking

Dhaka Bank is a pioneer bank of the country for conducting banking online. The online banking effort of the Bank is as under.

Table 1.6 Online Banking of DBL Up to December 2015

Particulars		Number
No. of ADCs (ATMs & ADMs)	Own	72
	Shared (All NPSBs shared ATMs)	7,200
Online Banking	No. of Total Branches	87
	No. of Branches with online coverage	87
Mobile/SMS Banking	No. of Accounts facilitated with Mobile/SMS Banking	1,07,062
	Growth	50%

Source: Author's compilation from the annual reports of DBL

Milestones through the Timeline

Year	Date	Event
1995	6 April	Date of Incorporation
1995	5 July	Commencement of Banking Business
1996	16 March	First Dividend Declared
1999	25 November	Initial Public Offering
2000	10 April	Listing with Dhaka Stock Exchange (DSE) Limited
2000	6 June	Listing with Chittagong Stock Exchange (CSE) Limited
2001	11 March	First Right Issue
2002	24 February	Introduction of Alternate Delivery Channel (First ATM)
2002	29 March	Launching of Retail Banking (Consumer Banking)
2003	2 July	Commencement of Islamic Banking
2004	1 April	Real-time Online Banking
2005	5 February	Launching of Brokerage Business
2005	5 July	Celebrating First Decade of Excellence in Banking
2006	22 May	Commencement of Off-shore Banking Operation
2007	1 March	Launching of Credit Card
2007	5 September	Launching of Internet Banking
2009	1 April	Centralization of Trade Operations & Credit Operations
2009	17 December	AAA Guarantee Accorded by ADB under Trade Finance Facilitation Programme (TFFP)
2010	30 June	Establishment of Islamic Banking Division
2010	4 July	Enhancement of Authorized Capital (from Tk. 600 crore to Tk. 1,000 crore)
2010	6 December	Basel-II Compliance: Issuance of Subordinated Bond
2011	13 February	Inauguration of Subsidiary 'Dhaka Bank Securities Limited'
2012	30 September	Hosting Credit Card in own software and go live Visa Debit Card
2013	29 April	Introduction of Automated Deposit Machine (ADM)
2014	12 November	SME Banking Award 2014: Manufacturing Sector-friendly Bank of the Year
2015	5 July	Celebrating 20 years of Banking Excellence
2015	5 July	Launching of Credit Card

Dhaka Bank Limited Organ gram

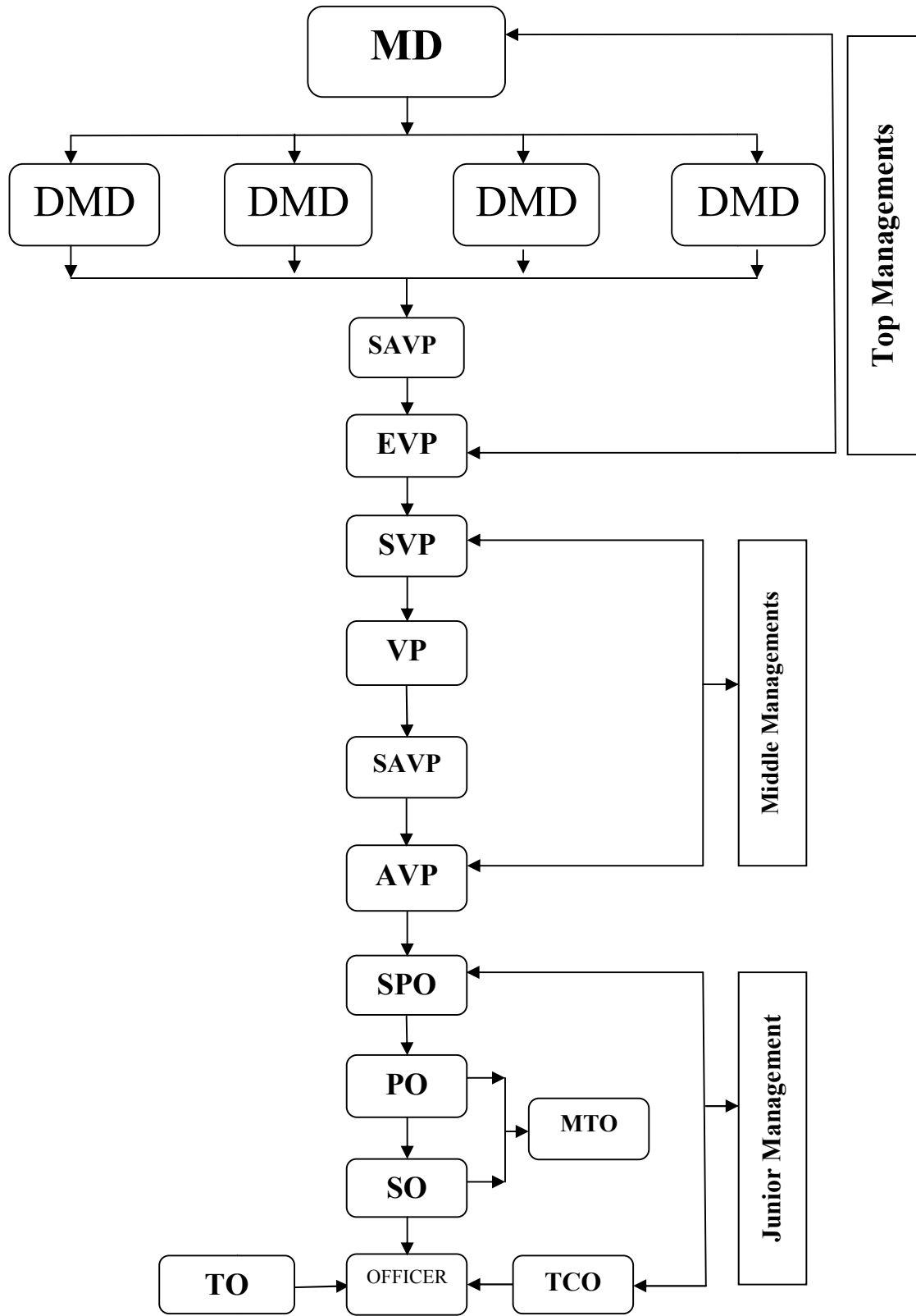


Figure 1.1 Hierarchies of Dhaka Bank Limited

Aberrations of Dhaka Bank Limited Hierarchy

MD	(Managing Director)
DMD 1	(Deputy Managing Director) Business Banking
DMD 2	(Deputy Managing Director) Risk Management
DMD 3	(Deputy Managing Director) International Business
DMD 4	(Deputy Managing Director) Operations
SEVP	(Senior Executive Vice President) Head of Different Department/ Head of Branch
EVP	(Executive Vice President) Head of Different Department/ Head of Branch
SVP	(Senior Vice President)
VP	(Vice President)
SAVP	(Senior Assistant Vice President)
AVP	(Assistant Vice President)
SPO	(Senior Principal Officer)
PO	(Principal Officer)
MTO	(Management Trainee Officer)
SO	(Senior Officer)
TO	(Trainee Officer)
TCO	(Trainee Cash Officer)

CHAPTER 2 INTERSHIP AT DHAKA BANK LIMITED

Attachment with Dhaka Bank Limited

After concluding all the required courses for completing my major in Finance and Accounting; I joined Dhaka Bank Limited for completing my internship as a prerequisite of BBA program of BRAC Business School of BRAC University.

Recognized as one of the top notch banking institution of country Dhaka Bank Ltd is able to sustain its position among the top rated Private commercial Banks (PCBs) of the country because of its tailored financial services, efficacy in implementation of banking strategies and also for maintaining government regulations as well as international standard.

DBL believes in the power of innovation and knows the importance of diversified and innovative products to thrive in today's competitive industry. For this reason, to guide the innovation with experience DBL recruits the top qualified experts of the industry to fresh graduates straight out of universities and apart from this bunch, to give the eligible students a firsthand experience of corporate banking world DBL also offers opening for internship every quarter.

Unlike the typical internship program of most of the corporate giant, DBL challenges its interns with the very work of paid and permanent employees with a view to give them an essence of everyday problems and solutions.

Internship Profile at a Glance

Table 2.1 Internship Profile

Name of the organization	Dhaka Bank Limited
Designation	Intern
Attach division	General Banking
Working hours	10:00 am to 6:00 pm
Work Station	Motijheel Branch, Dhaka.

Description of My Jobs

Though I was assigned to work in General Banking Division but I had an experience in working with credit department of DBL Motijheel Branch.

Throughout my stay in this branch I was fully involved with General Banking Division and Credit Department. My job responsibilities were as follow;

A Glimpse of My Job Responsibility of General Banking

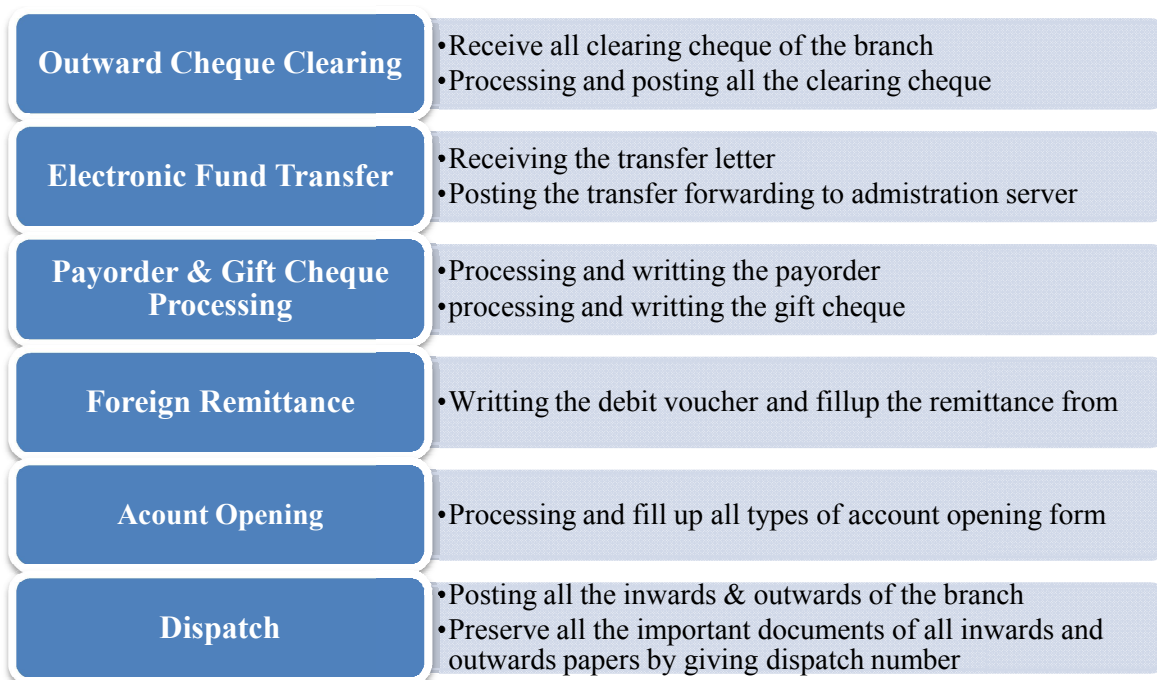


Figure 2.1 Job Responsibility of General Banking

For additional illustration top noted job responsibilities which I have performed on daily basis their detailed information's are given below;

Outward Cheque Clearing

There are two separate activities in outward clearing cheque such as;

Step 01

- Check the forwarding report of the previous clearing cheque to check for any return cheque
- Report to Local office of Dhaka Bank for the return cheque (if there any)
- Identify cheque return reason
- Notify the customers about their return cheque

Step 02

- Receiving all the clearing cheque on behalf of DBL Motijheel Branch
- Processing all the clearing cheque (giving clearing cheque seal, crossing seal and authorization seal)
- Posting all these clearing cheque in excel
- Write a forwarding letters in Microsoft word

Account Opening

Various important processes of the account opening activities are given below;

- Providing account opening form to all the customers
- Briefing the customers about the necessary requirements in order to open their bank account in Dhaka Bank Ltd
- Writing the CIF (Customers Information Form) both for the applicant and nominees
- Writing the KYC (know your customers)
- Providing all the necessary seals of the Dhaka Bank Ltd
- Providing Debit Card form, Mobile Banking form and Cheque Book requisition form
- Providing cheque book after four working day and debit card after fifteen working day by taking respective customers signature on the necessary papers and preserve them

Electronic Fund Transfer (EFT)

- Receive electronic fund transfer request letter
- Posting the information of both sender and receiver along with account numbers (sender account number must contain sixteen digits), branch code (Motijheel Branch), motive of the transaction (personal or business affair), receiver name (must be within thirteen digits with spaces) account number, branch routing number
- Sending to the administration server for authorization

Pay Order Issuing

- Provide pay order form to the customers
- Putting pay order number in the pay order form
- Writing the pay order form by hand
- Taking authorization from branch operations manager then branch manager
- Providing the pay order form by taking signature of the pay order issuer

Making Voucher Summary

There are three types of vouchers we have to maintain in everyday for three separate departments for instance, General Banking, Cash Department and Foreign Trade department. After collecting all three vouchers I prepare the voucher summary of them all.

Information Management System of DBL Motijheel Branch

- Maintain all the valuable customers profile data, contact numbers in addition to e-mail and send them to the Head Office of the DBL
- Making statement of various cost of the DBL motijheel branch in excel files and preserve them
- Assembling General Banking statement of the branch

My Job Responsibility at Credit Department

Though I was assigned to work in General Banking Division but I had an experience in working with credit department of DBL Motijheel Branch. My job responsibilities were as follow;

- Preparing the financial statements of different companies (Balance sheet, Income statements and owners equity statements)
- Ratio Analysis of the different companies
- Writing different forwarding letter of LC (letter of credit)
- Writing companies overview and bird of directors profiles

Public Relation (PR)

I often go to client visit along with my officers and operations managers of the branch, visiting the clients to grab an understanding of the business dynamics was also embedded in my list of regular tasks. But facing a client and extracting information is not easy task as it sounds because the owners in some cases feel vulnerable in disclosing business secretes. Being patient and understanding the customer's psychology is the key here. So, in the critical situations the analysts are required to handle the situation in a way so that the client does not being interrogated. Officers are required to speak in a way of conversation manner rather than asking question blatantly and also we were needed to explain the importance of the demanded data in a comprehensive way so that the customer realizes the significance of the information for his/her own benefit.

Managerial Task

Managerial tasks such as: coordination with business team, dealing with correspondence, writing emails, collaboration with MIS (management information system), delegation of tasks according to expertise, prioritization and completion of the tasks in order of importance, managing files and database.

Customers Services

Providing valuable information to the customers about banking services and maintains good customer's relationship with both the existing and potential customers.

Observation and Recommendations

Business Process Automation

For processing a file from submission to preservation and Bangladesh Bank reporting DBL uses different financial service software along with Microsoft excel and even hand written documentation. So, for using different medium for processing a file few steps of the course

become repetitive for no reason at all. The redundant mechanism not only reduces the turnaround time, it also increases the necessity of hiring more employees as well as expenses eventually.

Recommendation

Under business process automation DBL can use single software to get the entire job done. From preparing the input sheet to updating the proposal status, making appraisal, loan origination, disbursement and Bangladesh Bank reporting everything will be correlated and quantified. As a result, updating the input sheet will automatically bring up to date in the record of proposal status and appraisal and preparing the appraisal will automatically generate information for loan origination, disbursement and even Bangladesh Bank reporting.

IT Software

DBL currently use different types of software for different purpose such as Flexcube, DBCube, Docudex and many more which requires different training for the employees to operate them. Meanwhile it takes time and workload for the employees to learn and increase the system complexity.

Recommendation

Unified software will reduce this problem significantly and increase the efficiency of the ever improving IT (information technology) system of the DBL banking service. However, improved international software may be more useful to deliver quality banking experience.

Business Focus Information Portal

Though the business portal of DBL is very edifying but there is always room for improvement to make the portal be more effective.

Recommendation

News about international banking will be a valuable edition of the DBL portal due to this will enhance the employee's knowledge about world wide banking system. However, motivate the employees to check the portal constantly is also recommended in this regard.

CHAPTER 3

ANALYSIS OF PROFITABILITY: THE CASE OF DHAKA BANK LIMITED

Asset Size of DBL

Total asset consists of the final amount of all gross investments, cash and equivalents, receivables, and other assets as they are presented on the balance sheet. (Kieso, E. 2014)

Figure 3.1 shows that Total Assets of DBL grew smoothly with a very high rate over the period from 2011 to 2015. It indicates that the bank extended its operation and maximized its value significantly during this period.

Source: Author's compilation from the annual reports of DBL

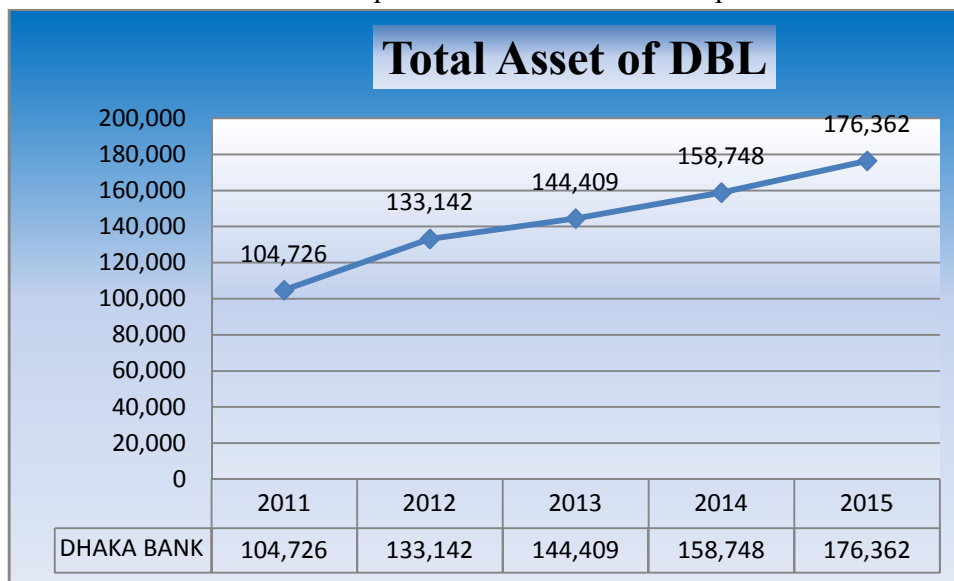


Figure 3.1 Total Asset of Dhaka Bank Ltd.

Profitability of DBL

Net Profit

Often referred to as the bottom line, net profit is calculated by subtracting a company's total expenses from total revenue, thus showing what the company has earned (or lost) in a given period of time (usually one year). (Kieso, E. 2014)

Figure 3.2 shows that the Net Profit of Dhaka Bank Ltd. decreased in a very high rate from the year 2011 to 2012. It was 2,165 million in the year 2011 but it became only 701 million in the year 2012 which is almost 67.6 times decline. But whether this beyond belief reduction of profit

is due to the bad loan adjustment or some other reasons is a subject of investigation. Again, the adjustment of bad loan is the main reason behind the decline of net profit in 2015.

Source: Author's compilation from the annual reports of DBL

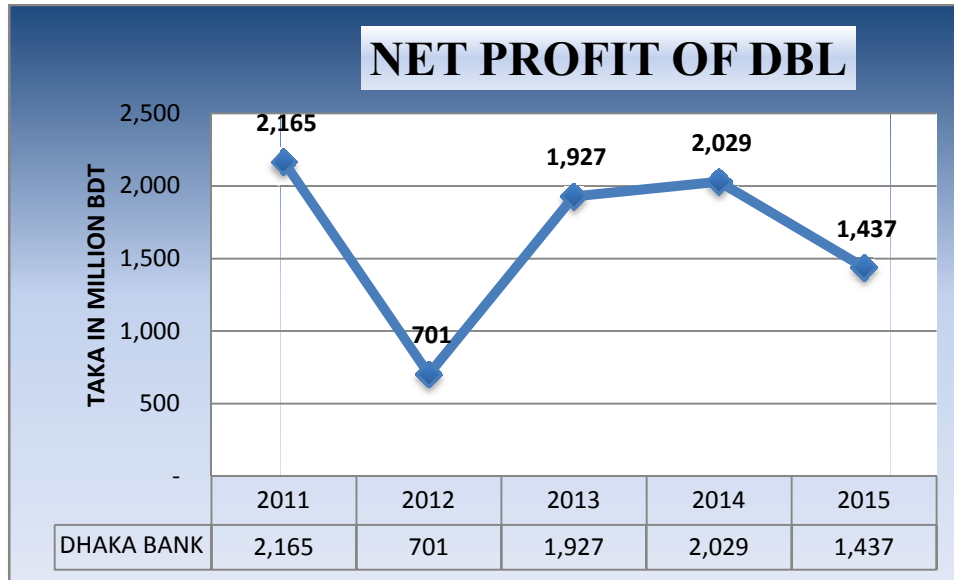


Figure 3.2 Net Profit of Dhaka Bank Ltd

ROA (Return on Asset)

ROA means regardless of the asset size how efficiently a company can squeeze profit from its asset. Higher ROA ensure solid financial and operational performance of the organization. (Kieso, E. 2014)

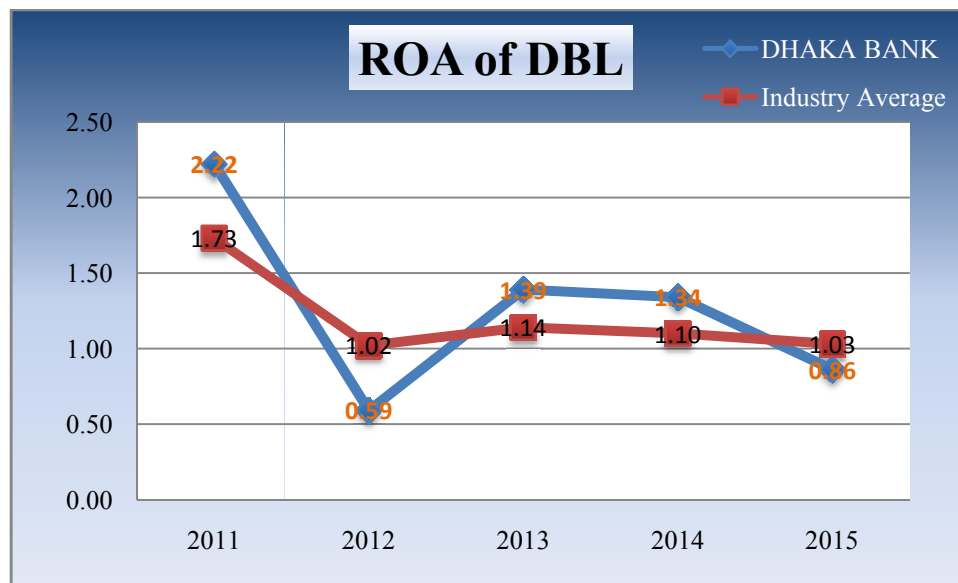


Figure 3.3 DBL Return on Asset for the Last Five Years

In, 2015 every \$100 worth of asset generate \$ 0.86 net profit. By, comparing with 2014 ROA we have seen that ROA has been declined significantly. ROA of 2015 was below industry average which was not satisfactory at all. Meanwhile, the percentage change in assets was higher than the percentage change in net profit.

Figure 3.3 indicates that ROA of DBL has been fluctuating over the last five years. Meanwhile in 2012 it was doing down in a record scale at 0.59.

DBL might have a low ROA for several reasons. But overcapacity is one of the main reasons. However overcapacity hurts ROA, because assets are sitting idle part of the time. If we look at the Bank to consumers' interest rate we have seen DBL offer one of the lowest interest rate in the market due to its overcapacity.

Source: Author's calculation

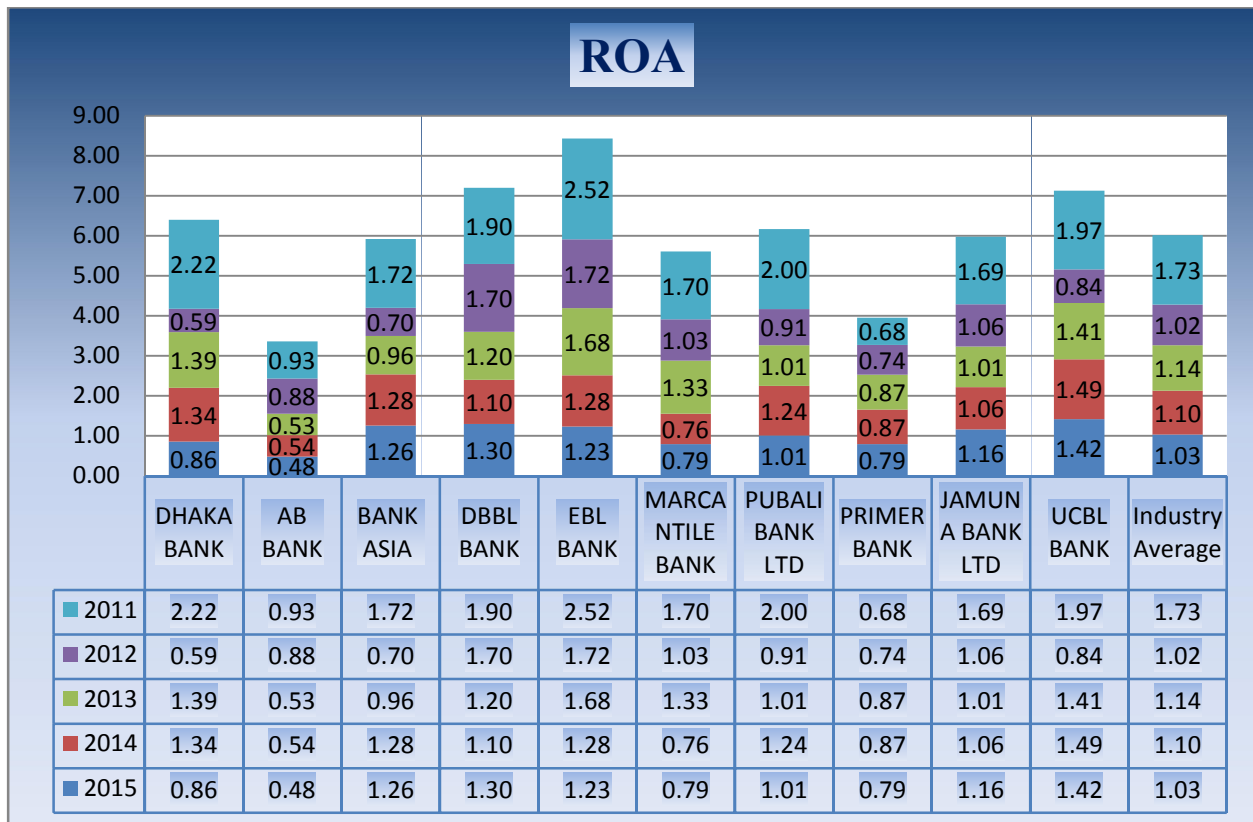


Figure 3.4 ROA of DBL and Nine Other PCB for the Last Five Years

Figure 3.4 indicates that all 10 PCBs ROA either going down or increase at the decreasing rate. Meanwhile, the industry averages are also going down. In figure 2.3 indicates that DBL maintain one of the highest ROA ratio compare to other 9 PCBs.

ROE (Return on Equity)

Return on equity defines how much profit a company earned in comparison to the money a shareholder has invested. (Kieso, E. 2014)

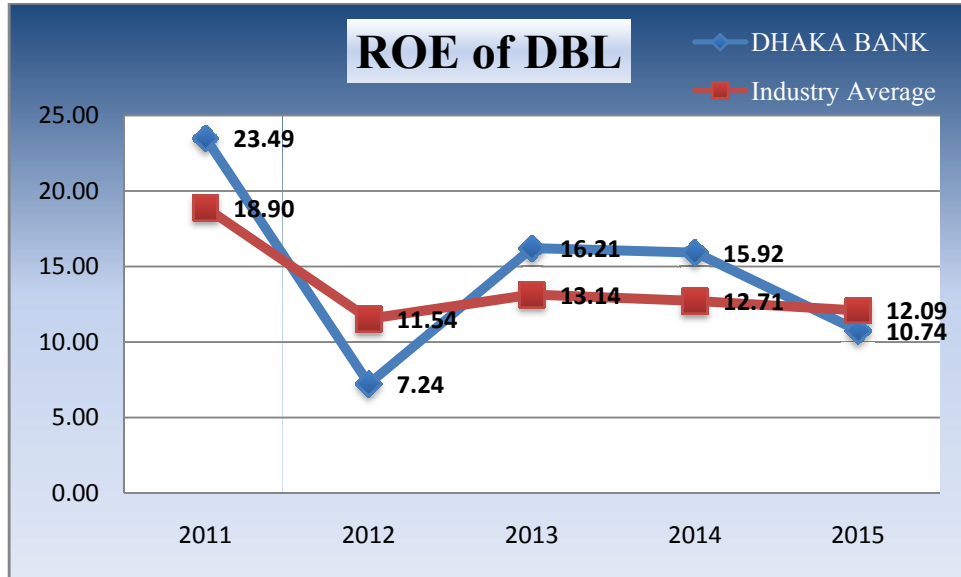


Figure 3.5 ROE of DBL for the Last Five Years

In figure 3.5 shows that the ROE of DBL in 2011 was 23.49 which was higher than the industry average (18.90). Afterward, DBL ROE gone down drastically at 7.24 when the industry average was 11.54. The ROE of DBL again goes up to 16.21 in 2013 above industry average. In 2014 the ROE of DBL had slightly gone down but still above industry average which was satisfactory. But in 2015 common shareholder have earned \$10.74 for the every \$100 invested in the company. However, the ROE has been gone down below industry average, which was not good. The percentage in net profit was lower than the percentage change in total equity.

Source: Author's calculation

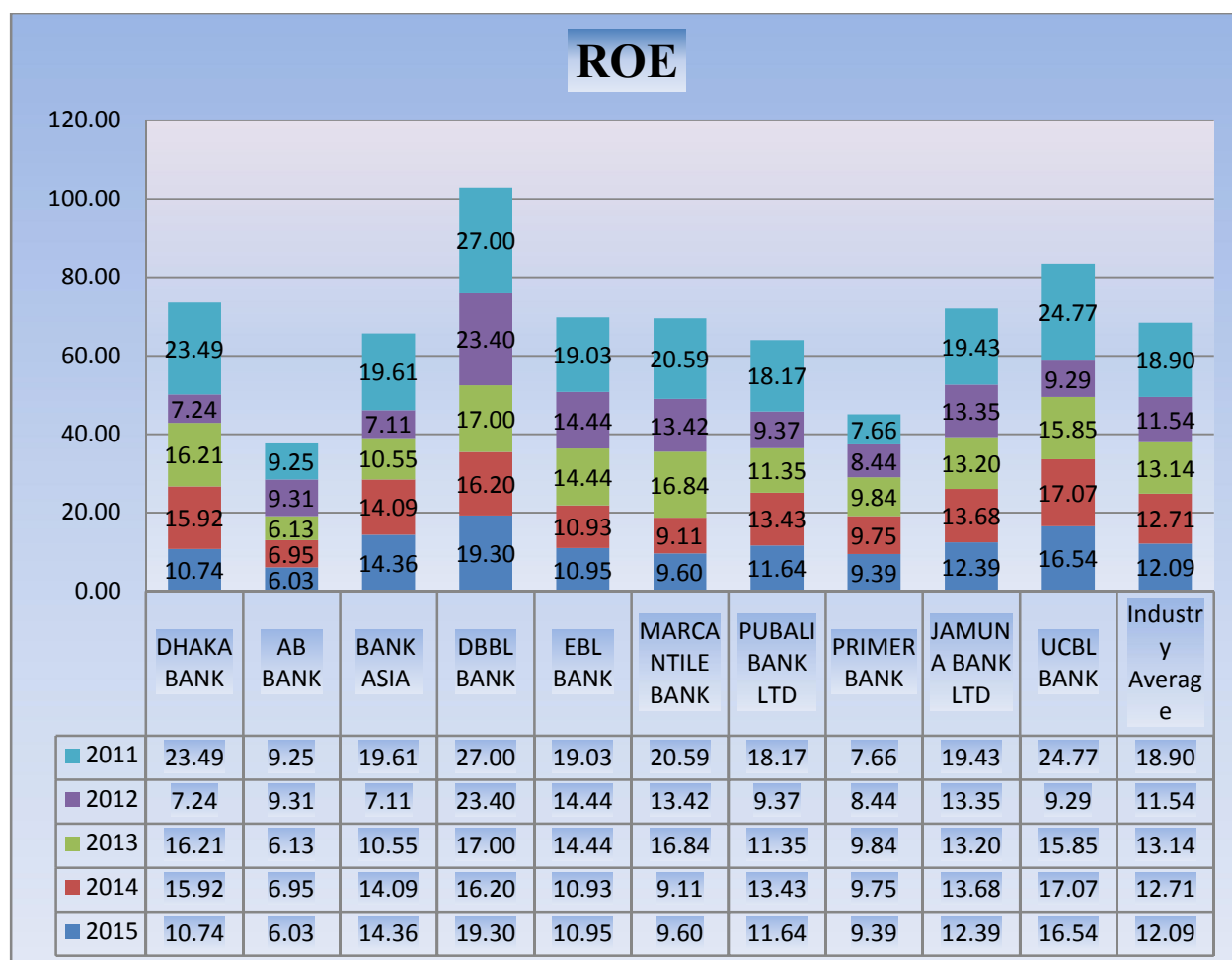


Figure 3.6 ROE of Ten PCB and Industry Average for the Last Five Years

Figure 3.6 shows DBL maintained one of the highest ROE compare to other 09 PCBs for the last five years. However, only Dutch Bangla Bank and United Commercial Bank maintained higher ROE than DBL.

Capital Adequacy (CA)

The capital adequacy regulations express the perception of how much capital, designated as the capital base, a bank must have in relation to the size of the risks it faces. The rules strengthen the connection between risk exposure and capital requirements in the bank's operations. In accordance with the Capital Adequacy, the capital base must at a minimum correspond to the sum of the capital requirement for credit risks, market risks and operational risks. (ISLAM, 2014)

Importance of Capital Adequacy Requirements:

- Adequate capital provides funds for the organization’s growth and development of new services and facilities as well as serving as a regulator.
- Adequate capital increases public confidence in a bank and reassures its creditors / depositors of its financial strength.
- Capital provides the funds needed to get the bank chartered, organized and operating before deposits come flowing in.
- It helps absorbing major financial risks like credit risk, market risk, foreign exchange risk, interest rate risk and risk involved in off-balance sheet operations.
- It protects the deposit insurance system from serious losses. (ISLAM, 2014)

Table 3.1 shows that the total equity of DBL increased incrementally rate from 2011 to 2015.

Table 3.1 Total Equity and Capital Adequacy Ratio of DBL

Year	Total Asset	Risk Weighted Assets	CA Ratio
2015	176,362	147,343	10.46
2014	158,748	137,842	11.20
2013	144,409	117,693	12.18
2012	133,142	117,412	10.74
2011	104,726	112,470	10.70

Source: Author’s compilation from the annual report of DBL

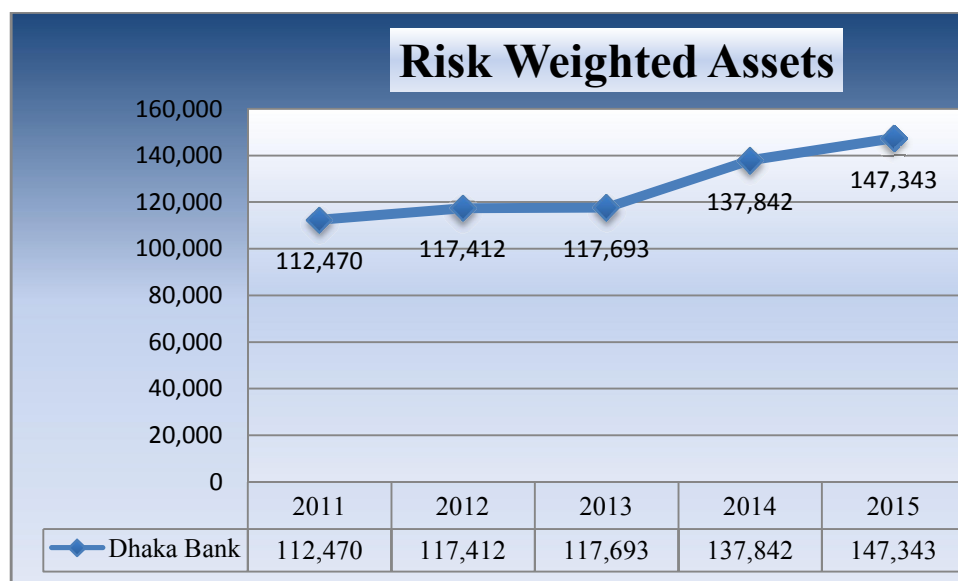


Figure 3.7: Risk Weighted Assets of 5 Years

This graph figure 3.7 shows the amount of the Risk Weighted Assets of the 5 years from year 2015 to year 2011. In the year 2011 RWA was Tk. 112,470 million. We see there is an increasing trend of RWA maintained by the bank. In the year 2015 the RWA is Tk. 147,343 million which is more than 31% from the year of 2011. This indicates that this bank is in the proper process of maintaining RWA for absorbing or mitigating the uncertain risks may arise at any time. For the variations in the assets classification by the bank it can easily observe that all the assets are not having the similar risks. Different types of assets have the different category risks. There has some classification about the maintenance of risk weighted assets. This increasing trend of the Dhaka Bank Limited shows that they are very much cautious about the total earning assets as generating the bank's earnings. Increasing trend of the bank's RWA prefers the highest regulated cautions of reducing all the related risks may arise from the bank's uncontrolled operations. (ISLAM, 2014)

Source: Author's calculation

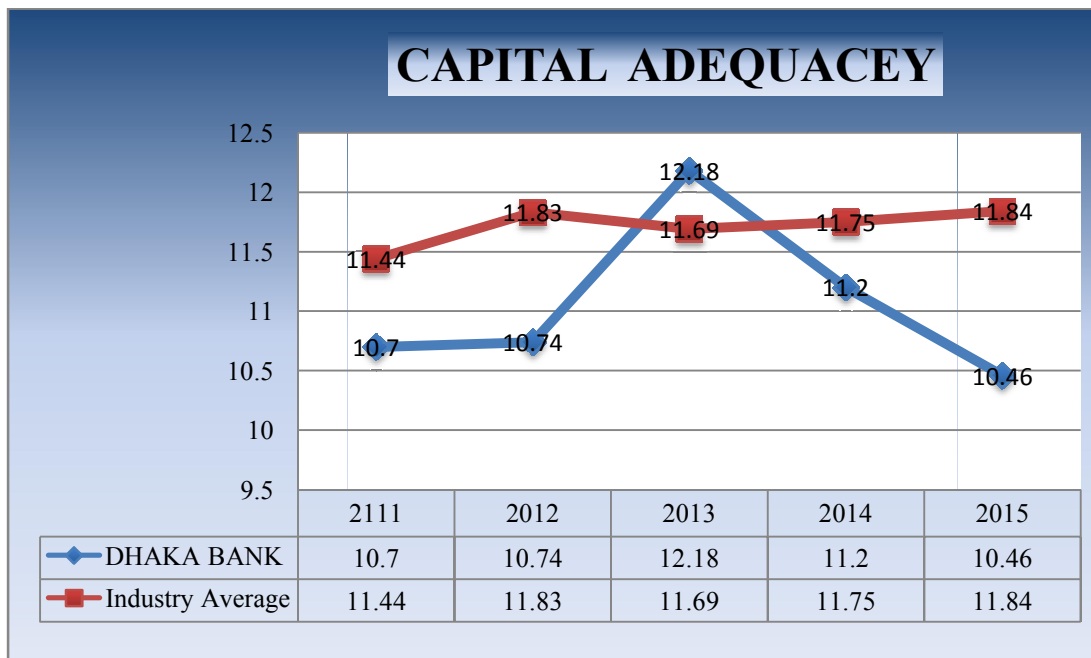


Figure3.8 Capital Adequacy Ratio of DBL for the Last Five Years

In figure 3.8 indicates that capital adequacy of DBL has been going down for two consecutive year (2014-2015). Though the CA has been going down but DBL was been able to maintain the minimum capital requirement of Bangladesh Bank. The minimum capital requirement of Bangladesh Bank for the next five years;

Table 3.2: Phase-in Arrangement of Minimum Capital Requirements

	2015	2016	2017	2018	2019
Minimum Common Equity Tier 1 Capital Ratio	4.5%	4.5%	4.5%	4.5%	4.5%
Capital Conservation Buffer	-	0.625%	1.25%	1.875%	2.50%
Minimum CET 1 plus Capital Conservation Buffer	4.5%	5.125%	5.75%	6.375%	7.00%
Minimum Tier 1 Capital Ratio	5.50%	5.50%	6.00%	6.00%	6.00%
Minimum Total 1 Capital Ratio	10.00%	10.00%	10.00%	10.00%	10.00%

Author's compilation from the annual report of Bangladesh Bank

Source: Author's calculation

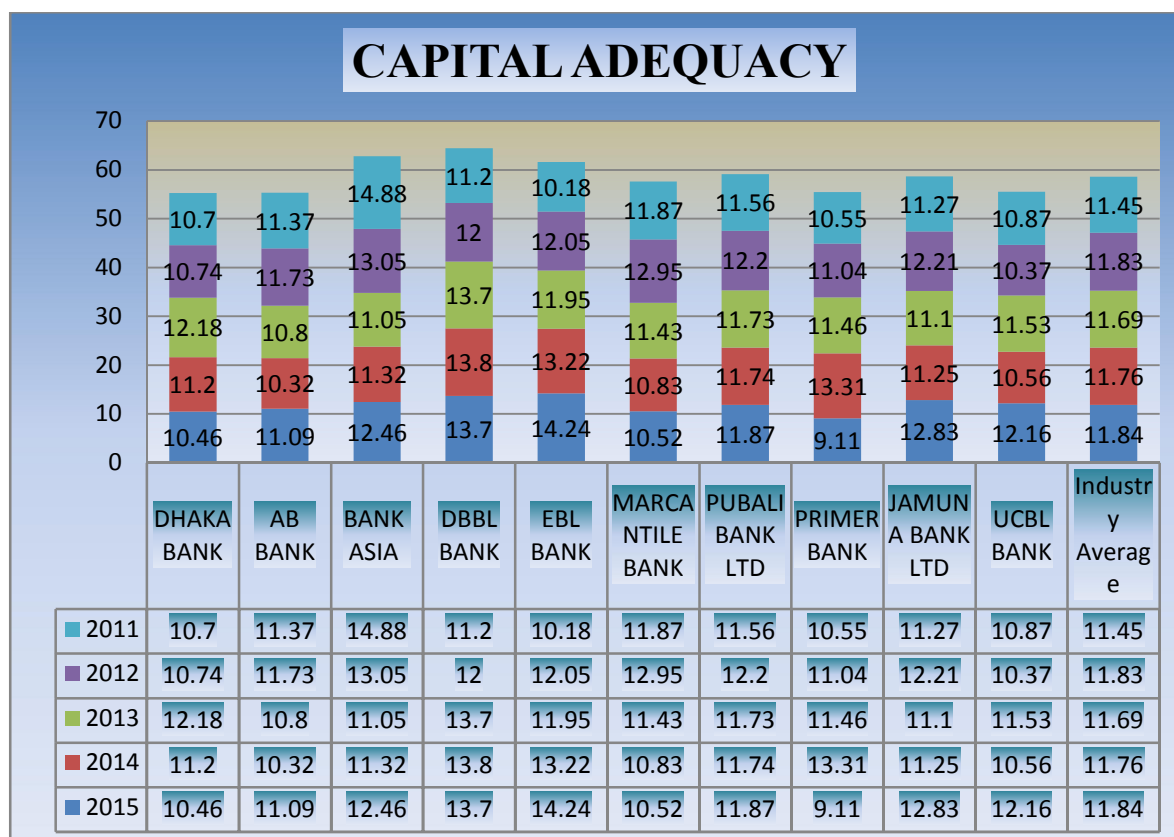


Figure 3.9 Capital Adequacies of Ten PCB and Industry Average for the Last Five Years

In the figure 3.9 illustrates that in 2015 Bank Asia, DBBL, EBL, Jamuna Bank and UCBL bank maintain above industry average Capital Adequacy. However, DBL was able to maintained the minimum capital adequacy requirement of Bangladesh Bank. Meanwhile, the size of the asset and weighted risk is varying from bank to bank. In addition to, the risk weighted asset of DBL is significant. It indicates that DBL is very much cautious about the total earning assets as

generating the bank’s earnings. On the other hand, many banks like AB Bank Ltd, Pubali Bank Ltd larger asset size have the different category risks to cope up with this additional risk they maintain more capital adequacy.

Loans and Deposits

Table 3.3 exhibits that both the Total Loan and Total Deposit of DBL increased over the period from 2011 to 2015 continuously. This increase in loan and deposit may be the one reason of rising trend of asset size of DBL.

Table 3.3 Total Loan and Deposits of DBL

Years	Total Loans	Total Deposits	LA	DP
2015	117,840	139,068	0.6681711	0.7885372
2014	103,132	124,854	0.649659	0.786492
2013	99,596	115,981	0.68968	0.803142
2012	90,140	107,427	0.677022	0.80686
2011	75,983	85,277	0.725541	0.814287

Source: Author’s compilation from the annual report of DBL

From the figure 3.10 it can be seen that the LA ratio of the bank remain above industry average during 2011 to 2015 period but LA ratio decreased from 2011 to 2015 subsequently slight increase in 2013 yet again it was observe slight increase in 2015.

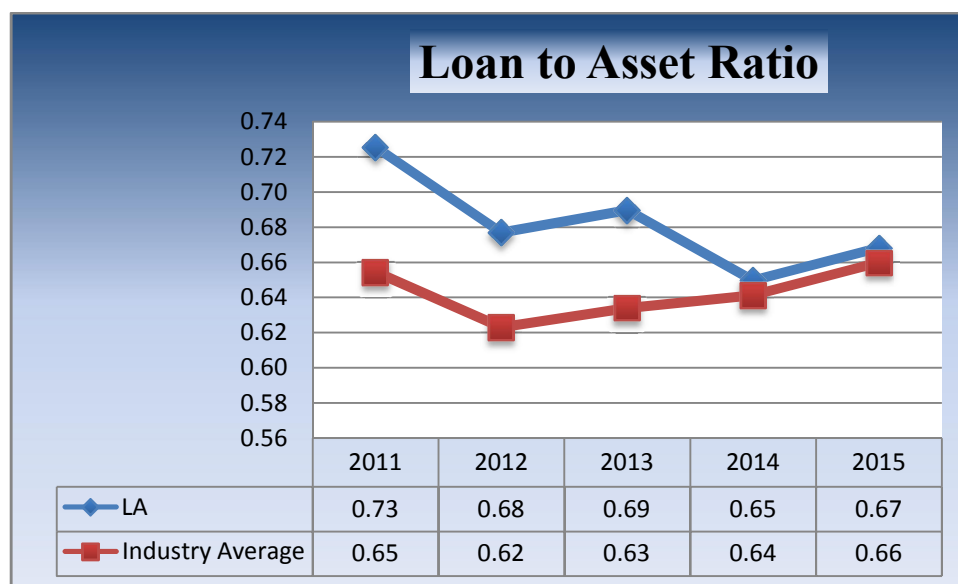


Figure 3.10: LA Ratio of Dhaka Bank Ltd

In the figure 3.11 indicate that DP ratio always stay above industry average which is good for DBL. however, downward Deposit is one of the reason of disturbing for DBL due to its low cost

availability. Meanwhile, in 2015 the DP ratio remains constant and the industry average in going down.

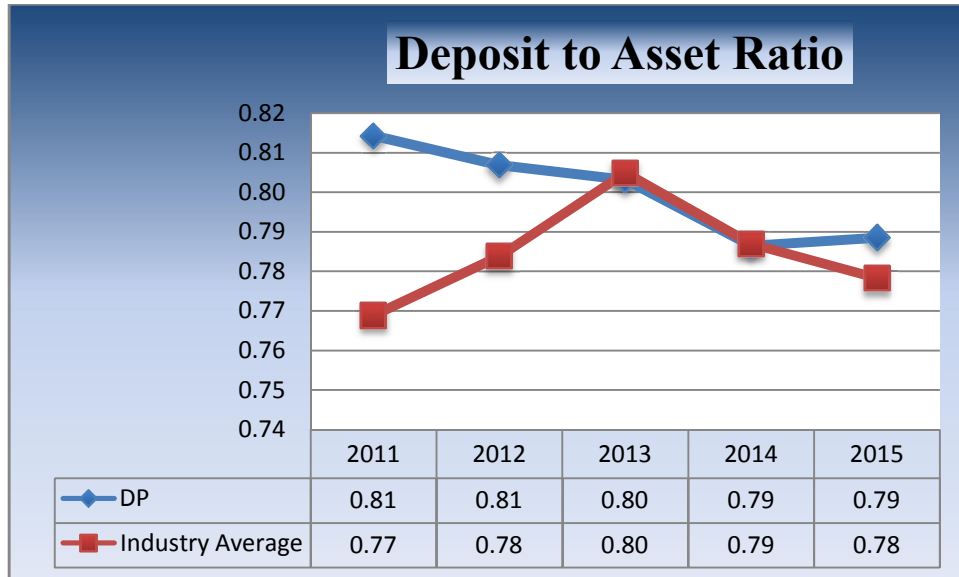


Figure 3.11: DP Ratio of Dhaka Bank Ltd

Asset Quality

A nonperforming loan (NPL) is the sum of borrowed money upon which the debtor has not made his scheduled payments for at least 90 days. A nonperforming loan is either in default or close to being in default. (Investopedia.com, 2003)

Table 3.4 indicates that the total non classified loan of DBL did decrease too much from 2012 to 2015; it remained almost in the same level with some fluctuations from 2013 to 2014. But then NPL ratio declined sharply over the period from the year 2014 to 2015.

The reason of decrease in the NPL ratio seems not to be the decrease in the total classified loan rather it is because of the high growth in the total loan of the bank and no significant growth in the total classified loan from 2012-2015. The decreasing trend of NPL ratio seems to have some positive impact on the profitability of the bank.

Table3.4 Total Classified Loan and NPL Ratio of DBL

Years	Total Loans	Total Classified Loan	NPL
2015	117,840	5,491	4.66
2014	103,132	5,657	5.48
2013	99,596	4,137	4.15
2012	90,140	5,656	6.27
2011	75,983	2,624	3.45

Source: Author's compilation from the annual report of DBL

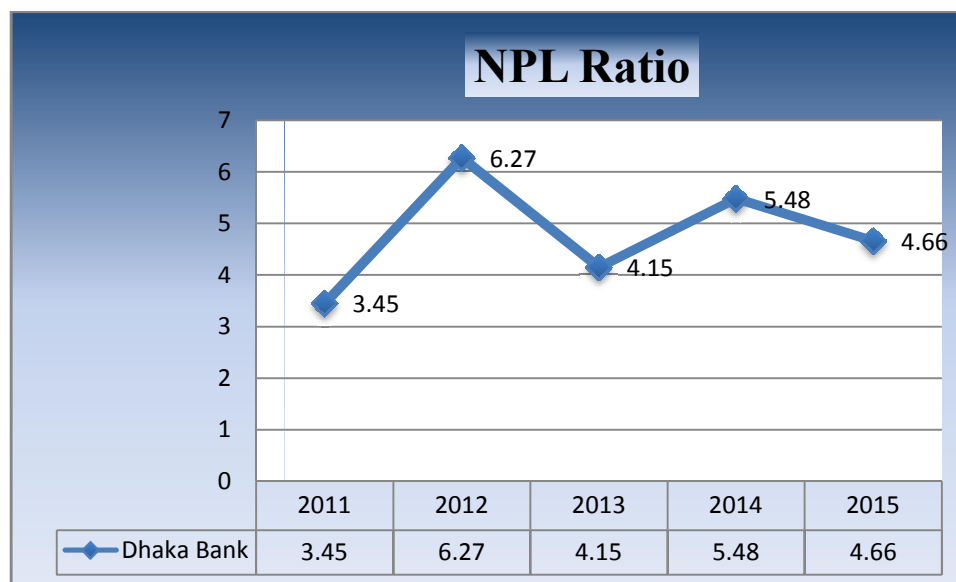


FIGURE 3.12 Non Performing Loan of DBL

Figure 3.12 shows that The NPL ratio dramatically dropped from 6.27% to 4.15% from the year 2012-2013. However, the NPL ratio went up again in the year 2014 then the NPL ratio was going down 5.48% to 4.66%.

Income Expenditure Structure

Net interest margin (NIM) is a measure of the difference between the interest incomes generated by banks and the amount of interest paid out to their lenders. A negative Net Interest Margin indicates that the firm was unable to make an optimal decision, as interest expenses were higher than the amount of returns produced by investments. Thus, in calculating the Net Interest Margin, financial stability is a constant concern. (Taillard, 2011)

Operating margin is a measurement of what proportion of a company's revenue is left over after paying for variable costs of production such as wages, raw materials, etc. (Investopedia.com, 2003). The operating profit margin ratio is a key indicator for investors and creditors to see how

businesses are supporting their operations. If companies can make enough money from their operations to support the business, the company is usually considered more stable. It shows that how much the business operations are sustainable. (Reserved, 2016)

Figure 3.13 shows that the Net Interest Income NIM ratio increased slowly over the five year period except in the year 2015 while it fell to 4.02% from 4.44%. However, NIM still above industry average which is good for DBL. The Net Operating Margin Ratio NOM was always lower than that of industry average. It can be observed from the graph that the NOM line always stayed below the industry average line. It indicates that the other bank have more revenue after paying all variable cost.

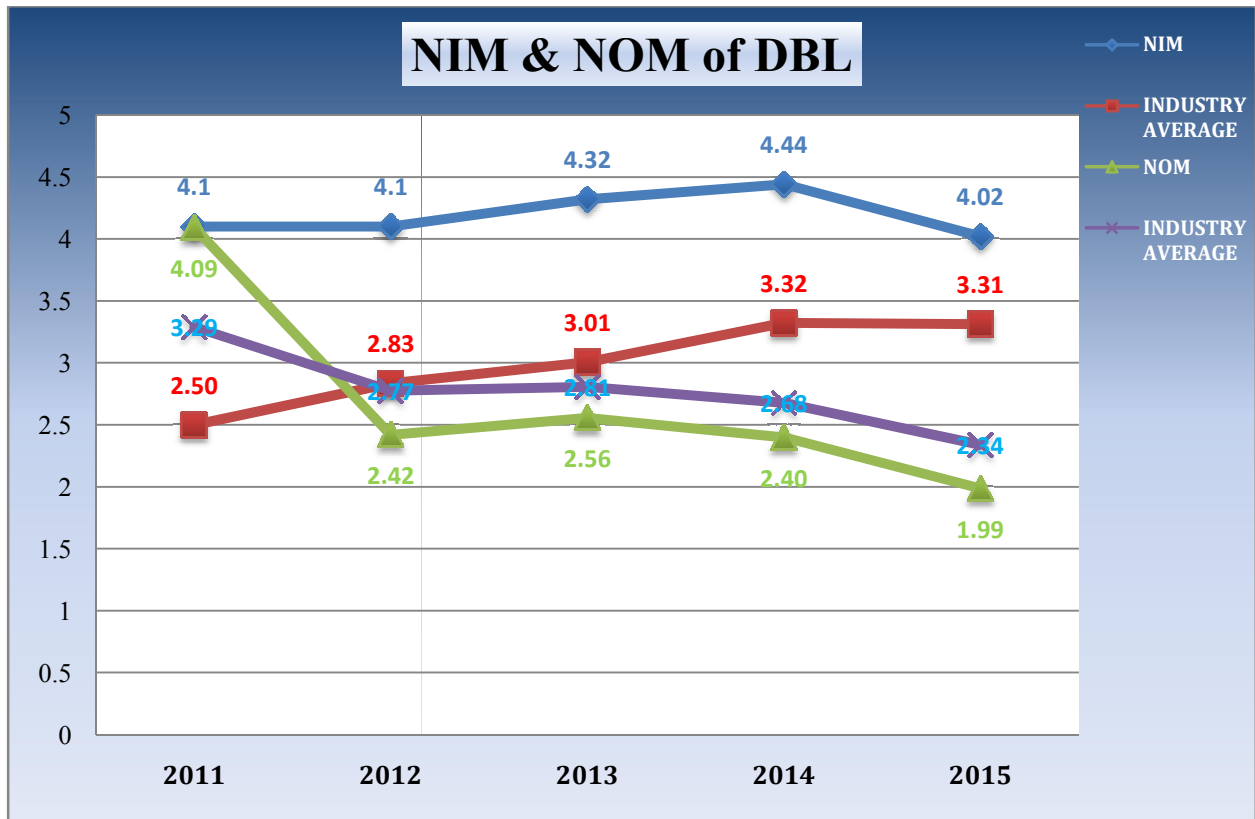


Figure 3.13 Net Interest Margin & Net Operating Margin of DBL

Rapport amid This Ratio

In this part of the report explain the affiliation among the ratios discuss earlier. The main objective of this analysis is to determine the variables that affect the DBL Net Profit in addition to determine the profitability factors of DBL based on these ratios. The units use here is the changes of percentage over the period.

Net Profit to Non Performing Loan Ratio

In figure 3.14 illustrates that there is a negative relationship between net profit and non performing loan (Olson and Zoubi, 2011). Furthermore, in 2012 when the NPL ratio was gone up then the net profit was gone down. For better understanding the percentage of changes between NPL ratio and net profit is shown underneath,

Source: Author’s calculation

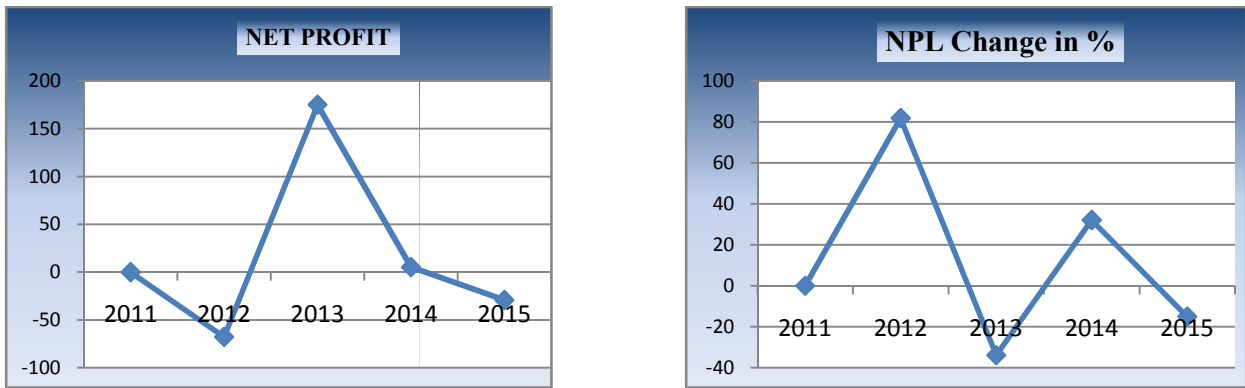


Figure 3.14 Percentage Changes between net Profit and NPL Ratio

The figure 3.15 indicates that there is a positive relationship uphold between net profit and ROA ratio. When the net profit was gone down in 2015 the ROA ratio was gone down as well. The percentage of changes between 2011 to 2015 both for net profit and ROA are shown below,

Source: Author’s calculation

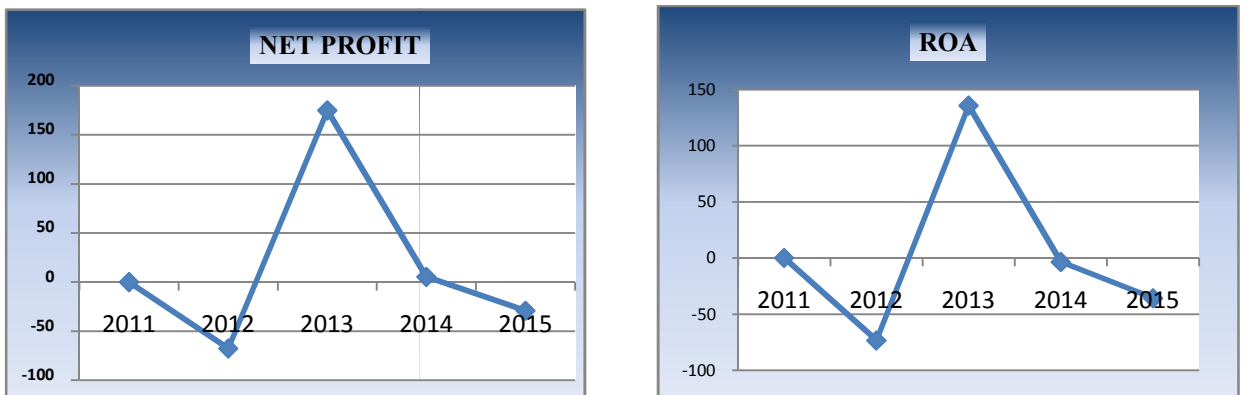


Figure 3.15 Percentage Changes between Net Profit and ROA Ratio

In figure 3.16 shows that there is a positive relationship maintain between non performing loan and risk weighted asset. To illustrate when the NPL ratio goes up the RWA is also goes up. DBL maintain very cautious approach to keep the risk weighted asset in accordance with the non performing loan.

Source: Author's calculation

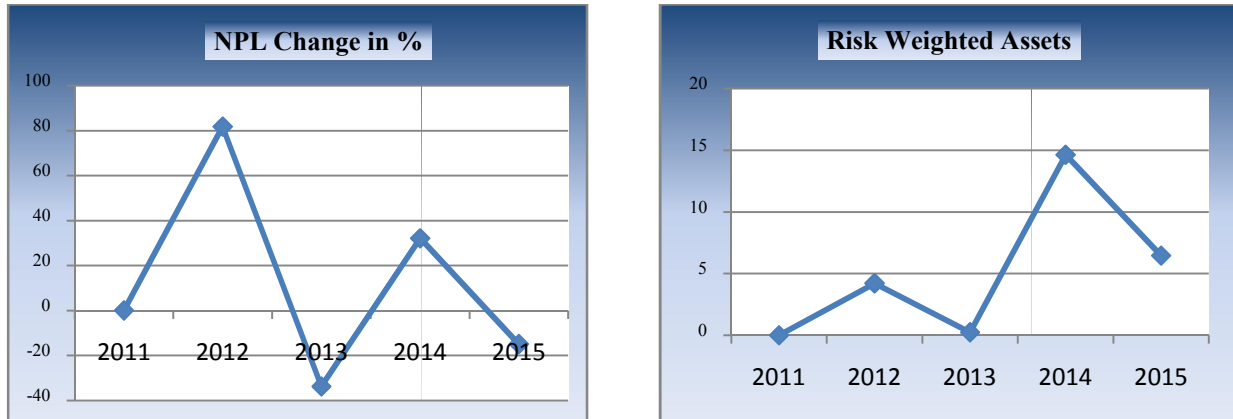


Figure 3.16 Percentage Changes between NPL Ratio and RWA

In figure 3.17 indicates that there is a negative relationship uphold between non performing loan and return on asset ratio. In 2012 when the NPL ratio was gone up the ROA ratio was gone down. But, in 2015 both NPL and ROA ratio was gone down due to adjustment of bad loans.

Source: Author's calculation

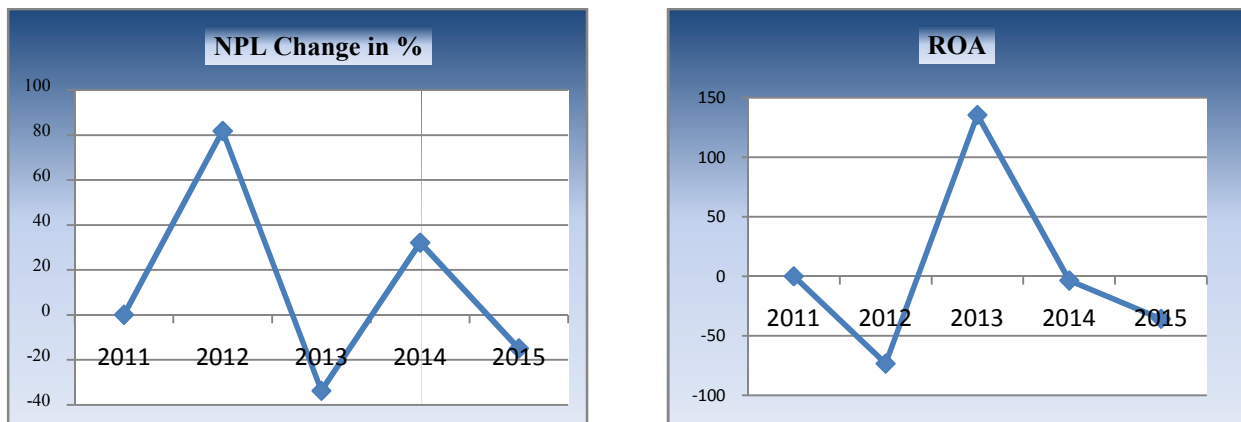


Figure 3.17 Percentage Changes between NPL and ROA Ratio

After analyzing the entire figure 3.14 to 3.17 shows a pattern to predict the profitability determinants and the relation among those ratios of the Dhaka Bank Limited. Based on this analysis to capture the bigger picture several advance researches have been run to determine the profitability factors of the private commercial banks of Bangladesh.

CHAPTER 4 LITERATURE REVIEW

In several literatures, profitability determinant of bank is defined as a function of internal and external determinants. Internal determinants are termed micro or bank specific determinants of profitability and related to bank management. The external determinants are the economic and legal environment which affects the operation and performance of banks. According to the nature and objective of each study, different variables could be used. Bank specific financial ratios representing capital adequacy, cost efficiency, liquidity, asset quality, and size are mostly used internal determinants. On the other hand economic growth, inflation, market interest rates, ownership etc. are commonly treated as external determinants that affect bank profitability.

There are numerous studies which deal with bank profitability though those studies vary to a great extent. Some studies on the bank profitability were carried out focusing on a single country, while others on a panel of countries. Many studies also have been done in the Asian region. To make this current research project more meaningful some references of previous studies are presented here.

In the other multi-country studies, **Hassan and Bashir (2003)** investigate profitability for a sample of Islamic banks from 21 countries. It was found that a higher loan ratio actually affects profits negatively.

N. Jahangir, S. Shill, & M. A. J. Haque (2007) studied the profitability in the perspective of Bangladeshi banking industry. The schoolwork was carried out on the data from the year 2000 to 2005 of only the listed commercial banks in DSE (Dhaka Stock Exchange). It was found that there is a strong and significant relationship between market size and bank's return on equity. It seemed that capital adequacy is an important factor for a bank to be profitable.

S. S. Debashis, & N. C. Shil (2011) tried to find out the key discriminators of bank profitability in India. The study was pursued with the help of data of 93 commercial banks for a period about 8 years from 2001 to 2009. To identify the most critical profitability ratios the technique of multiple discriminate analysis (MDA) was used as an important methodology. The analysis identified only five variables namely Priority Sector Advance / Net Advances, Interest Income/ Total Assets, Net interest Spread/ Total Assets, Net interest Spread/ Total Assets, Wage Bills/ Total Expenses as the significant discriminators of bank profitability (ROA- the dependent variable) among the total 13 variables.

Samad, A. (2015) examines the impact of bank specific characteristics and macroeconomic variables in determining the banks' profitability of Bangladesh banking industry with a panel data. A total of 42 Bangladesh commercial banks' financial reports were analyzed; and bank specific characteristics such as bank financial risk, bank operational efficiency, and bank sizes as well as macroeconomic variables such as economic growth are examined to estimate their impact

of bank profits. Results indicate that bank specific factors such as loan-deposit ratio, loan-loss provision to total assets, equity capital to total assets, and operating expenses to total assets are significant factors. Bank sizes and macroeconomic variable show no impact on profits.

Due to the variation of the environment and data included in the analysis the results of various studies differ significantly. However, several researchers identified that there are some common factors which influence profitability of a bank. Summarizing the results from numerous studies, good asset quality, higher proportion of equity capital to asset, greater GDP growth have generally been associated with greater profitability. Various measures of costs are usually negatively correlated with profits. Greater provisions for loan losses, higher liquidity, and more reliance on debt have been lower indicative of lower bank profits (**Olson and Zoubi, 2011**).

Though numerous studies have been carried out all over the world and some works also have been done in Bangladesh regarding the profitability of the banking sector and based on their study this report put together.

CHAPTER 5

OBJECTIVE AND RESEARCH METHODOLOGY OF THE STUDY

Objective of the Study

This report tries to focus on the factors explain the bank profitability of DBL and 09 other PCBs. This report aims at giving an in-depth look into the private commercial banks' profitability in Bangladesh by using the quantitative method to analyze accounting data. The objective as follows:

- To identify the major determinants of the profitability of Private Commercial Banks in Bangladesh in recent years.

Limitation of the Study

Due to limited primary data availability some external variables such as annual Real GDP growth rate, INF (annual inflation rate) and RI (real interest rate) have not been included in the report.

Meanwhile, to have a deeper look at panel data set ten years data would be more convenient to identify the determinants of profitability.

Research Methodology

Data and Research Method

This report employs annual data for all the 10 PCBs of Bangladesh for the year 2011 to 2015. The total sample consisted of 50 (10*5) bank- year observations. The main source of data is the annual report of each bank. It is worth noting here that all the 10 commercial banks are listed in the Dhaka Stock Exchange.

To capture the recent year's profitability determinants less emphasis has been given to the time series analysis. In this model, one dependent and six explanatory variables that may influence the profitability of a bank. The main objective of the report of choosing the proxies is to capture the significant determinants of profitability.

Meanwhile, five multiple regression analyses are run for the year 2011- 2015 to explain the relationship between ROA and independent variables

Variables

To analyze the determinants of the profitability of PCB eight variables are included in the study, one of them are dependent and the other are as explanatory or independent variables.

Dependent Variables

Bank's profitability usually measured by return on asset (ROA) and return on equity (ROE). In this study, ROA is used as measures of bank profitability. ROA is determined as net profit divided by total assets and is expressed in percent. ROA shows the profit earned per dollar of assets and most importantly, reflects the management ability to utilize the bank's financial and real investment resources to generate profits (Hassan and Bashir, 2003).

Independent Variables

By reviewing several literatures it is found that several researchers identified some common factors which influence profitability of a bank. Summarizing the result from numerous studies, bank specific financial ratios representing capital adequacy, cost efficiency, income expenditure mix, asset quality and size are mostly used internal variables.

The report included the following bank specific variables to capture the determinants of profitability:

Capital Adequacy

The ratio of equity to total assets (CA) is generally used to represent the basis ratios for capital strength. It is likely that the highest this ratio, lower the need for external funding and thus leads to the higher profitability of the bank. Equity to total assets ratio is expected to have positive relation with the performance that well-capitalized banks face lower costs of going bankrupt which reduces their costs of funding and risks (Berger, 1995; Bourke, 1989; Hassan and Bashir, 2003).

Asset Quality

To address the asset quality two ratios are used in this study; loans to total assets (LA) and non-performing loans to total loans (NPL). As loans is one of the main source of income of a bank, the ratio loans to total assets is expected to affect profitability positively unless an unrespectable level of risk is taken by a bank. Non-Performing Loans (loans which are considered not to generate earnings) to total loans ratio measures the asset quality of bank. (Saklain, S, 2012).

Deposits

Deposits are considered as banks' main source of funding and are the lowest cost of funds. The more deposits are transformed into loans, the higher the interest margin and profit. Hence, deposits generally have positive impact on profitability of the banks. But if a bank can't transform its deposits into loans efficiently it may bring negative impact on profitability also. (Saklain, S, 2012).

Income Expenditure Mix

In this study, net interest margin (NIM) and net-operating margin (NOM) ratios are used to reflect the income-expenditure structure. Net interest margin is measured by net interest income (net interest spread) to total assets. Net interest margin is an important measure of bank efficiency which basically focuses on the profit earned on interest activities of a bank.

On the other hand net operating margin is measured by Operating margin is a measurement of what proportion of a company's revenue left over after paying for variable cost. Net operating margin consists of, costs of production such as wages, raw materials, etc. Both the variables are expected to show positive relationship with bank profitability. (Saklain, S, 2012).

Table 5.1 Definitions and Notations of the Variables

	Variables	Measure	Notation
Dependent Variable	Profitability	Return On Asset (ROA) = Net Profit/Total Assets	ROA
Independent Variable	Capital Adequacy	Equity / Total Assets	CA
	Asset Quality	Loans / Total Assets, Non-Performing Loans / Total Loans	LA NPL
	Deposits	Deposits/Total Assets	DP
	Income Expenditure Mix	Net Interest Margin = Net Interest Income/ Total Assets Non-Operating Margin = (Total Operating Revenue- Total Operating Expense) /Total Assets	NIM NOM

Source: Author's calculation

Hypothesis

The previous discussion in the overview of the DBL in addition to industry average and the case study of Dhaka Bank Ltd. sections lead us to predict the following hypothesized relationships with respect to the profitability:

Hypothesis H1a: Non Performing Loan (NPL) has a significant negative impact on ROA.

Hypothesis H2a: Net Interest Margin (NIM) has a significant positive impact on ROA.

Hypothesis H3a: Banks with higher operating revenue measured by Net-Operating Margin (NOM) tend to be more profitable.

CHAPTER 6

ANALYSIS OF THE PROFITABILITY DETERMINANTS OF PRIVATE COMMERCIAL BANKS IN BANGLADESH

Descriptive Statistics

The basic descriptive statistics of the variables are presented in Table 6.1. For each variable, Table 6.1 shows mean, standard deviation, minimum and maximum value for the year 2015 to 2011 of 10 private commercial banks of Bangladesh. On average, those banks have a return on assets (ROA) of 1.03, 1.10, 1.14, 1.02 and 1.73 in the year 2015, 2014, 2013, 2012 and 2011 respectively. The ROA varies greatly across banks and periods, the standard deviation of ROA is 0.29, minimum and maximum values are 0.48 and 1.42 in the year 2015. Meanwhile, the standard deviation, minimum and maximum values of ROA in the year 2014-2011 are (0.54, 1.49, 0.29); (0.33, 1.68, 0.53); (0.39, 1.72, 0.59) and (0.55, 0.68, 2.52) respectively.

When the mean of capital adequacy ratio (CA) in the year 2015-2011 is 11.84, 11.76, 11.69, 11.83 and 11.45 minimum value is 9.11, 10.32, 10.80, 10.37 and 10.18 whereas maximum value is 14.24, 13.80, 13.70, 13.05 and 14.88. Averages of loans/assets ratio (LA) and deposits/assets (DP) are approximately 0.66, 0.64, 0.63, 0.62, 0.65 and 0.78, 0.79, 0.80, 0.78, 0.77 respectively.

The average non performing loan (NPL) ratio is 4.79, 5.41, 4.87, 4.96 and 2.72 from 2015 to 2011. Lower NPL trend indicates the lessening of the risky asset of the banks. Meanwhile the minimum and (maximum) values are 3.16 (6.69); 3.86 (9.00); 3.37 (7.59); 2.98 (9.72) and 1.79 (4.28) in the year 2015 to 2011. The standard deviation of NPL is 1.25, 1.45, 1.33, 2.03 and 0.75.

The net interest margin (NIM) amounts to 2.50, 2.83, 3.01, 3.32 and 3.31 on averages and net-operating margin (NOM) amounts to 2.34, 2.68, 2.81, 2.77 and 3.29 on average, for private commercial banks in this statistics. The higher average ratio of NIM indicates that the banks are able to make optimal decisions. On the other hand, downward NIM indicates that the banks are unable to make optimal decision so the banks are unable to make investment decision as contrasted to its debt situation. NOM measure the proportion of revenue left after paying variable costs again the downward average NOM indicates that higher costs of variable cost. Nevertheless, a company's net operating margin often determines how well the company can satisfy creditors and create value for shareholders by generating operating cash flow. A healthy net operating margin is also required for a company to be able to pay for its fixed costs, such as interest on debt, so a high margin means that a company has less financial risk than a company with a low margin.

Table 6.1 Descriptive Statistics

YEAR		ROA	CA	LA	NPL	DP	NIM	NOM
2015	Mean	1.03	11.84	0.66	4.79	0.78	2.50	2.34
	Minimum	0.48	9.11	0.61	3.16	0.68	1.21	1.49
	Maximum	1.42	14.24	0.74	6.69	0.85	4.02	2.86
	Std. Dev.	0.29	1.58	0.04	1.25	0.05	0.97	0.47
		ROA	CA	LA	NPL	DP	NIM	NOM
2014	Mean	1.10	11.76	0.64	5.41	0.79	2.83	2.68
	Minimum	0.54	10.32	0.56	3.86	0.68	1.73	1.61
	Maximum	1.49	13.80	0.72	9.00	0.83	4.44	3.36
	Std. Dev.	0.29	1.24	0.05	1.45	0.04	0.96	0.54
		ROA	CA	LA	NPL	DP	NIM	NOM
2013	Mean	1.14	11.69	0.63	4.87	0.80	3.01	2.81
	Minimum	0.53	10.80	0.57	3.37	0.74	1.77	1.71
	Maximum	1.68	13.70	0.69	7.59	0.86	4.32	3.67
	Std. Dev.	0.33	0.82	0.04	1.33	0.04	0.89	0.57
		ROA	CA	LA	NPL	DP	NIM	NOM
2012	Mean	1.02	11.83	0.62	4.96	0.78	3.32	2.77
	Minimum	0.59	10.37	0.50	2.98	0.62	2.13	1.01
	Maximum	1.72	13.05	0.68	9.72	0.87	4.49	3.71
	Std. Dev.	0.39	0.89	0.05	2.03	0.07	0.82	0.79
		ROA	CA	LA	NPL	DP	NIM	NOM
2011	Mean	1.73	11.45	0.65	2.72	0.77	3.31	3.29
	Minimum	0.68	10.18	0.48	1.79	0.61	2.29	1.09
	Maximum	2.52	14.88	0.73	4.28	0.83	4.10	4.34
	Std. Dev.	0.55	1.31	0.07	0.75	0.08	0.71	0.91

Source: Author's calculation

Correlation Matrix amongst Independent Variables

Correlation matrix between independent variables is presented in Table 6.2, 6.3, 6.4, 6.5 and 6.6. The matrixes show that there are few strong correlations between independent variables. The absolute values of correlation are greater than 0.5 in some occasions. But prima facie evidence suggests that multicollinearity problem is not extremely severe for the five years data. (Saklain, S, 2012).

In table 6.2 shows strong positive correlation between LA (loan to total asset) and DP (deposit to total asset). On the other hand, strong negative correlation between NPL (non performing loan) and NOM (net operating margin). There is a strong positive correlation between NIM (net interest margin) and NOM is also noticed.

Table 6.2
Correlation Matrix among Independent Variables in the Year 2011

	<i>CA</i>	<i>LA</i>	<i>NPL</i>	<i>DP</i>	<i>NIM</i>	<i>NOM</i>
<i>CA</i>	1					
<i>LA</i>	-0.034610923	1				
<i>NPL</i>	-0.064164593	0.013350284	1			
<i>DP</i>	0.121420865	0.617257551	0.303689172	1		
<i>NIM</i>	-0.467324421	0.225086198	-0.314374308	0.032286815	1	
<i>NOM</i>	0.016888999	0.29399411	-0.669685466	-0.135191814	0.681996018	1

Source: Author's calculation

In table 6.3 demonstrates strong negative correlation between LA and NPL. Meanwhile, the strong negative correlation between DP (deposit to total asset) and NOM (net-operating margin) is observed. On the other hand, strong positive correlation between NIM (net interest margin) and NOM.

Table 6.3
Correlation Matrix among Independent Variables in the Year 2012

	<i>CA</i>	<i>LA</i>	<i>NPL</i>	<i>DP</i>	<i>NIM</i>	<i>NOM</i>
<i>CA</i>	1					
<i>LA</i>	-0.316318166	1				
<i>NPL</i>	0.098299106	-0.524579435	1			
<i>DP</i>	-0.142667889	0.09349675	-0.09665997	1		
<i>NIM</i>	-0.054803284	0.111093801	-0.248854012	-0.395405578	1	
<i>NOM</i>	0.438147698	-0.03315403	-0.134802909	-0.565151545	0.581593743	1

Source: Author's calculation

In table 6.4 indicates strong positive correlation between CA (capital adequacy) and NIM (net-interest margin). On the other hand, strong negative correlation between LA (loan to total asset) and NPL (non performing loan). There is a strong positive correlation between NPL (non performing loan) and DP conversely strong negative correlation between NPL and NIM is noticed.

Table 6.4
Correlation Matrix among Independent Variables in the Year 2013

	<i>CA</i>	<i>LA</i>	<i>NPL</i>	<i>DP</i>	<i>NIM</i>	<i>NOM</i>
<i>CA</i>	1					
<i>LA</i>	-0.346705446	1				
<i>NPL</i>	-0.339152516	-0.563271999	1			
<i>DP</i>	-0.347755997	-0.0207653	0.560689354	1		
<i>NIM</i>	0.638730947	0.370382751	-0.572685026	-0.247283145	1	
<i>NOM</i>	-0.065491438	0.248913457	-0.155062291	-0.462131072	0.16163771	1

Source: Author's calculation

In table 6.5 illustrates very strong negative correlation between NPL (non performing loan) and NOM (net-operating margin). Meanwhile, there is a strong negative correlation between DP (deposit to total asset) and NOM also observed. 1% change in DP will result -1% change in NOM.

Table 6.5
Correlation Matrix among Independent Variables in the Year 2014

	<i>CA</i>	<i>LA</i>	<i>NPL</i>	<i>DP</i>	<i>NIM</i>	<i>NOM</i>
<i>CA</i>	1					
<i>LA</i>	-0.3928	1				
<i>NPL</i>	0.32656	-0.344715557	1			
<i>DP</i>	-0.4148	-0.1485	0.41572725	1		
<i>NIM</i>	-0.0595	0.252676954	-0.485441726	-0.062527823	1	
<i>NOM</i>	-0.2848	0.390312006	-0.702480464	-0.657287797	0.034576473	1

Source: Author's calculation

In table 6.6 demonstrates very strong positive correlation between CA (capital adequacy) and NOM (net-operating margin). On the other hand, strong negative correlation between CA and DP (deposit to total asset). There is a strong negative correlation between LA (loan to total asset) and NOM also seen whereas very strong positive correlation exists between NPL (non-performing loan) and DP.

Table 6.6
Correlation Matrix among Independent Variables in the Year 2015

	<i>CA</i>	<i>LA</i>	<i>NPL</i>	<i>DP</i>	<i>NIM</i>	<i>NOM</i>
<i>CA</i>	1					
<i>LA</i>	-0.447850305	1				
<i>NPL</i>	-0.441680243	-0.290755558	1			
<i>DP</i>	-0.641590554	-0.137468596	0.747684793	1		
<i>NIM</i>	-0.036481468	-0.048563039	-0.09423391	0.22275311	1	
<i>NOM</i>	0.850064952	-0.632410051	-0.18375466	-0.471255363	-0.001877324	1

Source: Author's calculation

REGRESSION ANALYSIS

R-squared

R-squared indicates the overall regression accuracy. R-squared is a statistical measure of how close the data are to the fitted regression line. It is also known as the coefficient of determination, or the coefficient of multiple determinations for multiple regressions. (Frost, 2013)

In general, the higher the R-squared, the better the model fits your data.

R-squared = Explained variation / Total variation

R-squared is always between 0 and 100%:

- 0% indicates that the model explains none of the variability of the response data around its mean. (Frost, 2013)
- 100% indicates that the model explains all the variability of the response data around its mean. (Frost, 2013)

Significance F

It indicates that the probability of regression output is not selecting by chance. Meanwhile, smaller “Significance F” indicates the greater probability that the outputs are not obtained by chance. (Excelmasterseries, 2010)

P-Value

The P-Value is a function of the observed sample results (a test statistic) relative to a statistical model, which measures how extreme the observation is. The smaller P- Value indicates the lower chance that the outputs are not obtained by chance. (Excelmasterseries, 2010)

Coefficient

Coefficient indicates the reliability and the Y intercept which is determined by the P- Value.

Standard Error

S represents the average distance that the observed values fall from the regression line. Smaller values are better because it indicates that the observations are closer to the fitted line. (Excelmasterseries, 2010)

Observation

In this report there are 10 observations which are 10 PCBs data. It refers by “n”.

Regression Results and Hypothesis Test

The Table 6.7 shows that the value of R Square is 0.8831 in the year 2011 which reflects that the regression model explains 88.31% of the variation in ROA. Significance F is 0.1513 at 95 percent confidence interval suggesting that the model for the year 2011 is useful to determine the determinants of ROA. (Frost, 2013)

Table 6.7
Regression Results for the Year 2011

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.9398
R Square	0.8831
Adjusted R Square	0.6494
Standard Error	0.3284
Observations	10

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	6	2.4451	0.4075	3.7785	0.1513
Residual	3	0.3235	0.1078		
Total	9	2.7686			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	0.1412	1.9444	0.0726	0.9467
CA	0.0230	0.1267	0.1813	0.8677
LA	2.0677	2.5649	0.8062	0.4791
NPL	-0.0811	0.2164	-0.3749	0.7327
DP	-2.0285	2.3136	-0.8768	0.4451
NIM	0.1875	0.3258	0.5756	0.6052
NOM	0.3450	0.3038	1.1353	0.3387

Source: Author's calculation

Hypothesis H1a (Non Performing Loan (NPL) has a significant negative impact on ROA):

In this model, it is found that NPL has insignificant negative relation with ROA indicating that banks with higher non performing loan may achieve higher profitability. In the regression result it is found that the coefficient of NPL is -0.811, t value is -0.3749 and 'p' value is 0.7327. Lower t value and higher 'p' value reflects that the NPL is not significantly related to ROA (Newbold, 2015). Based on this result we can reject the hypotheses H1a.

Hypothesis H2a (Net Interest Margin (NIM) has a significant positive impact on ROA):

In our study, it is found that NIM has insignificant positive relation with ROA indicating that banks with higher net interest margin may not achieve higher profitability. In the regression result it is found that the coefficient of NIM is 0.18758 t value is 0.5756 and 'p' value is 0.6052. Lower t value and higher 'p' value reflects that the NIM is not significantly related to ROA in 2011 (Newbold, 2015). Based on this result we can reject the hypotheses H2a.

Hypothesis H3a (Banks with higher operating revenue measured by Net-Operating Margin (NOM) tend to be more profitable):

The results imply that banks which derived a higher proportion NOM tend to report a higher level of profitability. The coefficient of NOM ratio is 0.3450 which is very much high in our regression model, t value is 1.1353 which is very significant. The 'p' value is 0.3387 for the year 2011 which is very low (Newbold, 2015). Based on these findings we can accept the hypothesis H3a.

The Table 6.8 shows that the value of R Square is 0.9258 in the year 2012 which reflects that the regression model explains 92.58% of the variation in ROA. Significance F is only 0.0808 at 95 percent confidence interval suggesting that the model for the year 2012 is useful to determine the determinants of ROA. (Frost, 2013)

Table 6.8
Regression Results for the Year 2012

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.9622
R Square	0.9258
Adjusted R Square	0.7774
Standard Error	0.1850
Observations	10

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	6	1.2811	0.2135	6.2387	0.0808
Residual	3	0.1027	0.0342		
Total	9	1.3838			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	5.2078	1.9491	2.6719	0.0756
CA	0.0947	0.0908	1.0438	0.3733
LA	-4.5041	1.5044	-2.9940	0.0579
NPL	-0.1344	0.0377	-3.5680	0.0376
DP	-2.8657	1.1741	-2.4407	0.0924
NIM	0.2248	0.1043	2.1545	0.1202
NOM	-0.1221	0.1320	-0.9246	0.4234

Source: Author's calculation

Hypothesis H1a (Non Performing Loan (NPL) has a significant negative impact on ROA):

In this model, it is found that NPL has insignificant negative relation with ROA indicating that banks with higher non performing loan may achieve higher profitability. In the regression result it is found that the coefficient of NPL is -0.1344, t value is -3.5680 and 'p' value is 0.0376. Lower t value and higher 'p' value reflects that the NPL is not significantly related to ROA in 2012 (Newbold, 2015). Based on this result we can reject the hypotheses H1a.

Hypothesis H2a (Net Interest Margin (NIM) has a significant positive impact on ROA):

In our study, it is found that NIM has significant positive relation with ROA indicating that banks with higher net interest margin may achieve higher profitability. In the regression result it is found that the coefficient of NIM is 0.2248, t value is 2.1545 and 'p' value is 0.1202. Higher t value and lower 'p' value reflects that the NIM has significantly related to ROA in 2012 (Newbold, 2015). Based on this result we can accept the hypotheses H2a.

Hypothesis H3a (Banks with higher operating revenue measured by Net-Operating Margin (NOM) tend to be more profitable):

The results imply that banks which derived a higher proportion NOM may not report a higher level of profitability. In the year 2012 the coefficient of NOM ratio is -0.1221 which is very much low in our regression model, t value is -0.9246 which is not very significant. The 'p' value is 0.4234 for the year 2012 which is very high. Based on these findings we can reject the hypothesis H3a (Newbold, 2015).

The Table 6.9 shows that the value of R Square is 0.7224 in the year 2013 which reflects that the regression model explains 72.24% of the variation in ROA. Significance F is only 0.4479 at 95 percent confidence interval suggesting that the model for the year 2013 is useful to determine the determinants of ROA. (Frost, 2013)

Table 6.9
Regression Results for the Year 2013

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.8499
R Square	0.7224
Adjusted R Square	0.1671
Standard Error	0.3008
Observations	10

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	6	0.7064	0.1177	1.3010	0.4479
Residual	3	0.2715	0.0905		
Total	9	0.9779			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	-2.7621	8.2111	-0.3364	0.7587
CA	0.0480	0.3667	0.1309	0.9042
LA	-0.5829	7.1652	-0.0813	0.9403
NPL	0.0080	0.1834	0.0438	0.9678
DP	2.5947	4.8820	0.5315	0.6319
NIM	0.2548	0.2786	0.9147	0.4278
NOM	0.2908	0.2329	1.2486	0.3004

Source: Author's calculation

Hypothesis H1a (Non Performing Loan (NPL) has a significant negative impact on ROA):

In this model, it is found that NPL has insignificant negative relation with ROA indicating that banks with higher non performing loan may achieve higher profitability. In the regression result it is found that the coefficient of NPL is 0.0080, t value is 0.0438 and 'p' value is 0.9678. Lower t value and higher 'p' value reflects that the NPL is not significantly related to ROA. Based on this result we can reject the hypotheses H1a (Newbold, 2015).

Hypothesis H2a (Net Interest Margin (NIM) has a significant positive impact on ROA):

In our study, it is found that NIM has significant positive relation with ROA indicating that banks with higher net interest margin achieve higher profitability. In the regression result it is found that the coefficient of NIM is 0.2548 but t value is 0.9147 and 'p' value is 0.4278. Higher t value and lower 'p' value reflects that the NIM is significantly related to ROA in 2013. Based on this result we can accept the hypotheses H2a.

Hypothesis H3a (Banks with higher operating revenue measured by Net-Operating Margin (NOM) tend to be more profitable)

The results imply that banks which derived a higher proportion NOM tend to report a higher level of profitability. The coefficient of NOM ratio is 0.2908 which is very much high in our regression model, t value is 1.2486 which is very significant. The 'p' value is 0.3004 for the year 2013 which is low. Higher t value and low p value indicate that we can accept the hypothesis H3a.

The Table 6.10 shows that the value of R Square is 0.8854 in the year 2014 which reflects that the regression model explains 88.54% of the variation in ROA. Significance F is only 0.1473 at 95 percent confidence interval suggesting that the model for the year 2014 is useful to determine the determinants of ROA. (Frost, 2013)

Table 6.10
Regression Results for the Year 2014

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.9410
R Square	0.8854
Adjusted R Square	0.6562
Standard Error	0.1724
Observations	10

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	6	0.6885	0.1148	3.8630	0.1473
Residual	3	0.0891	0.0297		
Total	9	0.7776			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	5.0080	4.3501	1.1512	0.3331
CA	-0.1083	0.0950	-1.1406	0.3368
LA	-4.4312	1.3506	-3.2808	0.0464
NPL	0.2113	0.0757	2.7925	0.0683
DP	-3.6916	3.1810	-1.1605	0.3298
NIM	0.1995	0.0830	2.4028	0.0956
NOM	0.5231	0.2766	1.8913	0.1549

Source: Author's calculation

Hypothesis H1a (Non Performing Loan (NPL) has a significant negative impact on ROA):

In this model, it is found that NPL has significant negative relation with ROA indicating that banks with higher non performing loan may not achieve higher profitability. In the regression result it is found that the coefficient of NPL is 0.2113, t value is 2.7925 and 'p' value is 0.0683. Higher t value and lower 'p' value reflects that the NPL is significantly related to ROA in 2014. Based on this result we can accept the hypotheses H1a.

Hypothesis H2a (Net Interest Margin (NIM) has a significant positive impact on ROA):

In our study, it is found that NIM has significant positive relation with ROA indicating that banks with higher net interest margin achieve higher profitability. In the regression result it is found that the coefficient of NIM is 0.1995, t value is 2.4028 and 'p' value is 0.0956. Higher t value and lower 'p' value reflects that the NIM is significantly related to ROA in 2014. Based on this result we can accept the hypotheses H2a.

Hypothesis H3a (Banks with higher operating revenue measured by Net-Operating Margin (NOM) tend to be more profitable):

The results imply that banks which derived a higher proportion NOM tend to report a higher level of profitability. The coefficient of NOM ratio is 0.5231 which is very much high in our regression model, t value is 1.8913 which is very significant. The 'p' value is 0.1549 for the year 2014 which is very low. Based on these findings we can accept the hypothesis H3a.

The Table 6.11 shows that the value of R Square is 0.8689 in the year 2015 which reflects that the regression model explains 86.89% of the variation in ROA. Significance F is only 0.1766 at 95 percent confidence interval suggesting that the model for the year 2015 is useful to determine the determinants of ROA. (Frost, 2013)

Table 6.11
Regression Results for the Year 2015

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.9321
R Square	0.8689
Adjusted R Square	0.6067
Standard Error	0.1848
Observations	10

ANOVA					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	6	0.6793	0.1132	3.3135	0.1766
Residual	3	0.1025	0.0342		
Total	9	0.7818			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>
Intercept	1.5920	3.6872	0.4318	0.6951
CA	0.0132	0.0925	0.1428	0.8955
LA	-0.6489	2.3672	-0.2741	0.8018
NPL	0.1180	0.0915	1.2897	0.2876
DP	-2.5042	2.7647	-0.9058	0.4318
NIM	0.0566	0.0741	0.7641	0.5004
NOM	0.4069	0.3199	1.2719	0.2931

Source: Author's calculation

Hypothesis H1a (Non Performing Loan (NPL) has a significant negative impact on ROA):

In this model, it is found that NPL has significant negative relation with ROA indicating that banks with higher non performing loan may achieve higher profitability. In the regression result it is found that the coefficient of NPL is 0.1180, t value is 1.2897 and 'p' value is 0.2876. Higher t value and lower 'p' value reflects that the NPL has significantly related to ROA in the year 2015. Based on this result we can accept the hypotheses H1a.

Hypothesis H2a (Net Interest Margin (NIM) has a significant positive impact on ROA):

In our study, it is found that NIM has significant positive relation with ROA indicating that banks with higher net interest margin may not achieve higher profitability. In the regression result it is found that the coefficient of NIM is 0.0566 t value is 0.7641 and 'p' value is 0.5004. Higher t value and lower 'p' value reflects that the NIM has significantly related to ROA in 2015. Based on this result we can accept the hypotheses H2a for 2015.

Hypothesis H3a (Banks with higher operating revenue measured by Net-Operating Margin (NOM) tend to be more profitable):

The results imply that banks which derived a higher proportion NOM tend to report a higher level of profitability. The coefficient of NOM ratio is 0.4069 which is very much high in our regression model, t value is 1.2719 which is very significant. The 'p' value is 0.2931 for the year 2015 which is very low. Based on these findings we can accept the hypothesis H3a.

Findings from the Analysis

Key finding of the above mentioned correlation and regression of the secondary data analysis are as follows.

- The experimental findings from the regression suggest that that Capital Adequacy (CA) ratio does not have significant effect on the profitability. NPL ratio and the NIM ratio have imperative effect on profitability. But the impact of NOM (Net-Operating Margin) on profitability was observed as the most significant among various variables.

CHAPTER 7 CONCLUSION AND RECOMMENDATIONS FOR POLICY IMPLICATIONS

The banking sector of Bangladesh has undergone noteworthy financial reforms, which has significantly transformed the sector. At present private commercial banks are dominant in respect of market share and profitability in this sector. Profitability is always an important criterion to measure the performance of banks. This study seeks to examine the determinants of private commercial bank's profitability in Bangladesh by using the data obtained from the financial statements of 10 private commercial banks for the year 2011 to 2015.

The study acknowledged that capital adequacy does not have a significant effect on profitability. It suggests that to achieve a higher level of ROA it is not always necessary to be a larger bank. Interest income is always considered to be the main source of income of a bank and in our study it is found that NIM/assets ratio does have a significant impact on profitability. But the most significant variable which affects the profitability was found to be the Net-Operating Margin/assets ratio. This indicates that greater operating margin in banking activities positively influence profitability. It is also identified that Non Performing Loan activities, of private sectors has a significant negative impact on ROA. It suggests that banks which are more exposed to the risk or invest higher proportion of risky loans and does not maintain higher Risk Weighted Asset Ratio tend to loss profitability.

The findings of this study have considerable policy relevance. It could be argued that the more profitable bank will be able to offer more new products and services. To this end, the role of diversified banking activities is particularly important, given that a bank with relatively more innovative ideas and better fund management capability may have added advantage over its peers. As per the portfolio theory diversification reduces risks, so various sources of earning should be welcomed. But if this earning includes higher proportion of volatile trading activity rather than low risk income streams like fees and commission, the risk may become higher.

More exposure in the capital market may bring more risk to a bank as the investment decision in the developing capital market like Bangladesh depends mostly on speculation rather than the real financial indicators. It suggests that non-traditional activates of banks (other than deposit taking and lending) may lead banks to higher exposure to the risk.

The policy direction should be directed in such a way which will enhance the resilience and efficiency of the financial institutions with the aim of intensifying the robustness as well as stability of the banking sector. In this regard, capital adequacy should be emphasized so that banks are able to withstand any risky assets.

Banks profitability is anticipated to be sensitive to macroeconomic variables such as Gross Domestic Product rate (GDP), inflation rate (INF) and real interest rate (RI). Due to limited data availability, those external variables have not been included in this study. There is also scope to analyze the linkage between the bank's profitability and their exposure to the capital market more intensively.

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WEB LINKS

Name of The Bank	Web-Links
AB Bank	http://www.abbank.com.bd
Bangladesh Bank	http://www.bangladesh-bank.org
Bank Asia	http://www.bankasia-bd.com
Dhaka Bank Limited	http://www.dhakabank.com.bd
Dutch Bangla Bank Limited	http://www.dutchbanglabank.com
Eastern Bank Limited	http://www.ebl-bd.com
Jamuna Bank Limited	http://www.jamunabankbd.com
Marcantile Bank Limited	http://www.mblbd.com
Pubali Bank Limited	http://www.pubalibangla.com
Primier Bank Limited	http://www.premierbankltd.com
United Commercial Bank limited	http://www.ucbl.com

Appendix

Appendix 1: Financial Data of the Private Commercial Banks of Bangladesh (2011-2015)

Name of Bank	Year	TOTAL ASSET	Total operating revenue	Total operating expense	NON PERFORMING LOAN/CL	TOTAL DEPOSIT	TOTAL LOAN
Dhaka Bank	2015	176362.00	6709.00	3205.00	1903.00	139068.00	117840.00
	2014	158748.00	6857.00	3049.00	2120.00	124854.00	103132.00
	2013	144409.00	6395.00	2701.00	2186.00	115981.00	99596.00
	2012	133142.00	5342.00	2119.00	2498.00	107427.00	90140.00
	2011	104726.00	6229.00	1944.00	1063.00	85277.00	75983.00
AB Bank	2015	285010.00	10649.00	5628.00	6619.00	213819.00	209725.00
	2014	246331.00	12155.00	5230.00	6856.00	198189.00	177571.00
	2013	208006.00	9755.00	4465.00	4720.00	161846.00	140121.00
	2012	173842.00	8435.00	4072.00	3522.00	140026.00	106066.00
	2011	152963.00	7743.00	3431.00	2672.00	116152.00	94638.00
Bank Asia	2015	224347.31	21497.24	15491.57	5808.00	169827.00	136396.00
	2014	182730.94	20385.97	14607.14	6200.00	140869.00	116808.00
	2013	163777.00	19672.29	14256.53	5878.00	133489.00	104911.00
	2012	140361.00	17437.02	12385.22	5251.00	110061.00	92328.00
	2011	117729.00	14606.10	10564.13	2249.00	95131.00	82819.00
Dutch Bangla Bank Ltd	2015	244057.60	15608.80	9174.90	5624.00	186765.00	152270.00
	2014	215993.50	13868.80	8544.40	5475.00	166762.00	124423.00
	2013	185537.40	12697.90	8114.30	4175.00	145230.00	106422.00
	2012	155918.60	11293.60	6088.00	2728.00	125433.00	91648.00
	2011	123267.00	9090.50	4310.60	2186.00	100711.00	79660.00
EBL	2015	189563.00	10087.00	4883.00	4263.00	127990.00	30543.00
	2014	172124.00	10134.00	4359.00	5157.00	116792.00	26021.00
	2013	157882.00	9469.00	3681.00	3697.00	117102.00	14080.00
	2012	147148.00	8727.00	3263.00	3071.00	91781.00	31158.00
	2011	117601.00	7791.00	2683.00	1561.00	75536.00	21652.00
Marcantile Bank	2015	182800.17	7944.02	4008.26	6250.00	154869.00	126338.00
	2014	168474.13	7996.02	3585.45	5965.00	140475.00	117060.00
	2013	144841.00	7294.96	3039.26	4659.00	124566.00	97688.00
	2012	152658.00	6110.76	2759.98	4090.00	132093.00	93610.00
	2011	166553.00	6102.25	2600.57	2084.00	102262.00	79999.00
Premier Bank Limited	2015	131437.94	5334.47	3371.27	6061.00	108875.00	91318.00
	2014	111576.00	5015.73	3216.97	6305.00	92715.00	70063.00
	2013	88959.00	4434.89	2911.59	3021.00	73516.00	52697.00
	2012	81733.00	3896.45	3072.97	2812.00	67058.00	52210.00
	2011	74951.00	4324.41	3507.11	2132.00	60692.00	49774.00

Source: Author's compilation from the annual reports of ten private commercial banks of Bangladesh

Appendix 1: Financial Data of the Private Commercial Banks of Bangladesh (2011-2015) Continued

UCBL	2015	293847.00	15548.00	7145.66	10324.00	220866.00	197413.00
	2014	266100.00	15209.39	6489.63	8050.00	211072.00	174146.00
	2013	226333.00	12398.58	5272.21	5985.00	184896.00	148664.00
	2012	207448.00	10177.66	4415.44	5015.00	170530.00	136071.00
	2011	168891.00	9294.37	3321.46	2067.00	139484.00	115506.00
Jamuna Bank Limited	2015	142859.00	6981.00	3353.00	5839.00	118849.00	87252.00
	2014	139494.00	6090.64	3021.83	4422.00	114635.00	77899.00
	2013	115162.00	5635.65	2665.75	5133.00	97485.00	67669.00
	2012	109678.00	5285.12	2078.22	5337.00	79623.00	54887.00
	2011	87065.00	4863.57	2046.50	1618.00	70508.00	56611.00
Pubali Bank Limited	2015	285462.00	14120.64	6629.65	9218.00	224808.00	173125.00
	2014	248386.00	13667.52	6406.92	9377.00	193090.00	149974.00
	2013	228533.00	12815.11	5079.14	8136.00	177878.00	136940.00
	2012	192947.00	11510.54	5374.74	6159.00	150418.00	122068.00
	2011	157153.00	9460.68	3980.46	2146.00	123805.00	106329.00

Source: Author's compilation from the annual reports of ten private commercial banks of Bangladesh

Appendix 2: Some Selected Ratios of the Private Commercial Banks of Bangladesh (2011-2015)

Name of Bank	Year	ROA	Loan to Asset Ratio	Capital Adequacy Ratio	NPL Ratio	NIM Ratio	NOM Ratio
Dhaka Bank	2015	0.86	0.67	10.46	1.61	4.02	1.99
	2014	1.34	0.65	11.2	2.06	4.44	2.40
	2013	1.39	0.69	12.18	2.19	4.32	2.56
	2012	0.59	0.68	10.74	2.77	4.10	2.42
	2011	2.22	0.73	10.7	1.40	4.10	4.09
AB Bank	2015	0.48	0.74	11.09	3.16	1.76	1.76
	2014	0.54	0.72	10.32	3.86	2.81	2.81
	2013	0.53	0.67	10.8	3.37	2.54	2.54
	2012	0.88	0.61	11.73	3.32	2.51	2.51
	2011	0.93	0.62	11.37	2.82	2.82	2.82
Bank Asia	2015	1.26	0.61	12.46	4.26	1.21	2.68
	2014	1.28	0.64	11.32	5.31	1.76	3.16
	2013	0.96	0.64	11.05	5.60	1.94	3.31
	2012	0.70	0.66	13.05	5.69	2.62	3.60
	2011	1.72	0.70	14.88	2.72	2.29	3.43
Dutch Bangla Bank Ltd	2015	1.30	0.62	13.7	3.69	4.01	2.64
	2014	1.10	0.58	13.8	4.40	3.86	2.47
	2013	1.20	0.57	13.7	3.92	3.95	2.47
	2012	1.70	0.59	12	2.98	4.49	3.34
	2011	1.90	0.65	11.2	2.74	4.02	3.88
EBL	2015	1.23	0.69	14.24	3.27	1.87	2.75
	2014	1.28	0.69	13.22	4.36	2.87	3.36
	2013	1.68	0.65	11.95	3.59	3.88	3.67
	2012	1.72	0.66	12.05	3.18	4.30	3.71
	2011	2.52	0.70	10.18	1.91	3.76	4.34
Marcantile Bank	2015	0.79	0.69	10.52	4.95	3.27	2.08
	2014	0.76	0.69	10.83	5.10	3.82	2.56
	2013	1.33	0.67	11.43	4.77	3.58	2.70
	2012	1.03	0.61	12.95	4.37	2.99	2.28
	2011	1.70	0.48	11.87	2.61	2.93	2.98
Premier Bank Limited	2015	0.79	0.69	9.11	6.64	1.79	1.49
	2014	0.87	0.63	13.31	9.00	1.73	1.61
	2013	0.87	0.59	11.46	5.73	1.77	1.71
	2012	0.74	0.64	11.04	5.39	2.13	1.01
	2011	0.68	0.66	10.55	4.28	2.32	1.09

Source: Author's compilation from the annual reports of ten private commercial banks of Bangladesh

Appendix 2: Some Selected Ratios of the Private Commercial Banks of Bangladesh (2011-2015) Continued

UCBL	2015	1.42	0.67	12.16	5.23	2.63	2.86
	2014	1.49	0.65	10.56	4.62	2.98	3.28
	2013	1.41	0.66	11.53	4.03	3.13	3.15
	2012	0.84	0.66	10.37	3.69	3.19	2.78
	2011	1.97	0.68	10.87	1.79	3.05	3.54
Jamuna Bank Limited	2015	1.16	0.61	12.83	6.69	2.07	2.54
	2014	1.06	0.56	11.25	5.68	2.05	2.20
	2013	1.01	0.59	11.1	7.59	2.58	2.58
	2012	1.06	0.50	12.21	9.72	3.03	2.92
	2011	1.69	0.65	11.27	2.86	3.82	3.24
Pubali Bank Limited	2015	1.01	0.61	11.87	5.32	2.37	2.62
	2014	1.24	0.60	11.74	6.25	2.03	2.92
	2013	1.01	0.60	11.73	5.94	2.36	3.39
	2012	0.91	0.63	12.2	5.05	3.86	3.18
	2011	2.00	0.68	11.56	2.02	4.02	3.49

Source: Author's compilation from the annual reports of ten private commercial banks of Bangladesh