# A Comparative Analysis of Profitability of Non Banking Financial Institutions in Bangladesh and Investors' Investment Decision Making

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# A Comparative Analysis of Profitability of Non Banking Financial Institutions in Bangladesh and Investors' Investment Decision Making

Submitted to:

Dr. Suman Paul Chowdhury Assistant Professor BRAC Business School BRAC University

Prepared by:

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**BRAC Business School** 

**BRAC** University

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August 22, 2017

#### **Approval Page**

This Internship report based on the internship period of three months has been duly prepared and submitted by Shaika Samreen Sanah, ID: 13304014 as a partial fulfillment of the requirements for the course BUS 400 for the completion of BBA Program in BRAC Business School, BRAC University.

Dr. Suman Paul Chowdhury

Internship Academic Supervisor

#### Letter of Transmittal

August 22, 2017 Dr. Suman Paul Chowdhury Assistant Professor BRAC Business School BRAC University

Subject: Submission of Internship Report on "A Comparative Analysis of Profitability of Non Banking Financial Institutions in Bangladesh and Investors' Investment Decision Making"

Dear Sir,

It is my great pleasure to submit the internship report titled "A Comparative Analysis of Profitability of Non Banking Financial Institutions in Bangladesh and Investors' Investment Decision Making" to you for your consideration as a binding requirement for the successful completion of my internship program at IPDC Finance Limited, under the BBA Program of BRAC Business School, BRAC University. My main inducement was to prepare this report as per your proficient guidance and directions while considering the guidelines of BBA Program.

I made ardent efforts to study and scrutinize the related materials, documents, observe the operations performed in IPDC Finance Limited and I hope that I have been able to relate the fundamental aspects with practical and rational applications considering my level of competence and experience.

Therefore, I am submitting my internship report, hoping that you will appreciate my instructive and comprehensive approach. I earnestly hope that this report fulfills the objectives and requirements of my internship and that it finds your acceptance. Your kind feedback will be highly appreciated and in case of any further elaboration or clarification or any kind of queries regarding the report, I shall be glad to assist you.

Sincerely yours,

Shaika Samreen Sanah

ID: 13304014 BRAC Business School BRAC University

#### Acknowledgement

The successful completion of my Internship Report is the outcome of the engrossment and contribution of a number of people, without whose expert guidance and suggestions the accomplishment of the report would be near to impossible. I am immensely grateful to each one of those individuals who have guided me through my entire internship journey and provided me with all the necessary information regarding the core activities and operations of IPDC Finance limited which has been of tremendous assistance to me in the formulation of this report.

First and foremost, I would like to thank my honorable internship academic supervisor, Dr. Suman Paul Chowdhury, Assistant Professor, BRAC Business School, BRAC University for his constant support, guidance, inspiration and for sharing his experience and wisdom during the course of this internship program. I am also grateful to him for contributing his valuable time while viewing my report and recommending all the necessary corrections.

Secondly, I would like to take the opportunity to express my heartfelt gratitude to my direct supervisor at IPDC Finance Limited, Mr. Muhammad Sami Ul Hoque, Head of Credit Administration, whose invaluable insights, motivation and guidance throughout my journey at IPDC has assisted me immensely in gaining practical knowledge regarding the extensive operation and activities of NBFIs. A special thanks goes to Mr. Shah Wareef Hossain, Chief Operating Officer, IPDC Finance Limited for providing me the opportunity of completing various assignments that has effectively enabled me to discover the diverse functions of IPDC Finance Limited.

I am also thankful to Mr. Md. Barkat Ullah, Head of Administration Department, IPDC Finance Limited for sharing his valuable experience and information regarding their extension strategy. I would also like to appreciate the cooperation of the entire Human Resources and Corporate Communication of IPDC Finance for availing me all the detailed and necessary information regarding the structure, varied initiatives, CSR and strategic changes in IPDC Finance Limited.

Finally, I am really beholden to my parents and benefactors who have extended their unending support and faith on me which kept me motivated and increased my spirit.

#### Abstract

Non banking financial institutions, or NBFIs, are the financial institutions that provide financial services including banking but do not hold a banking license. NBFIs primarily emerged with the inception of Industrial Promotion and Development Company of Bangladesh Limited, presently known as IPDC Finance Limited, to mitigate the limitations that existed in the banking sector and has since been customizing financial innovations and have established a strong foothold in the competitive financial market for satisfying the changing demands of customers, thus adding differentiation to the financial sector of Bangladesh. As a consequence, NBFIs are nowadays being considered as an imperative part sector of the financial system, which has been expanding extensively and attaining importance on a continuous basis due to their ability to address the diverse financial requirements of business enterprises. One of the objectives of the study is to provide a comparative analysis and evaluation of the profitability of NBFIs enlisted in Dhaka Stock Exchange. The interpretation of the profitability measures used for this purpose reflects the financial institutions' effectiveness in decision-making, efficiency in their core activities and utilization of resources and their resilience to economic adversities which will assist the companies in identifying the areas that require attention and corrective measures for improving their financial performance. It has been found that due to high volatility and lack of stability in the economy and stock market, trends of profitability ratios did not demonstrate consistency according to theory in some cases. The study also focuses on the degree of dependency of net incomes of the selected NBFIs on the four influencing factors, namely, net interest margin, operating margin ratio and return on equity. Another objective of the study is to assess the investors' investment decisions by evaluating whether or not the returns being earned by them sufficiently compensate the risk they bear by investing in the equity shares of the selected NBFIs. Several recommendations based on the analysis have been provided some of which include implementation of financial innovations, increasing transparency in credit evaluation, interest income, loans and streamlining loan disbursement methods so that both the issuing NBFIs and investors are benefitted in the long term.

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# Chapter 1



# **1.1 Introduction**

The accelerated growth of financial market plays a vital role in the economic development of our country. Although commercial banks are deemed as the dominant players in the financial system, they have some structural limitations and rigidity of different regulations, such as not being able to expand their operations in all areas and rather being restricted to a comparatively limited sphere of financial services. Additionally, the fundamental shift of private sector has emerged as a catalyst of economic growth and development along with the public sector. As a consequence, IPDC Finance Limited, the pioneering company in the financial sector of Bangladesh came into being with a view to mitigate financial intermediation gap and thereby play a crucial complementary role of commercial banks. Since then, the size and scope of the non-banking financial sector has been expanding in both absolute and relative terms. IPDC Finance Limited has been achieving remarkable growth in all areas of business and has been serving its customers through its diversified portfolio of financial products that are arranged under its three business segments, namely, Corporate business, Small and Medium Enterprises (SME) business and Retail business. It is one of the blue chip companies on the stock markets of our country which is dedicated to sustainable business practices and strong financial performance. The company has been consistently recognized by independent bodies for the values underpinning its business and is proud to be a standard bearer for the financial sector of Bangladesh. IPDC Finance Limited has always been devoted in upholding the highest standards of ethics and compliance for its employees and is committed in making significant contributions in the development and welfare of the society.



# Chapter 2



# 2.1 Organization Overview

# 2.1.1 Historical Background:

Previously known as 'Industrial Promotion and Development Company of Bangladesh Limited', IPDC Finance Limited was established in November 28, in the year 1981 and has since become the first private sector Development Finance Institution (DFI) and Non Banking Financial Institution (NBFI) in Bangladesh. It was founded in collaboration and through the lead sponsorship of a distinguished group of shareholders and multinational financial institutions namely International Finance Corporation (IFC), USA; German Investment and Development Company (DEG), Germany; The Aga Khan Fund for Economic Development (AKFED), Switzerland; Commonwealth Development Corporation (CDC), UK; and the Government of Bangladesh (GOB). IPDC was licensed as a Financial Institution by Bangladesh Bank under Financial Institutions Act on 7 February, 1995. Since its inception, IPDC Finance Limited has played a vital role in the development of the industrial landscape of Bangladesh by partnering with many of the very renowned corporate houses of the country during their incubation stage. Some of the of milestone projects that were the first of their kind in Bangladesh in which IPDC marked its contribution include-













: First Leasing Company

: First Theme Park

: First Preference Share Investment

: First Independent Power Producer

: First Housing Finance Company

: First International Standard Private Hospital





: First Private Sector 5 Star Hotel

: Second Housing Finance Company

: First Private Sector TV Channel

: First Institutional Investment in Private Sector Education

Along with the progression of the company, the dominance of foreign shareholding of 70% by AKFED was gradually being withdrawn when different local organizations namely BRAC, Ayesha Abed Foundation, RSA Capital Limited acquired 40% shares from AFFED with AKFED retaining 11.05%, thus marking the presence of local institutions in the shareholdings of IPDC Finance Limited. In 2016, IPDC reinvigorated and rebranded itself to IPDC Finance Limited from Industrial Promotion and Development Company of Bangladesh Limited and has since embarked on a new journey of growth, empowerment, uniqueness and innovation.

# 2.1.2 About the Company:

IPDC Finance Limited commenced its operation in 1981 as the first private sector financial institution of the country with multinational alliance and funding of the International Finance Corporation (IFC) of the World Bank Group. Gradually it went on to become one of the topnotch companies in the financial sector and has always been dedicated in several pioneering intercessions for making significant contribution in the socio-economic development of our country. As a demonstration of social responsiveness and for fulfilling one of its integral objectives of building a better community, IPDC has undertaken several CSR activities in various fields some of which include-

- Inaugurating "Porua/Rural Library" and distributing books to the children of underserved areas in order to provide them with a viable source of education.
- Donating bicycles to school and college going underprivileged girls of North Bengal with the assistance of Terre des Hommes Italia with a view to easing the labor of several students who previously used to walk barefoot every day.



- > Distributing blankets, warm clothes and Nebulizer to the poor
- Contributing to the Rights and Sight for Children in affiliation with Distressed Children & Infants International (DCI) to provide the basic yet indispensable rights of the destitute children living in our society.
- > Handing over toys to children through the "Toys-R-Yours" initiative.
- > Setting up Public Washroom for preventing the spreading of toxic diseases.
- Providing aid to UCEP Institute of Science and Technology which is involved in imparting education and vocational training to the underprivileged children.
- Sponsorship for silver jubilee souvenir to Uttara Ladies Club for recognizing the spirit and improving the situation of women by enriching them with their activities.
- > Planting trees in Kurigram and Barguna Upazillas.
- Donation for "We stand for Korail", an initiative taken by BRAC in order to support the innumerable people who suffered immeasurable loss when Dhaka's biggest slum caught fire in December 4, 2016.
- Honoring 7 women in association with Daily Star, the "Unsung Women Nation Builders Awards" for their contribution in different fields and to encourage women empowerment.
- Implementing "Lady Unbound" campaign for encouraging women entrepreneurs for their drive and endeavor.

As of July 2017, IPDC Finance had 285 fulltime employees working for the company and currently has 10 branches actively operating in different parts of the country. Moreover, the company is expecting to start its operation soon in Mymensingh and Comilla as a part of attaining its target of opening 7 new branches across the country with a view to further expanding its distribution reach by the end of the year 2017. Meanwhile, it is also anticipating to open booths and small offices in remote areas for facilitating easy access as a part of its business extension strategy. Below is a list of branches that are currently providing services to people and organizations engaged in different spheres-

| Branch Locations             | Headcount |
|------------------------------|-----------|
| Dhaka                        | 4         |
| Gulshan Avenue - Head Office |           |
| Motijheel                    |           |
| Dhanmondi                    |           |



| Uttara                          |    |
|---------------------------------|----|
| Chittagong                      | 1  |
| Sylhet                          | 1  |
| Narayangonj                     | 1  |
| Gazipur                         | 1  |
| Bogra                           | 1  |
| Jessore                         | 1  |
| <b>Total Number of Branches</b> | 10 |

Figure 1: IPDC Finance Limited Branch Location

On the contrary, IPDC relaunched its brand in December 2016 in order to reposition itself to the diverse market segments of Corporate, SME ad Retail it wishes to serve as per the strategic plan as opposed to its primary focus on corporate segment. As a part of rebranding, the company not only has embraced a new name by changing to "IPDC Finance Limited" but has also altered its logo and payoff line, the current one being "Jaago Ucchashe" while the previous payoff line being "Beside your Dream…always".

# Mission:

To enable our customers and communities to rise unbound, to live up to their fullest potential by extending innovative financial solutions in a friendly, timely, transparent and costeffective manner.

# Our Vision:

To become the most passionate financial brand in the country with special focus on youth, women and underserved areas.



### **Core Values:**

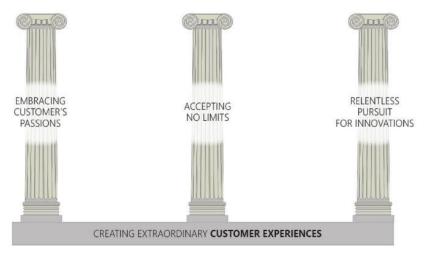


Figure 2: Core Values of IPDC Finance Limited

#### Source: IPDC Annual Report 2016

These three pillars are built on the following sets of core values:

- Delivering extraordinary customer experience by placing customer at the heart of everything we do
- > Displaying the highest level of integrity in the way we conduct our business
- > Demonstrating a strong will to win in the market place
- Promoting diversity in the work place and community
- Encouraging teamwork and collaborative efforts
- > Harnessing the power of technology to deliver better customer experience
- Setting the standard for the best corporate citizenship in the communities we work

#### Strategic Aim of the Company:

#### **Home Loans**

Given the demand and growing income level of the middle and low income households, IPDC aims to build home loan portfolio by creating new market (middle and low income households) with new set of product propositions.

#### **Empowering Women**

Creating and promoting women entrepreneurs though financing has been included in our strategy agenda.



### **Creating Entrepreneurs**

With the emergence of new generations and their attitude towards doing business, IPDC plans cater to this sector with right product offerings and distribution coverage.

#### **Beyond Megacities**

IPDC envisages extending retail credit beyond the megacities where the level of competition is yet to intensify.

#### **Brining Convenience at Home**

With growing per capita income, increased buying power of the people, growing number of small households and the fact that people are spending more on consumer durables and life style products, IPDC endeavors to penetrate strongly in consumer finance market.

# **2.2 Nature of the Business**

The major activities of the company are related to finance and finance associated activities. These areas include deposits collection; credit to corporate organizations, retail and SMEs; factoring finance; project finance; leases; hire purchase; equity/quasi-equity investments and advisory services. In 2016, IPDC penetrated strongly in retail market, renewed its focus on SME segment and concentrated more on collecting low-ticket size retail deposit in order to support long term financing.

# **2.3 Range of Products and Services**

IPDC Finance Limited offers a wide range of financial solutions through its three business segments which includes Corporate, SME and Retail-

# 1. Corporate Business

The Corporate Financial Services Division of IPDC offers the full spectrum of corporate finance services to large public and private enterprises. Products under corporate finance are as follows-

**i.** Lease Finance: Lease financing is provided against industrial machineries, commercial equipment, generators, vehicles, vessels, industrial large engines and so forth that will be newly procured. Lease facility may also be provided against already procured or in-use industrial machinery, commercial equipment, office equipment, generators, vehicles, vessels, engines, and many more.



- **ii. Term Loan:** Term Loan is designed for long-term business purposes and is generally provided to meet various capital/fixed expenditures such as balancing of production line, modernization of manufacturing process, expansion of capacity and space and so on.
- **iii. Project Financing:** For projects requiring large-scale investment, IPDC brings other Financial Institutions/Banks to raise funds through syndication where IPDC acts as the lead arranger for the financing. Project Financing provided for setting up of a new unit as addition to the existing product line and capacity, a new concern of an existing group, a new Joint Venture project of an existing company and so forth.
- **iv.** Short Term Financing: IPDC offers working capital financing to assist companies in carrying out day-to-day business operations, to meet short term cash requirements.
- v. Investment in Preference and Common Share: IPDC corporate division makes financing by purchasing preference and common shares if clients raise fund and receives payments usually through redemption of the preferred shares over the tenure and receiving dividend from equity shares.

#### 2. Small and Medium Enterprises (SME) Business

Small and medium enterprises (SMEs) are acknowledged worldwide as lifeblood of local trade, commerce and industry. With lower energy supply, lesser infrastructure facilities and minor environmental risk, SMEs contribute notably in the alleviation of poverty, uncovering potential entrepreneurs and creation of employment opportunities, women empowerment and equitable distribution of income as well as diversification of industrial sector in Bangladesh. Through the SME Financial Service unit, the company offers various SME products based on the needs of the business. The value created by this unit is demonstrated through the unique relationship model, industry expertise, and local market advantage. The SME team deals with all sorts of activities- sales, marketing, business promotions, relationship management, customer service, budgeting, target setting and allocation, execution, monitoring and evaluation of sales deals. A short of description products under SME is furnished below:

- i. Lease Finance: Lease finance is offered to small/medium size business for procuring fixed asset like commercial/office equipment, machineries, generators, vehicles, vessels and many more.
- **ii. Long Term Finance:** Financing in any business concern to meet up various regular capital/fixed asset expenditures.



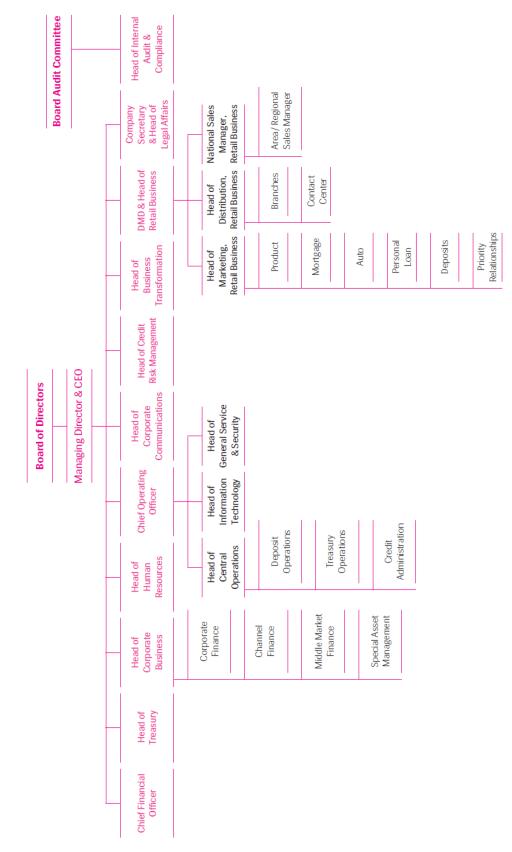
- **iii.** Short Term Finance: Short Term Loan to different business concerns to meet urgent fund requirement for any interim period.
- **iv. Financing Women Entrepreneurs:** This product is exclusively tailored for the women in business to give them that added edge and success.
- v. Factoring: IPDC Factoring provides advance cash against invoices or bills. With IDPC factoring, customer does not need to wait for 90 to 180 days with their accounts receivables to meet their liquidity needs.
- vi. Work Order Financing: IPDC offers financing against Work Orders (WO) to bridge the gap between time of processing the order and receipt of payment.

#### 3. Retail Business

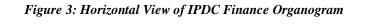
The Individual Financial Service division offers a variety of personal financial services to fulfill the needs of individuals. The unit provides high quality services coupled with maximum security. Depositors can earn competitive returns from the hard-earned savings as well as avail loan facilities against their deposits. A short description of products under Retail business segment is given below:

- **i.** Savings Schemes: Products under this scheme are Deposit Premium, Millionaire Deposit and Ultiflex Deposit schemes.
- Deposit Schemes: Among the wide ranges of products that are offered in this type schemes, Annual Profit, Cumulative Profit, Fixed Deposit General, Monthly Profit, Double Money Deposit, Quarterly Profit Schemes are included.
- **iii. Home Loan:** With a host of Home Loan options, the Home and Mortgage Unit strives to meet individual needs for housing solutions.
- **iv.** Auto Loan: The Auto Loan Unit specializes in car financing for individuals and institutions.
- v. Personal Loan: The Personal Loan Unit offers any purpose loans for personal need.
- vi. Club Royal: This is a complete package of prerogative services, including personal financial advice to the high-value customers.





# 2.4 Organogram of IPDC Finance Limited



Source: Author's Constructed (Adapted IPDC Annual Report 2016)



# **Hierarchal Structure:**

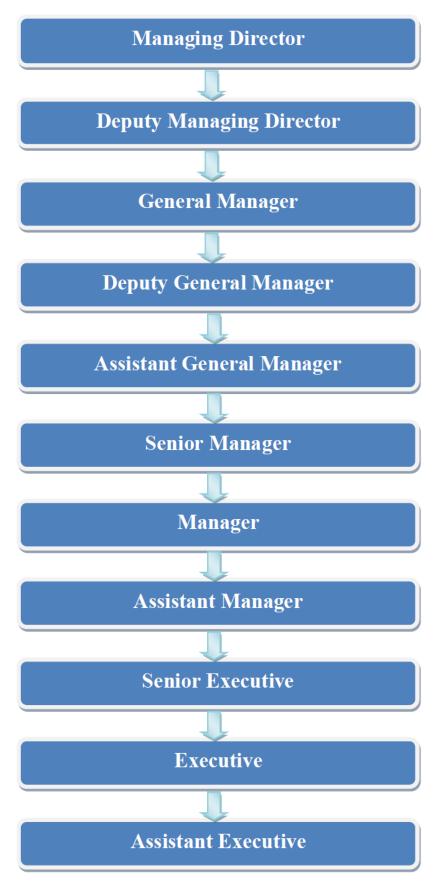


Figure 4: Hierarchal Structure of IPDC Finance Limited



# **Organogram of Central Operation Department:**

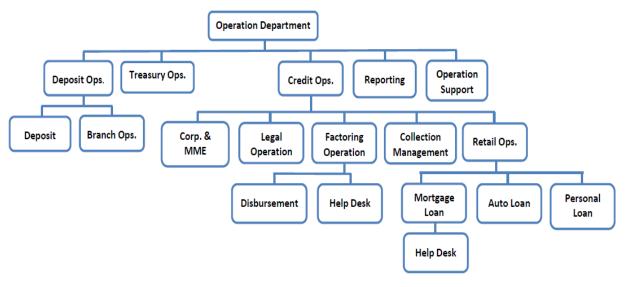


Figure 5: Organogram of Operation Department

Source: Author's Constructed (Adapted from Organogram of Operation Department, IPDC Finance Limited)



# **2.5 Shareholding Structure**

In early 2004 AKFED acquired 70% stake in IPDC by purchasing the shares from IFC, CDC and DEG. In 2006, the shareholding structure was changed by issuance of public shares with AKFED maintaining the management control of the company holding 51% of the shares. However, BRAC (25%), Ayesha Abed Foundation (10%), RSA Capital Limited (5%) acquired 40% shares from AKFED in 2016 with AKFED retaining 11.05% of the shares. Meanwhile, Government of People's Republic of Bangladesh and General Public own 21.88% and 27.07% respectively. General Shareholders can be categorized into three subdivisions namely, Institutions, Foreign and General Public Shareholders.

|                                | 2016                     |                |  |
|--------------------------------|--------------------------|----------------|--|
| Share capital                  | Number                   | % of holding   |  |
| Foreign                        |                          |                |  |
| AKFED                          | 16,744,132               | 11.05          |  |
|                                | 16,744,132               | 11.05          |  |
| Domestic                       | 27.075.1.41              | 25.00          |  |
| BRAC<br>Ayesha Abed Foundation | 37,875,141<br>15,150,057 | 25.00<br>10.00 |  |
| RSA Capital Limited            | 7,575,028                | 5.00           |  |
| GoB                            | 33,147,664               | 21.88          |  |
| General shareholders           | 41,008,545               | 27.07          |  |
|                                | 134,756,435              | 88.95          |  |
|                                | 151,500,567              | 100.00         |  |

Figure 6: Shareholding Composition of IPDC Finance Limited

Source: Author's constructed (Adapted from IPDC Annual Report 2016)



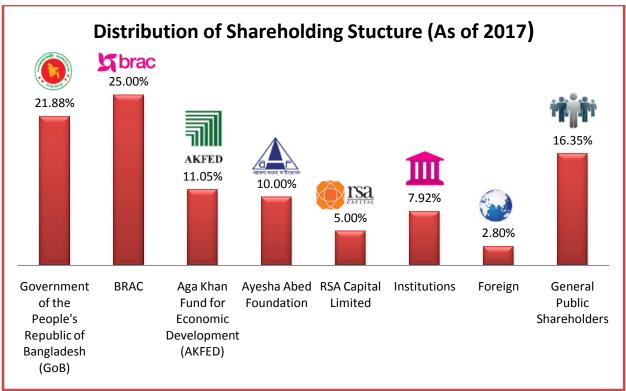


Figure 7: Shareholding Composition Percentage

Source: Author's constructed (Adapted from IPDC Annual Report 2016)



# 2.6 Code of Ethics and Conducts

- Treating customers fairly and without prejudice fosters good support and helps to build long-term sustainable business relationships.
- All information gathered from customers during the course of providing service during an individual's employment is to be considered confidential unless it is clearly stated otherwise.
- Employees must ensure that information and reporting relating to their respective organizations is readily available, accurate and transparent.
- All media (print, electronic and social) inquiries should be forwarded to authorized personnel only to initiate contact with the media on behalf of the organization.
- Ensuring strict compliance with anti-discrimination and harassment policy whereby the wrongdoer may be subjected to the full range of disciplinary actions up to and including termination of his/her employment as well as the prevailing laws of the country.
- Employees must not receive payment or compensation of any kind, except as authorized under the organization's business. In particular, IPDC strictly prohibits the acceptance of secret commission from suppliers and clients.
- Employees are prohibited from taking part in trading of publicly traded securities and investments for personal gain if they possess material non-public information about the security or the issuer.
- Conduct towards female colleagues: Any harassment or discriminatory behavior directed at female employees in the form of derogatory or provocative comments, physical violence, horseplay or inappropriate jokes, unwanted physical contact, use of epithet, comments or innuendo, obscene or harassing telephone calls, e-mails, letters, notes or other forms of communication, and any other conduct that may create a hostile working environment is strictly prohibited.
- Maintaining a healthy and productive work environment by ensuring the safety and security of office premises.

Overall IPDC's business ethics means, "Choosing the good over the bad, the right over the wrong, the fair over the unfair and the truth over the untruth".



# 2.7 Key Company Milestones

| Company Chronicle  | Year |
|--|------|
| IPDC became the first private sector Development Finance Institution (DFI) in Bangladesh   | 1981 |
| IPDC started its commercial operation  | 1983 |
| IPDC sponsors IDLC, the first leasing company, thereby introduced lease financing in the market  | 1985 |
| IPDC gets the license from Bangladesh Bank as a Financial Institution under the Financial Institution Act 1993                             | 1995 |
| IPDC starts Lease Financing itself   | 1997 |
| IPDC introduces Short Term Working Capital and Bridge Loan Finance   | 1999 |
| IPDC introduces the concept of Preference Share Investment in the country by investing in Hyundai Cement Bangladesh                        | 2000 |
| (Later on known as Holcim Bangladesh)  |      |
| IPDC invests in Preferred Stock of Delta BRAC Housing, the pioneer is Housing Finance in the private sector of the country                 | 2000 |
| IPDC introduces Zero Coupon Bond through securitization of receivables with technical assistance from World Bank                           | 2004 |
| AKFED takes the majority share of the company through buying the stakes from IFC, DEG and CDC  | 2004 |
| IPDC gets publicly listed  | 2006 |
| IPDC introduces Auto Loan and Club Royal, a High Net Worth Lifestyle product, first in the NBFI sector                                     | 2009 |
| IPDC launches first branch in Chittagong   | 2009 |
| IPDC opens its branch in Sylhet  | 2011 |
| IPDC introduces Factoring Finance and Mortgage Finance   | 2012 |
| -BRAC (25%), Ayesha Abed Foundation (10%), RSA Capital Limited (5%) acquires 40% shares from AKFED with AKFED retaining 11% of the shares. | 2015 |
| -Establishing the five-year Strategic paper by realigning its focus on youth, women and Undeserved areas.                                  | 2016 |
| -IPDC revamped and rebranded itself to IPDC Finance Limited from Industrial<br>Promotion and Development Company of                        |      |



Bangladesh Limited

-IPDC opens its 3 branches in Gazipur, Narayangonj, Bogra

Figure 8: Key Company Milestones

Source: Author's constructed: Adapted from (IPDC Annual Report 2016)



# Chapter 3



# **3.1 Internship Experience**

The completion of internship is an imperative part of the BBA Program in BRAC University as it provides a remarkable opportunity to get a real life experience by exposing to practical work field. I got the opportunity to complete my internship from IPDC Finance Limited and consider myself very fortunate since I was appointed in the Head Office of IPDC Finance Limited for my 3-month tenure. I was assigned in the Operation department, which serves as the core of any financial institution. Operation department is responsible for executing all kinds of financial and service related tasks and activities for clients or consumers without which the primary objective of any financial institution will falter. I was responsible not only for conducting the activities of Operation Department but was also entrusted with auditrelated activities. Additionally, I was assigned to work in different assignments in collaboration with two other interns from Information Technology and Administration Department of the organization. These assignments were given to us by the Chief Operating Officer (COO) of IPDC in our weekly meetings.

The internship program of IPDC Finance Limited is quite challenging and it creates a learning platform for the beginners. As a consequence, I got the opportunity of utilizing my analytical, influencing and planning skills through the implementation of various process improvements for increasing the accuracy and efficiency of some of the existing practices which I had to perform under the supervision of my direct Supervisor and COO. I had an invigorating experience during my internship program as I have gained significant practical knowledge and also contributed by assisting the regular activities with hands on support.

#### **3.1.1 Responsibilities as an Intern**

#### **Specific Duties and Responsibilities:**

As an intern I was assigned the following job responsibilities-

- i. Conducting routine follow-ups of Audit Issues of Operation Department
  - Discussing the issues with the respective Relation Manager
  - > Retrieving pending documents or solving issues within the given deadline
- Conducting routine follow-ups of Document Imperfections of Corporate, MME and Retail Business
  - Discussing the issues with the respective Relation Manager
  - > Retrieving pending documents or solving issues within the given deadline
- iii. Correction and cross-checking Capex Budget of IT



- iv. Correction and cross-checking Capex Budget of Administration Department
- v. IT and Administration Budget Tracking
- vi. Periodic Update of Auto Loan Insurance MIS
- vii. Revenue Stamp attachment to Auto Loan and Personal Loan files
- viii. Identifying, scanning and Inputting relevant Bangladesh Bank Circular of the year 2016 and 2015 in Internal Interface of IPDC
- ix. Scanning important documents pertinent to Operation Department
- x. Assisting in Corporate Communications in English to Bangla translation of the contents of IPDC Finance website
- xi. Assisting in Document Management Manual for Operation Department
- xii. Content Note writing on the project 'Supply Chain Finance with Digital Platform' for Business Finance Challenge Fund
- xiii. Filing and other manual work

#### **Specific Assignments:**

i. Report on Management of Data Center and Power Room:

This report contains an overview of current management of Data Center and Power Room under the control of IT Department of IPDC Finance Limited based on which recommendations have been generated for eradicating limitations in the entire process. Additionally, suggestions related to interior architecture of the upcoming renovation of Data Center have also been provide.

ii. Report on Management of Non Judicial Stamp Paper:

This report contains an overview of current practice of management Non Judicial Stamp Paper in Operations Department of IPDC Finance Limited based on which recommendations have been generated for improvement in the entire process.

iii. Report on Management of Revenue Stamp:

This report contains an overview of current practice of managing Revenue Stamps in Operations Department of IPDC Finance Limited based on which recommendations have been generated for improvement in the entire process.

iv. Report on Process of Document and Cheque Maintenance in Doc/Safe Room:

This report contains an overview of current practice of management and maintenance of document and cheques in Doc/Safe Room under the supervision of Operations



Department of IPDC Finance Limited based on which recommendations have been generated for eradicating limitations related to safe-keeping and misplacement of security documents. Additionally, a format of register for document and/or file entry and out has also been provided.

v. Report on RJSC Charge Creation Process:

This report contains an overview of current practice of RJSC Charge Creation Process in Operations Department of IPDC Finance Limited based on which recommendations have been generated for eradicating limitations in the entire process.

vi. Report on Task and time wise Budget for Opening a New Branch:This report contains a detailed list of the activities needed to be performed for opening a new branch along with a tentative budget required for the execution of each task.

Additionally, I was also exposed to some other activities which are minor to mention but have assisted me in developing my work skills to a great extent.



# **Chapter 4**



# 4.1 Introduction of the Study

According to Gupta, Yesmin, & Khan (2013), non banking financial institutions or simply NBFIs are financial institutions that provide financial services including banking but do not hold a banking license and are not allowed to take deposits from the public. Financial Institution Act 1993 defined NBFIs as, "financial institution means such non-banking financial institutions, which- make loans and advances for industries, commerce, agriculture or building construction; or carry out the business of underwriting, receiving, investing and reinvesting shares, stocks, bonds, debentures issued by the Government or any statutory organization or stocks or securities or other marketable securities; or carry out installment transactions including the lease of machinery and equipments; or finance venture capital; and shall include merchant banks, investment companies, mutual associations, mutual companies, leasing companies or building societies" (Hamid, Akter, & Rab, 2016). Despite narrow business line relative to banks, NBFIs enhance the financial system and contribute to the economic development of our country by offering multifaceted financial services in the market which are not provided by banks. Their diversified product portfolio include lease financing, term lending, house financing, venture capital financing, equity financing, project financing, merchant banking, financing to pilgrimage and many more.

Meanwhile, stock exchange is an integral segment of the financial mechanism and thereby is undoubtedly one of the fundamental institutions in the economy of Bangladesh. It works as a mechanism for channeling funds from the surplus units to the deficit units of the economy. The main objective of stock exchange is to create a win-win situation for both investor and issuer through generating income for the investor from stock trading and arranging necessary debt financing for the issuing company. Again, the careful supervision of issuing companies over their operating efficiency and profitability plays a vital role in increasing investors' confidence to invest in stock market.

This report emphasizes on some of the profitability measures and their significance in identifying the various aspects of the companies that need attention. Based on historical data, the analysis provides an overview of overall profitability of the selected financial institutions and ascertaining the degree of dependability of net income on influencing factors, namely, net interest margin, operating margin ratio and return on equity. Additionally, it also aims at providing an insight to the existing and prospective investors as to how they may make their investment decisions and supplement their earnings from their investments on equity shares.



# 4.2 Objectives

### 4.2.1 Broad Objective:

The study aims at assessing the profitability position of Financial Institutions Sector in Bangladesh based on the performance analysis of the selected companies. The study may assist the companies under study as well as the investors to analyze the companies' financial efficiency and in investors' investment decisions. It aims at helping the management to find out the financial problems at present and the specific areas in the business, which might require further effort for more effective and efficient utilization of existing resources.

#### **4.2.2 Specific Objectives:**

The following are the specific objectives of the study-

- > To analyze the profitability position of selected Financial Institutions in Bangladesh.
- To analyze the factors influencing the profitability of selected Financial Institutions in Bangladesh.
- To evaluate the various aspects of operations and make practical recommendation for reinforcing the sector's prosperity
- To ascertain abnormal returns of the stocks of each company for assisting investors their investment decision making.

# 4.3 Scope of the Study

This study aims at assessing the profitability position of Financial Sector in Bangladesh which plays a crucial role in the economic development of the country. The study aims at providing assistance to the companies in evaluating their financial efficiency and the investors in analyzing their investment decisions. It aims to help the management to find out its financial problems at present and the specific areas in the business, which may require some effort for more effective and efficient utilization of its resources. Ten companies, all of which are enlisted in Dhaka Stock Exchange under the industry of Financial Institutions have been selected for an overall evaluation of the financial sector of Bangladesh-

- IDLC Finance Limited
- LankaBangla Finance Limited
- IPDC Finance Limited
- Investment Corporation of Bangladesh Limited
- Islamic Finance & Investment Limited



- > Delta Brac Housing Finance Corporation Limited
- Phoenix Finance and Investments Limited
- Bay Leasing & Investment Limited
- FAS Finance & Investment Limited
- United Finance Limited

# 4.4 Limitations of the Study

Some of the impediments and drawbacks that were encountered while conducting the study have been stated-

- Organizational restriction of IPDC Finance Limited to disclose some confidential information.
- Lack of access to some confidential information of the remaining selected financial institutions also hindered the study.
- > Limited availability of sufficient and appropriate journals and publications.
- > High dependence on secondary data due to limited access.
- Due to high volatility and lack of stability in the economy and stock market, trends of profitability ratios did not demonstrate relevance according to theory in some cases. This impeded the illustration of a concrete interpretation as it hampered the depiction multiple regression and statistical significance of some of the companies.
- > Non-availability of former and most recent information.

# **4.5 Literature Review**

The journey of Non Banking Financial Institution commenced in the year 1981, ten years after the independence of the country. A private sector NBFI, namely, Industrial Promotion and Development Company, known as IPDC Finance Limited at present was the pioneer in this sector in Bangladesh. In the study conducted by Mansur (2015), it has been found that NBFIs were incorporated in Bangladesh under the then Companies Act, 1913 and were being regulated by the provisions contained in Chapter V of the Bangladesh Bank Order, 1972. Subsequently, in order to remove the regulatory deficiency and also to delineate an extensive range of activities to be covered by NBFIs, a new statute titled the 'Financial Institution Act, 1993' was enacted in 1993 which was again followed by the 'Financial Institution Regulation, 1994'. NBFIs have been issued licenses and are supervised by Bangladesh Bank under the Financial Institution Act, 1993. Over the years, the NBFI sector has grown in numbers and



scope as many state-owned, private, and joint-venture firms started to enter the sector. As per Bangladesh Bank (2016), out of 33 NBFIs, three are Government-owned, 11 are joint venture and the remaining 19 are locally private-owned, whereas the branch network increased to 220 as on 30 June 2016 (Bangladesh Bank, 2016). The Structure of NBFIs has been presented in Figure 9-

|  | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016* |
|--|------|------|------|------|------|------|-------|
| No. of NBFIs   | 29   | 31   | 31   | 31   | 31   | 32   | 33    |
| Government- owned  | 1    | 2    | 3    | 3    | 3    | 3    | 3     |
| Joint-venture  | 8    | 8    | 10   | 10   | 10   | 10   | 11    |
| Private  | 20   | 20   | 18   | 18   | 18   | 19   | 19    |
| New branches   | 20   | 53   | 8    | 7    | 7    | 15   | 22    |
| Total branches   | 108  | 161  | 169  | 176  | 183  | 198  | 220   |
| * As on 30 June 2016.<br>Source: Department of Financial Institutions and Markets, BB. |      |      |      |      |      |      |       |

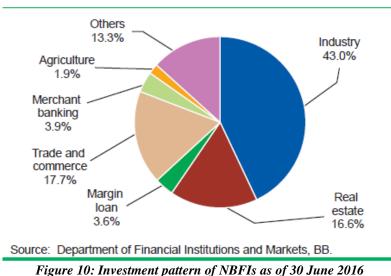
Figure 9: Structure of NBFIs

Source: Bangladesh Bank Annual Report (July 2015-June 2016)

It can be stated without any doubt that the progress of a country depends on the development and growth of all economic entity. The financial system, which is involved in the mobilization of financial resources from the surplus to the deficit sector, is the ultimate force for achieving economic prosperity of a country. With a view to supplement the economic growth and cater the ever changing demands of customers, NBFIs have been playing a critical role in the financial sector of our country by availing additional financial services that are not always been provided by the full-fledged banking industry. Ahmed and Chowdhury (2007) support that the fundamental limitations existed in the banking sector are, in fact, laid down the foundation of the accelerated development process of NBFIs. This is because the rules and regulations endorsed by the central bank of a country do not allow banks to embrace financial services for all areas of business. Also, banks always face a disparity in maturity intermediation since they have to fulfill the long-term financing needs with shortterm resources. Finally extending the scope of operation through product innovations is not always possible for banks. Hence, these areas create new opportunities for NBFIs to seize utmost success. As a consequence, NBFIs are now treated as an integral sub-division of the financial system, which has been expanding expeditiously and attaining immense significance on a continuous basis due to their ability to meet the diverse financial requirements of business enterprises. 2016 has been a challenging year for Banks and NBFIs



as marked by continuous degeneration of asset quality, excess market liquidity, low demand for credit, leading to lower Balance Sheet growth. Despite this, Non Banking Financial Institutions demonstrated an impressive growth of 37.94 percent in terms of credit in 2016 compared to banking growth of 15.32 percent (Ahmed, 2017). To be more precise, leading 28 NBFIs have disbursed loans equal to BDT 112,483.69 million in the year 2016, which is 37.94 percent higher than the loan disbursed by the companies in 2015, according to Bangladesh Leasing and Finance Companies' Association (BLFCA). In his article with The Daily Observer, Ahmed (2017) also states that of the total loans provided by NBFIs, growth of home loan was 35.45 percent to BDT 33,985.16 million while the growth of auto loan was 32.45 percent to BDT 7,494.32 million, SME loan at 28.38 percent to BDT 56,614.25 million, factoring loan at 26.02 percent to BDT 11,402.69 million. Also, as stated in the Annual Report (2015-2016) of Bangladesh Bank, total deposits of NBFIs rose to BDT 351.4 billion as of June 2015 from 318.1 billion in 2015. The same report also states that the assets of NBFIs increased from BDT 611.0 billion in 2015 to BDT 672.8 billion in 2016. According to Carmichael and Pomerleano (2002), NBFIs add power to the economy in such a way that enhances the resilience of the financial system to economic crisis. Figure 10 illustrates the contribution of Non Banking Financial Institutions in various sectors of economy in the year 2016. Around 43 percent of the total investment has been contributed to the Industry sector while an approximate of 16.6 percent to Real Estate, 17.7 percent in Trade and Commerce sector, 3.9 in Merchant banking, 1.9 percent in Agriculture and 13.3 percent in other sectors (Bangladesh Bank, 2016).



Source: Bangladesh Bank Annual Report (July 2015-June 2016)



On the contrary, theories of finance are never concrete and are prone to transformation due to changing economic condition. Therefore, the laws in finance are seldom proven. However, the laws provide the ideas about the mechanism of stock market (Bergen, n.d.) It demonstrates the flow of funds around the economy through stock exchange. The pattern fluctuates but eventually stabilizes. Similarly, share price is also subject to fluctuation due lack of stability in the economic and political scenario as well as in the stock exchange of a country. Therefore, the returns on a stock tend to shift away from the returns that the investors are actually suppose to earn, that is, the proper returns. For this reason, investors need to carefully evaluate the profitability or the return they will earn due to the shift from the proper return.

A brief resume on the review of the work already done on the related aspects of the subject is as follows-

### i. Net Interest Margin:

Net interest margin is a ratio that assesses the degree of a firm's success in investing its funds in comparison to the expenses on the same investments. It typically refers to the spread interest earned and paid. That is, what a bank or any other financial intuition would earn by investing its clients' or depositors' money at a relatively higher interest rate than the interest rate that it will avail to the depositors.

Like operating profit ratio, net interest margin or NIM is generally more stable compared to net income. Management always wants to improve their margin relative to their competitors (Peal, 2017). However, that means they will either need to find depositors or lenders who will accept lower rates, or find borrowers who will high interest, preferably without increasing the bank's or NBFI's risk.

If a negative return is shown in this ratio, this means that the bank or financial institution has not invested their funds efficiently. In a negative net interest margin scenario, the company would be benefitted by applying the interest returns against outstanding debt or to fund more profitable revenue streams (Investopedia, n.d.).

Net Interest Margin = <u>Net Interest Income</u> Average Earning Assets

In his article Pearl (2017) noted that accepting risky loans could increase NIM in the current period, but may ultimately impair the bank's or financial institution's profitability



when the loans are charged off. This is because risky loans generally carry much higher interest rates which increase the spread between the cost of capital and the return they receive on the investment. Risky NIM practices can be tested in several ways. Firstly, it needs to be inspected whether the net interest margin has varied to a great extent over time, especially short periods of time. This indicated that the bank's or financial institution's loans are vulnerable to adverse economic conditions. Good loans are more likely to be repaid in spite of what is happening in the national or international marketplace. Secondly, doubtful increases in NIM can be verified by ascertaining the ratio of non-performing loans to total loans. Frequent and dramatic swings in the ratio indicate that the loans being accepted are not likely to be very trustworthy.

An investor wants to look at NIM as a measure of the efficiency of the underlying business of the financial institution. Higher net interest margin is undoubtedly better but an investor needs to be careful about unstable ones unless their risk tolerance is equally high.

It needs to be mentioned that if inflation expectations rise further, then it is likely that net interest margins will also widen further which will supplement financial institution or bank profitability.

#### ii. Net Profit Ratio:

Net profit ratio, also known as profit margin, is a type of profitability ratio that is calculated as net income or net profit divided by revenue or sales. In case of financial institutions, net income or net profit may be ascertained by deducting all expenses, which include operating expenses, provisions, and provision for taxation from its net interest income. Since profit margins are expressed as a percentage, a company measures how much it actually keeps in earnings out of every dollar of net interest income. The method of calculating net profit ratio in terms of financial institutions or banks can be represented by the following formula:

Net Profit Ratio = <u>Net Profit after Tax</u> <u>Net Interest Income</u>

Increased earnings, although is good, is not an indicator of a financial institution's improving profit margin. Similarly, an increase or decrease in a company's expenditures does not necessarily indicate that the company's profit margin is improving or worsening.



On an elementary level, a low net profit margin can be interpreted as a financial institution's profitability not being very secure. If a company with a net low profit ratio experiences a decline in net interest income, its net profit ratio will decline even further, leading to a very low, neutral or even negative profit margin (Investopedia, n.d.).

As stated in Investopedia (n.d.), low profit margins may also reveal certain things about the industry in which a company operates or even about broader economic conditions. For instance, if a company has a low net profit ratio, it may imply that it has lower net interest income, that is, a low market share relative to other banks or financial institutions in the industry or that the industry in which the financial institution operates is itself suffering, possibly because of dwindling consumer demand due to unfavorable interest rates, increase in inflation rate, contraction in money or because of any factors of a distressed economy or recession.

Net profit ratio may also reveal certain things regarding a company's ability to manage its expenditures. High expenditures relative to total operating income, that is, a low net profit ratio may be an indication that a financial institution is struggling to keep its costs low, for reasons such as management problems. This implies that costs need to be checked and under better control.

Additionally, net profit ratio is one of the most significant indicators of a business's financial health. It can provide a more accurate view of how profitable a bank or financial institution is than its cash flow and by tracking increases and decreases in its net profit ratio, any financial institution can assess whether or not current practices are working (Investopedia, n.d.).

#### iii. Operating Profit Ratio:

Operating profit ratio, also known as operating margin, is used in order to measure a company's pricing strategy and operating efficiency. In case of banks or financial institutions, it is determined by calculating the percentage of a company's total operating income left after compensating for total operating expenses, such as, salary and allowance, legal expenses, charge on loan losses and so on. The formula for calculating operating margin is as follows:

Operating Profit Ratio =  $\frac{Profit Before Provision}{Net Interest Income}$ 



An investor can be helped by operating profit ratio by taking an even closer look at a company. Operating Profit Ratio can be used to analyze a particular project within a company. Similarly, it can also be used for comparing multiple projects or investigating a particular project within a company, regardless the size of the project (Investopedia, n.d.).

#### iv. Return on Equity:

Fuhrmann (2017) suggested that return on equity (ROE) is the amount of net income returned as a percentage of shareholders' equity. He also inferred that this ratio measures the profitability of a company by revealing how much profit or earnings it generates with the money shareholders have invested. ROE is expressed as a percentage and is calculated with the application of the following formulas-

Return on Equity = Net Income/Shareholder's Equity

Or,

DuPont ROE: Profit Margin x Asset Turnover Ratio x Equity Multiplier

#### v. Earnings Per Share:

As stated in Investopedia (n.d.), earnings per share, abbreviated as EPS is the portion of a company's profit allocated to each outstanding share of common stock and serves as an indicator of a company's profitability. It can be calculated as-

EPS = 
$$\frac{\text{Net Income } -\text{DividensonPreferredStock}}{\text{AverageOutstandingShares}}$$

#### vi. Multiple Regressions:

Regression is used to determine how strong the relationship between one dependent variable, usually denoted by Y and a series of other changing variables, that is, independent variables is. It is a statistical tool. Linear regression and multiple regressions are the two common types of regression. When a single independent variable is used to explain or predict the outcome of Y, it is called linear regression. Meanwhile, when two or more independent variables are used for predicting the outcome of a dependent variable or Y, it is called multiple regressions. The general formula of each type of regression is-

Multiple Regression: Y = a + b1X1 + b2X2 + B3X3 + ... + BtXt + uLinear Regression: Y = a + bX + u



Where,

X= the variable that we are using to predict Y

Y= the variable that we are trying to predict

u= the regression residual.

b= the slope

a= the intercept

In multiple regressions analysis, a group of random variables which are thought to be predicting or influencing Y is taken for assessing the mathematical relationship between them as it best approximates all the individual data points. Regressions are largely used for determining how the price of a product, interest rates, particular industries or sectors and many other specific factors affect the price movement of an asset.

#### vii. Monthly Return:

Return is the amount or percentage of earnings from a security over a particular period of time. It can either be a gain or a loss. Monthly returns of the stocks of each financial institution have been calculated by taking an account of closing prices of two months. The monthly return is calculated using-

Monthly Return = (Closing price of current month – Closing price of the previous month ) Closing price of the previous month

#### viii. Capital Asset Pricing Model (CAPM):

An investor is rewarded for bearing only the systematic risk as it cannot be diversified like unsystematic or firm-related risk. Therefore, the only risk that matters for the investor being compensated by expected returns is the systematic risk measured by  $\beta$ . According to Shukla (1995), the Capital Asset Pricing Model (CAPM) shows that since investors need to bear only the systematic risk, the expected return from a security should be related to its systematic risk only. The relationship, between a security's expected return and its systematic risk is given by the security market line (SML):

$$R_i = R_f + \beta(R_m - R_f)$$

Where,

 $R_i = Expected return of a security$ 

 $\beta$  = Beta of the security

 $R_f = Risk$  free rate

 $R_m - R_f = Market risk premium$ 



In equilibrium, the price of a security equals its value, and its expected return  $R_i$  equals its equilibrium expected returngiven by the security market line. If a security's price is not equal to its value, and therefore, its expected return is not equal to the equilibrium expected return, the security is said to be mispriced (Shukla, Portfolio Analysis, 1995).

#### ix. Jensen's Alpha:

Shukla (1995) opines that in order to measure performance, the effects of market-wide factors and risk is needed to be controlled which is done by taking the difference between the realized return on an investment and the return that should be expected based on the risk and the economic conditions, that is, the expected return calculated by using CAPM. This excess return over the expected return is Jensen's Alpha or Abnormal Return. Jensen's Alpha can be depicted as:

 $J_a = Actual Return - Expected Return (based on CAPM)$ Or,  $J_a = R_a - R_f + \beta(R_m - R_f)$ 

Where,

J<sub>a</sub>= Jensen's Alpha or Abnormal Return

 $R_a = Actual Return on a stock$ 

If Jensen's Alpha equals to 0, it means that the market it efficient and CAPM is working properly. On the contrary, a positive value for Jensen's alpha indicates that the stock has provided more than adequate return to compensate the risk taken and that the investor has "beat the market". This also means that the stock was undervalued while a negative value indicates the opposite.

#### x. Beta:

According to Horne and Wachowicz (2014), beta is an index of systematic risk, market risk or unavoidable risk. It measures the sensitivity of a stock's return to changes in returns on the market portfolio. The market is considered to have a Beta of 1. If the beta of a stock is greater than 1, this means the stock's price is more volatile than the market and vice versa. Stocks with high beta are considered to be riskier compared to the ones with low beta (Finance Train, n.d.). The formula used for calculating beta is as follows-

$$\beta_{\rm s} = \frac{{\rm Cov}\left({\rm r}_{\rm s},{\rm r}_{\rm m}\right)}{{\rm Var}\left({\rm r}_{\rm m}\right)}$$



Where,  $\mathbf{r}_{s}$  represents return the on stock, and  $\mathbf{r}_{m}$  represents return on the market or benchmark.

## 4.6 Methodology

The selection of an effective and efficient methodology is an imperative for conducting a successful study. With a view to ensure the effectiveness and accuracy of the study, both primary and secondary data have been utilized. This report is primarily based on the findings and interpretations that resulted through corroboration with both primary and secondary data.

#### 4.6.1 Primary Data:

Primary Data were collected through various semi-structured interviews with different departments of IPDC Finance Limited Head Office. Two main interviewees were Mr. Muhammad Sami Ul Hoque, Head of Credit Administration of Operation Department and Mr. Md. Barkat Ullah, Head of Administration Department. Interviewees also include different personnel from Human Resource Department, Operation Department and Corporate Communications. The information derived primarily focuses on the varying functions, activities and milestone events of the organization.

#### 4.6.2 Secondary Data:

Secondary research has been conducted elaborately for determining various profitability ratios for evaluating the financial performance and overall profitability scenario of the financial sector. Secondary data have also been used for assisting the companies by providing feasible solutions for escalating their effectiveness and efficiency in the areas where needed. Moreover, these data were also utilized to assist current and potential investors in making their investment decisions in the sector of Dhaka Stock Exchange under consideration. The secondary sources that were used to get some picture on the research topic include-

- Annual Reports of the companies under study from the Year 2012 to 2016
- DSE Data Archive
- Reports related to stock exchange
- Online Articles and Publications
- > Newspaper
- > Journals
- Official website Of IPDC Finance Limited



#### 4.6.3 Techniques of Analysis:

Ratio analysis is a technique that has been employed to analyze and interpret the significance of various items in the annual reports in order to assess the profitability positions of the selected financial companies. Furthermore, a comprehensive analysis has been carried out by applying statistical techniques namely mean, standard deviation, co-efficient of variance, multiple regressions. Meanwhile, the monthly prices collected from Monthly Price Archive of Dhaka Stock Exchange have been used for calculating monthly returns and actual returns of the ten companies and market index based on which the beta and abnormal returns or alpha of the stocks each company have been computed. The abnormal returns will to facilitate investors in evaluating and making their investment decisions in the NBFI sector.

#### 4.6.4 Period of the Study:

The study covers a period of five years, starting from the financial year 2012-2016.

#### 4.6.5 Analysis of Profitability of Financial Sector:

Profitability of financial sector can be measured and evaluated with the application of the given ratios-

- ➢ Net Interest Margin
- Net Profit Ratio
- Operating Profit Ratio
- Return on Equity
- ➢ Earnings Per Share

#### 4.6.6 Analysis of Investment Decision:

Jensen's Alpha or abnormal returns for the stocks of all the 10 companies have been determined for analyzing investors' investment decision.

#### 4.6.7 Overview of Techniques of Analysis:

#### i. Net Interest Margin:

Net interest margin is a performance metric that allows analysts to examine and analyze how successful a firm's investment decisions are when compared to its debt situation. In Excel, the following formula has been used for determining the net interest margin-

 $= \frac{\text{Net Interest Income}}{\text{Average Earning Assets}}$ 



#### ii. Net Profit Ratio:

Net profit ratio is a useful ratio and can help provide insight about a variety of aspects of a company's financial performance. The following formula has been used for determining the net profit ratio in Excel-

#### iii. Operating Profit Ratio:

Operating profit ratio gives analysts an idea of how much a company makes (before provision against loans, advances, leases, diminution in value of investments and taxes) on each dollar of interest income. The formula used in Excel for gauging operating profit ratio is-

#### iv. Return on Equity:

According to Fuhrmann (n.d.), return on equity (ROE) is a ratio that provides investors insight into how efficiently a company or more specifically its management team is managing the equity that shareholders have contributed to the company. The formula that has been used to calculate return on equity in Excel is as follows-

= Net Profit after Tax/Shareholders<sup>'</sup>Equity

## v. Earnings Per Share:

Higher earnings per share are always better than a lower ratio because this means the company is more profitable and the company has more profits to distribute to its shareholders (My Accounting Course, n.d.). We have used the given formula in Excel-

= Net Profit after Tax – Dividens on Preferred Stock Average Outstanding Shares

## vi. Mean, Standard Deviation and Coefficient of Variation:

For a further comprehensive analysis, statistical measures, as such, mean standard deviation and coefficient of variation of net interest margin, net profit ratio, operating profit ratio, return on equity and earnings per share of each company have been calculated respectively in Excel by using the following functions and formula-



Mean = AVERAGE(number1, [number2], ...) Standard Deviation = STDEV(number1, [number2], ...)  $Coefficient of Variation = \frac{Standard Deviation}{Mean}$ 

#### vii. Multiple Regressions:

Multiple regressions has been used as a means to measure the influence of independent variables, namely, net interest margin, operating profit ratio and return on equity on the dependent variable net income. The significance of the model is that it will aid the selected financial institutions to identify and assess the activities as well as the alterations and improvements that are to be made to increase the earnings or net income. The alterations or improvements may vary from increasing operational efficiency, effective utilization of resources, optimal decision making and so forth. The model has been executed through the application of Microsoft Excel.

#### viii. Actual Return:

Actual returns of the stocks of each selected company have been ascertained with the use of AVERAGE function in Excel after the calculation of monthly returns of the stocks from the year 2012- 2016. It is to be noted that the actual market return has been gauged with data retrieved from the General Index of DSE from the period starting from December 29, 2011 to December 30, 2012 and from DSEX starting from January 31, 2013 and ending on December 29, 2016.

#### ix. Monthly Risk-Free Rate:

As per Bangladesh Bank (n.d.), the risk-free rate of 364 days Treasury Bills as of 2017 is 4.47%. For ascertaining the monthly risk-free rate in Excel, the following formula has been used-

=  $(1 + \text{ annual risk-free rate})^{(1/12)-1}$ 

#### x. Beta:

Beta is a measure of the volatility, systematic risk, market risk or unavoidable risk of a security or a portfolio in comparison to the market as a whole (Investopedia, n.d.). In Excel, beta has been calculated by using the slope function-

=SLOPE(known\_y's, known\_x's)



#### xi. Jensen's Alpha:

The abnormal rate of return on a security or portfolio is excess of what would be predicted by an equilibrium model like the capital asset pricing model (CAPM). For determining the abnormal returns of each stock, the formula used in Excel is-

$$J_a = R_a - R_f + \beta(R_m - R_f)$$

## 4.7 Findings and Analysis

In order to increment the financial performance, effectiveness and efficiency of a company's management team in managing the equity contribution of the shareholders it is imperative to identify the areas of the company that requires improvement. Analysis of profitability ratios may assist a financial institution to identify the factors responsible for low or declining interest income, whether or not the current practices are relevant, whether or not the company is being able to cover its fixed costs and also in conducting a comparative analysis of profitability. Meanwhile, it is equally important for existing and potential investors to analyze whether or not the stocks they have invested in or are expecting to invest are generating sufficient profit or returns.

#### i. Net Interest Margin:

Table 1 reveals the net interest margin of selected Financial Institutions in Bangladesh from the financial year 2011-2012 to 2015-2016. This net interest margin shows a fluctuating trend in case of several companies during the study period. It implies the high interest expense due to lack of optimal decision-making and lesser interest income. This variation in NIM over the time means that the companies' loans are vulnerable to weak economic condition. Good loans are most likely to be repaid despite the condition of national or international marketplace. United Finance Limited has the highest average net interest margin of 5.45 percent and Investment Corporation Of Bangladesh Limited has the lowest and a negative average net interest margin -2.56 percent which indicates that the company did not make an optimal decision since interest expenses exceeded interest incomes.

FAS Finance & Investment has the highest standard deviation of net interest margin of 1.27 percent. Bay Leasing & Investment Limited has the lowest standard deviation of net interest margin of 0.22 percent with a fluctuating trend in net interest margin.



FAS Finance & Investment Limited has the highest co-efficient variance of net interest margin of 30.61 percent. Investment Corporation Of Bangladesh has the lowest co-efficient of variance of net interest margin of -27.36 percent and it has been found that there is a negative and downward trend, that is, there has been consistency in net interest margin in comparison to other NBFIs.

| Company Name                                   | Mean    | Standard<br>Deviation | Coefficient<br>of Variation |
|--|---------|-----------------------|-----------------------------|
| IDLC Finance Limited                           | 0.0506  | 0.0037                | 0.0736                      |
| LankaBangla Finance Limited                    | 0.0290  | 0.0055                | 0.1891                      |
| IPDC Finance Limited                           | 0.0480  | 0.0098                | 0.2040                      |
| Investment Corporation Of Bangladesh Limited   | -0.0256 | 0.0070                | -0.2736                     |
| Islamic Finance & Investment Limited           | 0.0450  | 0.0049                | 0.1100                      |
| Delta Brac Housing Finance Corporation Limited | 0.0447  | 0.0037                | 0.0834                      |
| Phoenix Finance and Investments Limited        | 0.0409  | 0.0093                | 0.2284                      |
| Bay Leasing & Investment Limited               | 0.0155  | 0.0022                | 0.1405                      |
| FAS Finance & Investment Limited               | 0.0414  | 0.0127                | 0.3061                      |
| United Finance Limited                         | 0.0545  | 0.0091                | 0.1668                      |

Table 1: Net Interest Margin of Individual Companies

#### ii. Net Profit Ratio:

Table 2 reveals the net profit ratio of selected NBFIs in Bangladesh from the financial year 2011-2012 to 2015-2016. The net profit ratio shows the fluctuating trend during the study period. This fluctuation indicates the company's capacity to face adverse economic conditions, namely, price competition, low demand and so forth. Bay Leasing & Investment has the highest average net profit ratio of 95.26 percent while Investment Corporation Of Bangladesh has the lowest average net profit ratio of -283.87 percent.

Investment Corporation Of Bangladesh has the highest standard deviation of net profit ratio of 248.72 percent. Delta Brac Housing Finance Corporation has the lowest standard deviation of net profit ratio of 2.88 percent and has been steady to some extent in terms of net profit ratio.

Phoenix Finance and Investments Limited has the highest co-efficient variance of net profit ratio of 58.60 percent whereas Investment Corporation Of Bangladesh has the lowest co-efficient variance of net profit ratio of -87.62 percent and it has been found that there is a consistency in net profit ratio in contrast to the other financial institutions selected for the study.



| Company Name                                   | Mean    | Standard<br>Deviation | Coefficient<br>of Variation |
|--|---------|-----------------------|-----------------------------|
| IDLC Finance Limited                           | 0.4128  | 0.0566                | 0.1370                      |
| LankaBangla Finance Limited                    | 0.5872  | 0.2151                | 0.3664                      |
| IPDC Finance Limited                           | 0.4879  | 0.0645                | 0.1321                      |
| Investment Corporation Of Bangladesh Limited   | -2.8387 | 2.4872                | -0.8762                     |
| Islamic Finance & Investment Limited           | 0.5440  | 0.1972                | 0.3625                      |
| Delta Brac Housing Finance Corporation Limited | 0.4184  | 0.0288                | 0.0687                      |
| Phoenix Finance and Investments Limited        | 0.4958  | 0.2905                | 0.5860                      |
| Bay Leasing & Investment Limited               | 0.9526  | 0.3047                | 0.3199                      |
| FAS Finance & Investment Limited               | 0.2863  | 0.1174                | 0.4100                      |
| United Finance Limited                         | 0.3959  | 0.0322                | 0.0813                      |

Table 2: Net Profit Ratios of Individual Companies

## iii. Operating Profit Ratio:

Table 3 reveals the operating profit ratio of selected financial institution in Bangladesh from 2011-2012 to 2015-2016. Operating profit ratio demonstrates a fluctuating trend during the study period. This fluctuation implies the inability of keeping operating expenses under proper control and supervision given the specific level of sales achieved. Bay Leasing & Investment Limited has the highest average operating profit ratio of 164.64 percent and Investment Corporation Of Bangladesh has the lowest average operating profit ratio of -354.71 percent.

Investment Corporation Of Bangladesh has the highest standard deviation of operating profit ratio of 296.06 percent. United Finance Limited has the lowest standard deviation of operating profit ratio of 3.18 percent and had a fluctuating operating profit ratio over the study period.

LankaBangla Finance has the highest co-efficient variance of operating profit ratio of 30.17 percent. Investment Corporation Of Bangladesh has the lowest co-efficient variance of operating profit ratio of -83.46 percent and is found to be consistent in terms of operating profit ratio when compared to other NBFIs.

| Company Name                                 | Mean    | Standard<br>Deviation | Coefficient<br>of Variation |
|--|---------|-----------------------|-----------------------------|
| IDLC Finance Limited                         | 0.7953  | 0.0597                | 0.0750                      |
| LankaBangla Finance Limited                  | 1.0261  | 0.3095                | 0.3017                      |
| IPDC Finance Limited                         | 0.9429  | 0.1149                | 0.1219                      |
| Investment Corporation Of Bangladesh Limited | -3.5471 | 2.9606                | -0.8346                     |



| Islamic Finance & Investment Limited           | 0.8023 | 0.0731 | 0.0911 |
|--|--------|--------|--------|
| Delta Brac Housing Finance Corporation Limited | 0.9218 | 0.0968 | 0.1050 |
| Phoenix Finance and Investments Limited        | 0.9500 | 0.2504 | 0.2636 |
| Bay Leasing & Investment Limited               | 1.6464 | 0.4545 | 0.2760 |
| FAS Finance & Investment Limited               | 0.7909 | 0.1686 | 0.2132 |
| United Finance Limited                         | 0.6887 | 0.0318 | 0.0462 |

| Table 3: Operating | <b>Profit Ratios</b> | of Individual | Companies |
|--------------------|----------------------|---------------|-----------|
| - acte ct oper and |                      |               |           |

#### iv. Return on Equity:

Table 4 reveals the return on equity capital ratio of selected Financial Institution in Bangladesh from 2012-2016. This fluctuation, according to Vijayalakshmi and Srividya (2014), indicates profit earned by the company and those profits which can be made non-available to pay dividends to equity shareholders. Delta Brac Housing Finance Corporation has the highest average return on equity capital ratio of 20.93 percent and Bay Leasing & Investment has the lowest average return on equity capital ratio of 3.95 percent.

Islamic Finance & Investment has the highest standard deviation of return on equity capital ratio of 4.31 percent. On the contrary, Bay Leasing & Investment has the lowest standard deviation of return on equity capital ratio of .86 percent and is found to have experienced fluctuations in equity capital ratio.

FAS Finance & Investment has the highest co-efficient variance of return on equity capital ratio of 61.09 percent. Delta Brac Housing Finance Corporation has the lowest co-efficient variance of return on equity capital ratio of 6.21 percent and it has been found that there is a consistency in equity capital ratio than other financial institutions.

| Company Name                                   | Mean   | Standard<br>Deviation | Coefficient<br>of Variation |
|--|--------|-----------------------|-----------------------------|
| IDLC Finance Limited                           | 0.1703 | 0.0309                | 0.1814                      |
| LankaBangla Finance Limited                    | 0.0908 | 0.0366                | 0.4034                      |
| IPDC Finance Limited                           | 0.0821 | 0.0199                | 0.2422                      |
| Investment Corporation Of Bangladesh Limited   | 0.1228 | 0.0346                | 0.2817                      |
| Islamic Finance & Investment Limited           | 0.1084 | 0.0431                | 0.3980                      |
| Delta Brac Housing Finance Corporation Limited | 0.2093 | 0.0130                | 0.0621                      |
| Phoenix Finance and Investments Limited        | 0.1090 | 0.0187                | 0.1716                      |
| Bay Leasing & Investment Limited               | 0.0395 | 0.0086                | 0.2171                      |
| FAS Finance & Investment Limited               | 0.0509 | 0.0311                | 0.6109                      |
| United Finance Limited                         | 0.1215 | 0.0102                | 0.0840                      |

 Table 4: Return on Equity of Individual Companies



#### v. Earnings Per Share:

Table 5 reveals the earnings per share ratio of selected NBFI from 2012 to 2016. The earnings per share ratio show a fluctuating trend during the study period. According to Vijayalakshmi and Srividya (2014), this fluctuation indicates whether or not the earning power of the company has decreased. Investment Corporation Of Bangladesh Limited has the highest average earnings per share of 7.39 and FAS Finance & Investment Limited has the lowest average earnings per share which is 0.69.

Investment Corporation Of Bangladesh has the highest standard deviation of earnings per share ratio of 2.22, while United Finance Limited has the lowest standard deviation of earnings per share ratio of 0.11 and has experienced a fluctuating trend in terms of earnings per share ratio over the study period.

FAS Finance & Investment Limited has the highest co-efficient of earnings per share ratio of 0.67. On the other hand, United Finance has the lowest co-efficient variance of earnings per share ratio of 0.06 and it is found that there has been a fluctuating trend in earnings per share ratio.

| Company Name                                   | Mean   | Standard<br>Deviation | Coefficient<br>of Variation |
|--|--------|-----------------------|-----------------------------|
| IDLC Finance Limited                           | 5.1200 | 1.4166                | 0.2767                      |
| LankaBangla Finance Limited                    | 2.4380 | 1.1567                | 0.4744                      |
| IPDC Finance Limited                           | 1.4740 | 0.3284                | 0.2228                      |
| Investment Corporation Of Bangladesh Limited   | 7.3860 | 2.2209                | 0.3007                      |
| Islamic Finance & Investment Limited           | 1.4260 | 0.6408                | 0.4493                      |
| Delta Brac Housing Finance Corporation Limited | 5.1380 | 1.2953                | 0.2521                      |
| Phoenix Finance and Investments Limited        | 2.1920 | 0.3449                | 0.1574                      |
| Bay Leasing & Investment Limited               | 0.8660 | 0.1736                | 0.2004                      |
| FAS Finance & Investment Limited               | 0.6920 | 0.4626                | 0.6685                      |
| United Finance Limited                         | 1.9860 | 0.1117                | 0.0563                      |

Table 5: Earnings Per Share of Individual Companies

#### vi. Multiple Regression Analysis:

Table 6 represents the multiple regression analysis of Financial Institutions in Bangladesh and statistical significance of the model. The  $R^2$  value states the level or extent of influence that all the three independent variables, that is, net interest margin, operating profit ratio and return on equity capital ratio have on the dependent variable net profit ratio. It has been found that the net incomes of 8 out of 10 NBFIs are highly dependent on



the independent variables whereas the net incomes of Delta Brac Housing Finance Corporation Limited and FAS Finance & Investment Limited are moderately dependent.

**IDLC Finance Limited Statistical Significance of the Model:** The multiple regressions between net profit ratio and the three independent variables net interest margin, operating profit ratio and return on equity capital is found to be 0.9431(R), where (R) is Multiple R, with R Square 0.8894. It means that all the independent variables have contributed 88.94 percent on dependent variable of net profit ratio which is significant at 5 percent level.

**LankaBangla Finance Limited Statistical Significance of the Model:** The multiple regressions between net profit ratio and the three independent variables which are net interest margin, operating profit ratio, and return on equity capital is found to be 0.9827(R) with R Square valued at 0.9656. It signifies that all the independent variables have contributed 96.56 percent on dependent variable of net profit ratio which is significant at 5 percent level.

**IPDC Finance Limited Statistical Significance of the Model:** The multiple regressions between net profit ratio and the three independent variables, that is, net interest margin, operating profit ratio, and return on equity capital is found to be 0.9963(R) with R Square 0.9927. It suggests that all the independent variables have 99.27 percent influence on the dependent variable net profit ratio which is significant at 5 percent level.

**Investment Corporation Of Bangladesh Limited Statistical Significance of the Model:** The multiple regressions between dependent variable net profit ratio and the three independent variables net interest margin, operating profit ratio, and return on equity capital is found to be 0.9999(R) with R Square at 0.9999. It connotes that all the independent variables have contributed 99.99 percent on dependent variable net profit ratio which is significant at 5 percent level.

**Islamic Finance & Investment Limited Statistical Significance of the Model:** The multiple regressions between net profit ratio and the independent variables, that is, net interest margin, operating profit ratio, and return on equity capital is found to be 0.9926(R) with R Square valued at 0.9853. It implies that all the independent variables have 98.53 percent influence on the dependent variable net profit ratio which is significant at 5 percent level.

**Delta Brac Housing Finance Corporation Limited Statistical Significance of the Model:** The multiple regressions between dependent variable net profit ratio and the three



independent variables net interest margin, operating profit ratio, and return on equity capital is found to be 0.7851(R) with R Square valued at 0.6163. It means that all the independent variables have a contribution of 61.63 percent on dependent variable net profit ratio which is significant at 5 percent level.

**Phoenix Finance and Investments Limited Statistical Significance of the Model:** The multiple regressions between dependent variable net profit ratio and the three independent variables which are net interest margin, operating profit ratio, and return on equity capital is found to be 0.9862(R) with R Square 0.9725. It is an indication that all the independent variables have contributed 97.25 percent on the dependent variable net profit ratio which is significant at 5 percent level.

**Bay Leasing & Investment Limited Statistical Significance of the Model:** The multiple regressions between net profit ratio and the three independent variables, that is, net profit ratio, operating profit ratio, and return on equity capital is found to be 0.9988(R) with R Square valued at 0.9976. It implies that all the independent variables have contributed 99.76 percent on dependent variable net profit ratio which is significant at 5 percent level.

**FAS Finance & Investment Limited Statistical Significance of the Model:** The multiple regressions between net profit ratio and the three independent variables which are net profit ratio, operating profit ratio, and return on equity capital has been valued at 0.8677(R) with R Square 0.7529. It indicates that all the independent variables have an influence of 75.29 percent on dependent variable net profit ratio which is significant at 5 percent level.

**United Finance Limited Statistical Significance of the Model:** The multiple regressions between the dependent variable net profit ratio and the three independent variables, that is, net profit ratio, operating profit ratio, and return on equity capital is found to be 0.9509(R) with R Square valued at 0.9043. It means that all the independent variables have contributed 90.43 percent on the dependent variable net profit ratio which is significant at 5 percent level.

| Company Name                | Multiple R | R Square | Adjusted<br>R Square | Standard<br>Error |
|-----------------------------|------------|----------|----------------------|-------------------|
| IDLC Finance Limited        | 0.9431     | 0.8894   | 0.5575               | 0.0376            |
| LankaBangla Finance Limited | 0.9827     | 0.9656   | 0.8624               | 0.0798            |
| IPDC Finance Limited        | 0.9963     | 0.9927   | 0.9708               | 0.0967            |



| Investment Corporation Of<br>Bangladesh Limited   | 0.9999 | 0.9999 | 0.9994  | 0.0597 |
|---|--------|--------|---------|--------|
| Islamic Finance & Investment Limited              | 0.9926 | 0.9853 | 0.9410  | 0.0479 |
| Delta Brac Housing Finance<br>Corporation Limited | 0.7851 | 0.6163 | -0.5347 | 0.0356 |
| Phoenix Finance and Investments<br>Limited        | 0.9862 | 0.9725 | 0.8901  | 0.0963 |
| Bay Leasing & Investment Limited                  | 0.9988 | 0.9976 | 0.9905  | 0.0296 |
| FAS Finance & Investment Limited                  | 0.8677 | 0.7529 | 0.0116  | 0.1167 |
| United Finance Limited                            | 0.9509 | 0.9043 | 0.6171  | 0.0199 |

Table 6: Multiple Regression Analysis of NBFIs

#### vii. Actual Return:

Actual return is the actual gain or loss that investors earn or incur on their investments. Actual return is what investors actually realize from their investments. The discrepancy between actual and expected return is due to systematic and unsystematic risk (Investopedia, n.d.). From the analysis of this study, the calculations of actual return of the ten companies and DSEX are as follows-

| Company Name                                   | Actual Return |
|--|---------------|
| IDLC Finance Limited                           | -0.49%        |
| LankaBangla Finance Limited                    | -1.22%        |
| IPDC Finance Limited                           | 1.28%         |
| Investment Corporation Of Bangladesh Limited   | -0.18%        |
| Islamic Finance & Investment Limited           | -0.25%        |
| Delta Brac Housing Finance Corporation Limited | 0.58%         |
| Phoenix Finance and Investments Limited        | -0.59%        |
| Bay Leasing & Investment Limited               | -0.85%        |
| FAS Finance & Investment Limited               | -1.04%        |
| United Finance Limited                         | -0.85%        |
| DGEN/DSEX                                      | 0.12%         |

Table 7: Actual Returns of Individual Companies and DSEX

#### viii. Monthly Risk-free Rate:

The monthly risk-free rate has been calculated at 0.37 percent as of the year 2017.

#### ix. Beta:

Beta of an investment indicates whether the investment on a company stock or share is more or less volatile than the market as a whole. The beta of each company is as follows-



| Company Name                                   | Beta |
|--|------|
| IDLC Finance Limited                           | 1.59 |
| LankaBangla Finance Limited                    | 1.52 |
| IPDC Finance Limited                           | 1.33 |
| Investment Corporation Of Bangladesh Limited   | 0.87 |
| Islamic Finance & Investment Limited           | 1.29 |
| Delta Brac Housing Finance Corporation Limited | 0.92 |
| Phoenix Finance and Investments Limited        | 1.67 |
| Bay Leasing & Investment Limited               | 1.48 |
| FAS Finance & Investment Limited               | 1.45 |
| United Finance Limited                         | 1.31 |

 Table 8: Systematic Risk of Individual Companies

#### x. Jensen's Alpha:

Jensen's alpha or abnormal return is a risk-adjusted performance measure that represents the average return on a stock which is below or above the return predicted by the capital asset pricing model (CAPM), given the stock's or investment's beta and the average market return. It has been ascertained that the stocks of only two companies out of the ten NBFIs are investable because their realized or actual returns are higher than their expected returns. In other words, these stocks have positive abnormal returns and hence they are underpriced and are attractive investments. The two financial institutions which provide positive alpha or abnormal returns to the investors are IPDC Finance Limited and Delta Brac Housing Finance Corporation Limited. The abnormal returns of each company stock or share is as follows-

| Company Name                                   | Alpha  |
|--|--------|
| IDLC Finance Limited                           | -0.46% |
| LankaBangla Finance Limited                    | -1.20% |
| IPDC Finance Limited                           | 1.25%  |
| Investment Corporation Of Bangladesh Limited   | -0.33% |
| Islamic Finance & Investment Limited           | -0.29% |
| Delta Brac Housing Finance Corporation Limited | 0.45%  |
| Phoenix Finance and Investments Limited        | -0.54% |
| Bay Leasing & Investment Limited               | -0.84% |
| FAS Finance & Investment Limited               | -1.04% |
| United Finance Limited                         | -0.89% |

Table 9: Alpha or Abnormal Returns of Individual Companies



# **Chapter 5**



# 5.1 Recommendation

In order to identify the limitations of unstable or decreasing trend in profitability measures as well fluctuations in share price of the enlisted financial institutions, a thorough evaluation of the analysis has to be considered. In cases where profitability ratios failed to show consistency was due to high volatility and lack of stability in the economy and stock market and inefficiency. However, with a view to curtail the negative impact of such irregularity related to profitability position and also to assist investors in reaching favorable investment decisions, the following recommendations have been generated-

- i. The companies may concentrate on increasing transparency in credit evaluation, interest income, loans, advances and leases and on improving their profitability.
- ii. The companies need to implement financial innovation and may expand their range of financial products and services. This will result in an upward trend in their client base which will eventually increment their earnings.
- iii. They may streamline their loan disbursement methods with a focus on low-risk industrial segments and adopt better monitoring mechanisms for reducing risks associated with their assets.
- iv. From multiple regression analysis, it has been found that the net profit of 8 financial institutions, namely, IDLC Finance Limited, LankaBangla Finance Limited, IPDC Finance Limited, Investment Corporation Of Bangladesh Limited, Islamic Finance & Investment Limited and United Finance Limited is highly dependent and can be influenced to a much greater extent by their respective net interest margin, operating profit ratio and return on equity as these ratios have contributed at least 88 percent on net profit. Therefore, the operation managers of these companies can analyze, control and even increase their net profit and earnings by properly utilizing their net interest income and profit before provision.
- Investors have to be made more aware about the trends and fluctuations in the current economy and share prices. This is because the more educated the investors are, the more they will be able to actively participate in the stock exchanges of Bangladesh. This will not only help them in receiving reasonable and adequate returns on their investments but also in increasing efficiency of the stock market.



- vi. Financial institutions with low or negative profitability measures need to concentrate on the following areas-
  - Increase the propensity to making optimal decisions with a view to decrease interest expense and initiate an upward trend in interest income.
  - Improve the companies' capacity to counter adverse economic conditions, such as, price competition, low demand and so on.
  - Increase the companies' ability to maintain and control operating expenses properly for a given level of net interest income achieved.
  - Enhance the earning capacity of the companies.
- vii. Investors should invest on the stocks which provide them a positive abnormal return as such stocks are underpriced and mitigate their risks and thereby provide adequate returns on their investments.
- viii. The listed companies should publish their annual reports with proper financial notes and disclosures on a timely manner to allow the users to perform comparative and performance analysis.
- ix. A more investment friendly policy of Bangladesh Bank for NBFIs, more coordination with banking institutions, easy and simplified reporting procedures to Bangladesh Bank and so on will boost the growth of NBFIs.

Policies implemented based on the stated recommendations can make positive and constructive impact on improving the profitability situation and efficiency of any financial institution. Additionally, they will also play a vital role in assisting investors in making feasible decisions regarding their investments in the stocks of financial institutions. It needs to be noted that such policies can also be initiated by any company categorized under any sector of Dhaka and Chittagong Stock Exchange with moderate modification depending on the industry.



# Chapter 6



# 6.1 Conclusion

It can be concluded by stating that the Non Banking Financial Institutions enlisted in Dhaka Stock Exchange (DSE) do not differ that much from companies grouped under different sectors or industries. Therefore, the use of profitability measures is applicable for companies of different industries and their dependency on each other can also be tested through multiple regressions analysis. However, gross profit ratio can be used instead of net interest margin depending on the industry. Similarly, by ascertaining abnormal returns, investors can determine which stocks which compensate their risks or are underpriced, in other words, the stocks they may invest in irrespective of industries. On the contrary, the effects of diversification hold for the financial institutions industry. The more securities of different companies are included in a portfolio, the more unsystematic risk is reduced. All the companies selected for the study are categorized as Class-A, which also serves an evidence of their success. But due to the inefficiency of the stock market and instability in the economy, there was a lack of consistency in the profitability trend. It should be well-noted that the profitability trend of a company is not static over time but is rather subject to change caused by changes or deterioration in economic factors, such as, demand, interest rates and so forth. Therefore, investors need to conduct timely analysis to evaluate such changes. They also need to ensure the wellbeing of financial performance of companies from other industries in order to create a good portfolio and diversify risk.



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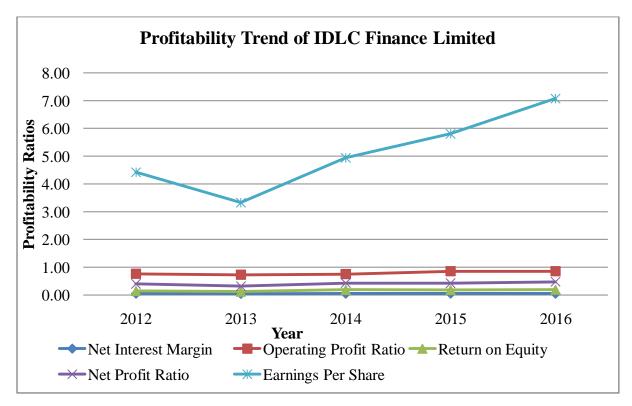
# Appendix



# 1. Profitability Ratios

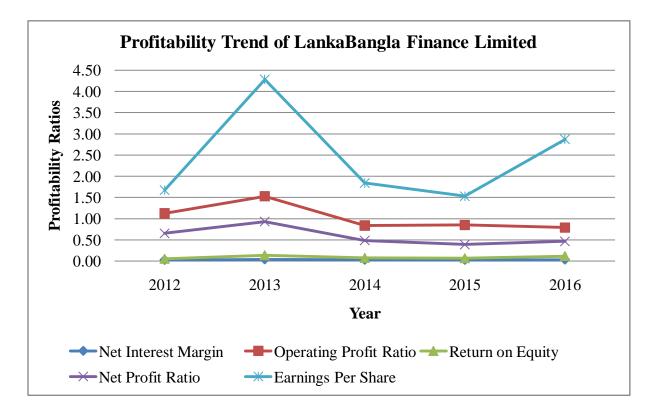
a. IDLC Finance Limited:

| Year | Net Interest | Operating    | Return on | Net Profit | Earnings  |
|------|--------------|--------------|-----------|------------|-----------|
| Tear | Margin       | Profit Ratio | Equity    | Ratio      | Per Share |
| 2016 | 0.0505       | 0.8575       | 0.1968    | 0.4763     | 7.08      |
| 2015 | 0.0542       | 0.8602       | 0.1874    | 0.4269     | 5.81      |
| 2014 | 0.0509       | 0.7595       | 0.1908    | 0.4312     | 4.95      |
| 2013 | 0.0445       | 0.7308       | 0.1248    | 0.3223     | 3.33      |
| 2012 | 0.0531       | 0.7683       | 0.1519    | 0.4071     | 4.43      |



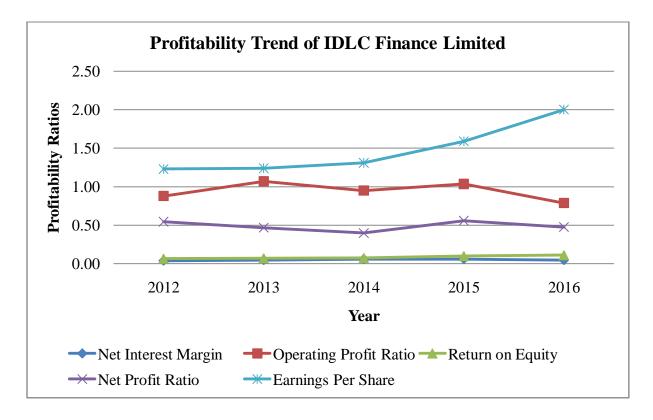
| Year | Net Interest | Operating    | Return on | Net Profit | Earnings  |
|------|--------------|--------------|-----------|------------|-----------|
| rear | Margin       | Profit Ratio | Equity    | Ratio      | Per Share |
| 2016 | 0.0314       | 0.7908       | 0.1190    | 0.4687     | 2.87      |
| 2015 | 0.0253       | 0.8483       | 0.0672    | 0.3925     | 1.53      |
| 2014 | 0.0273       | 0.8388       | 0.0745    | 0.4868     | 1.84      |
| 2013 | 0.0374       | 1.5275       | 0.1396    | 0.9312     | 4.28      |
| 2012 | 0.0237       | 1.1251       | 0.0538    | 0.6567     | 1.67      |

b. LankaBangla Finance Limited:



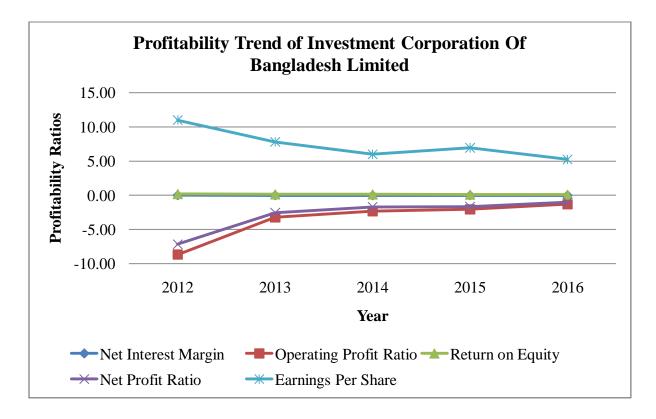
#### c. IPDC Finance Limited:

| Year | Net Interest | Operating    | Return on | Net Profit | Earnings  |
|------|--------------|--------------|-----------|------------|-----------|
|      | Margin       | Profit Ratio | Equity    | Ratio      | Per Share |
| 2016 | 0.0435       | 0.7860       | 0.1092    | 0.4750     | 2.00      |
| 2015 | 0.0583       | 1.0332       | 0.0971    | 0.5567     | 1.59      |
| 2014 | 0.0580       | 0.9494       | 0.0722    | 0.3977     | 1.31      |
| 2013 | 0.0438       | 1.0683       | 0.0688    | 0.4665     | 1.24      |
| 2012 | 0.0363       | 0.8774       | 0.0634    | 0.5438     | 1.23      |



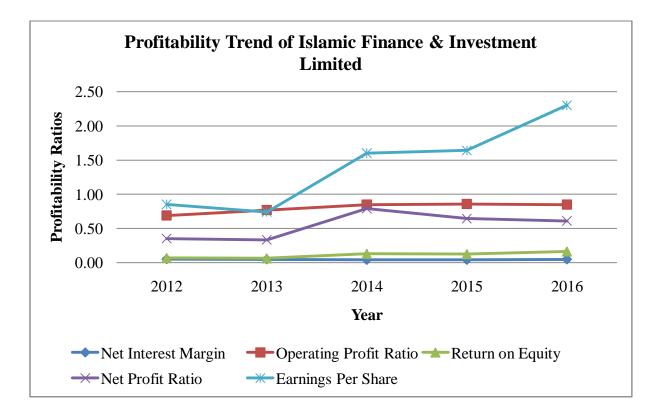
| Year | Net Interest | Operating    | Return on | Net Profit | Earnings  |
|------|--------------|--------------|-----------|------------|-----------|
| rear | Margin       | Profit Ratio | Equity    | Ratio      | Per Share |
| 2016 | -0.0299      | -1.3312      | 0.0884    | -1.0209    | 5.24      |
| 2015 | -0.0298      | -2.0874      | 0.1003    | -1.6948    | 6.94      |
| 2014 | -0.0305      | -2.3551      | 0.1189    | -1.7313    | 5.99      |
| 2013 | -0.0238      | -3.2651      | 0.1283    | -2.5683    | 7.80      |
| 2012 | -0.0141      | -8.6967      | 0.1780    | -7.1784    | 10.97     |

d. Investment Corporation Of Bangladesh Limited:



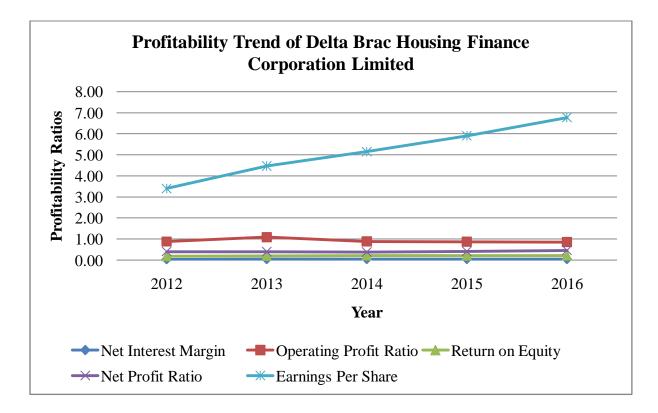
| Year | Net Interest | Operating    | Return on | Net Profit | Earnings  |
|------|--------------|--------------|-----------|------------|-----------|
|      | Margin       | Profit Ratio | Equity    | Ratio      | Per Share |
| 2016 | 0.0467       | 0.8480       | 0.1625    | 0.6073     | 2.30      |
| 2015 | 0.0404       | 0.8573       | 0.1230    | 0.6425     | 1.64      |
| 2014 | 0.0393       | 0.8486       | 0.1280    | 0.7879     | 1.60      |
| 2013 | 0.0474       | 0.7693       | 0.0621    | 0.3320     | 0.74      |
| 2012 | 0.0510       | 0.6881       | 0.0663    | 0.3504     | 0.85      |

e. Islamic Finance & Investment Limited:



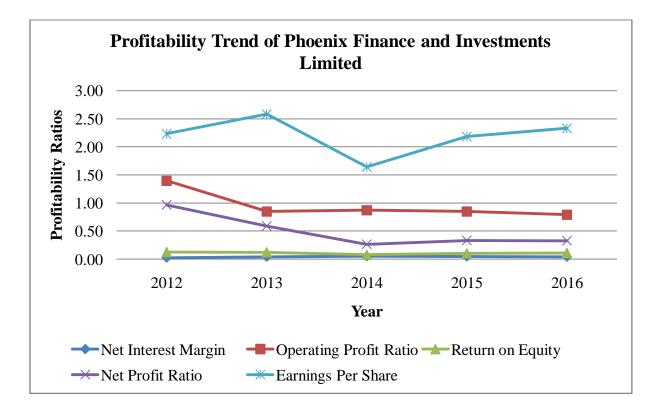
| Year | Net Interest | Operating    | Return on | Net Profit | Earnings  |
|------|--------------|--------------|-----------|------------|-----------|
| rear | Margin       | Profit Ratio | Equity    | Ratio      | Per Share |
| 2016 | 0.0451       | 0.8610       | 0.2178    | 0.4658     | 6.77      |
| 2015 | 0.0480       | 0.8777       | 0.2161    | 0.4183     | 5.90      |
| 2014 | 0.0477       | 0.8917       | 0.2188    | 0.3883     | 5.15      |
| 2013 | 0.0436       | 1.0938       | 0.2058    | 0.4081     | 4.47      |
| 2012 | 0.0389       | 0.8848       | 0.1880    | 0.4114     | 3.40      |

f. Delta Brac Housing Finance Corporation Limited:



| Year | Net Interest | Operating    | Return on | Net Profit | Earnings  |
|------|--------------|--------------|-----------|------------|-----------|
| rear | Margin       | Profit Ratio | Equity    | Ratio      | Per Share |
| 2016 | 0.0410       | 0.7910       | 0.1105    | 0.3284     | 2.33      |
| 2015 | 0.0457       | 0.8471       | 0.1052    | 0.3303     | 2.18      |
| 2014 | 0.0501       | 0.8721       | 0.0795    | 0.2647     | 1.64      |
| 2013 | 0.0423       | 0.8452       | 0.1233    | 0.5911     | 2.58      |
| 2012 | 0.0254       | 1.3948       | 0.1266    | 0.9645     | 2.23      |

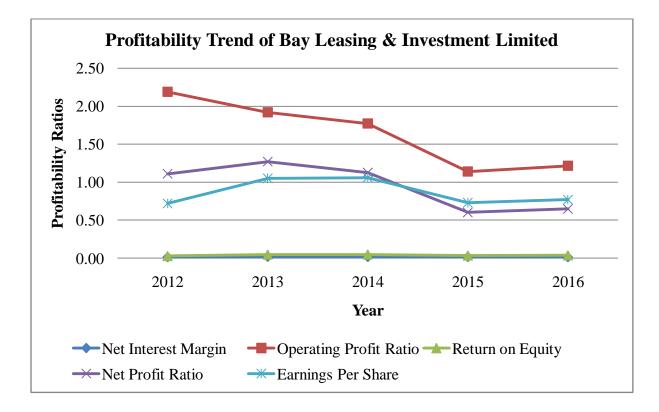
g. Phoenix Finance and Investments Limited:



| Year | Net Interest | Operating    | Return on | Net Profit | Earnings  |
|------|--------------|--------------|-----------|------------|-----------|
| Tear | Margin       | Profit Ratio | Equity    | Ratio      | Per Share |
| 2016 | 0.0131       | 1.2145       | 0.0383    | 0.6499     | 0.77      |
| 2015 | 0.0165       | 1.1395       | 0.0350    | 0.6026     | 0.73      |
| 2014 | 0.0163       | 1.7719       | 0.0486    | 1.1286     | 1.06      |
| 2013 | 0.0181       | 1.9181       | 0.0475    | 1.2706     | 1.05      |
| 2012 | 0.0134       | 2.1878       | 0.0282    | 1.1113     | 0.72      |

h. Bay Leasing & Investment Limited:

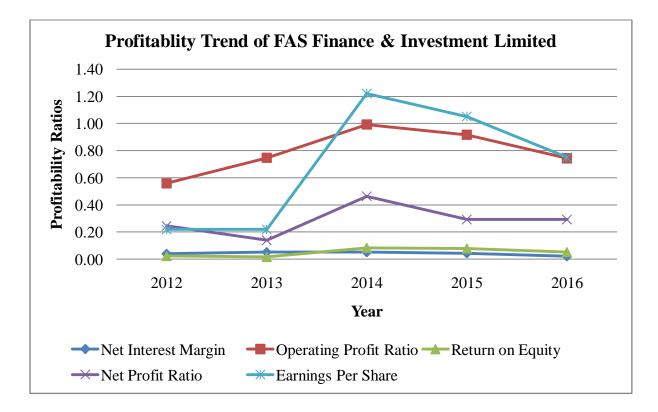
Graphical View-



| Year | Net Interest | Operating    | Return on | Net Profit | Earnings  |
|------|--------------|--------------|-----------|------------|-----------|
| rear | Margin       | Profit Ratio | Equity    | Ratio      | Per Share |
| 2016 | 0.0206       | 0.7432       | 0.0526    | 0.2926     | 0.75      |
| 2015 | 0.0434       | 0.9153       | 0.0789    | 0.2921     | 1.05      |
| 2014 | 0.0512       | 0.9911       | 0.0840    | 0.4637     | 1.22      |
| 2013 | 0.0518       | 0.7462       | 0.0160    | 0.1384     | 0.22      |
| 2012 | 0.0399       | 0.5587       | 0.0232    | 0.2447     | 0.22      |

i. FAS Finance & Investment Limited:

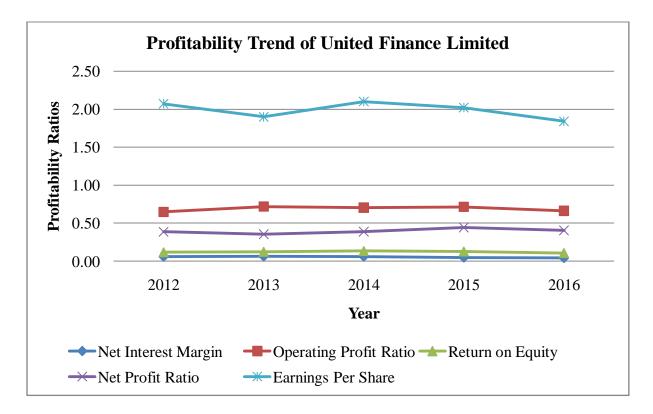
Graphical View-



#### j. United Finance Limited:

| Year   | Net Interest | Operating | Return on | Net Profit | Earnings |
|--------|--------------|-----------|-----------|------------|----------|
| Margin | Profit Ratio | Equity    | Ratio     | Per Share  |          |
| 2016   | 0.0420       | 0.6613    | 0.1067    | 0.4058     | 1.84     |
| 2015   | 0.0478       | 0.7140    | 0.1272    | 0.4432     | 2.02     |
| 2014   | 0.0607       | 0.7029    | 0.1335    | 0.3890     | 2.10     |
| 2013   | 0.0629       | 0.7172    | 0.1230    | 0.3549     | 1.90     |
| 2012   | 0.0590       | 0.6482    | 0.1172    | 0.3866     | 2.07     |

Graphical View-



# 2. Multiple Regressions

## a. IDLC Finance Limited:

## SUMMARY OUTPUT

| Regression Statistics |             |  |  |  |  |  |  |
|-----------------------|-------------|--|--|--|--|--|--|
| Multiple R            | 0.943062118 |  |  |  |  |  |  |
| R Square              | 0.889366158 |  |  |  |  |  |  |
| Adjusted R Square     | 0.557464633 |  |  |  |  |  |  |
| Standard Error        | 0.037628831 |  |  |  |  |  |  |
| Observations          | 5           |  |  |  |  |  |  |

|            |    |             |             |            | Significance |
|------------|----|-------------|-------------|------------|--------------|
|            | df | SS          | MS          | F          | F            |
| Regression | 3  | 0.011382406 | 0.003794135 | 2.67960853 | 0.415556761  |
| Residual   | 1  | 0.001415929 | 0.001415929 |            |              |
| Total      | 4  | 0.012798335 |             |            |              |

|                               | Standard     |             |              |             |              |             |              |             |
|-------------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
|                               | Coefficients | Error       | t Stat       | P-value     | Lower 95%    | Upper 95%   | Lower 95.0%  | 95.0%       |
| Intercept                     | -0.010975254 | 0.335133738 | -0.032748878 | 0.979158865 | -4.269253146 | 4.247302638 | -4.269253146 | 4.247302638 |
| Net Interest Margin           | 2.065748606  | 6.775359084 | 0.304891384  | 0.811599866 | -84.02335106 | 88.15484827 | -84.02335106 | 88.15484827 |
| <b>Operating Profit Ratio</b> | 0.100483799  | 0.484302306 | 0.207481562  | 0.869761021 | -6.053160453 | 6.25412805  | -6.053160453 | 6.25412805  |
| Return on Equity              | 1.404590583  | 0.966587808 | 1.453143286  | 0.383714721 | -10.877072   | 13.68625316 | -10.877072   | 13.68625316 |

# b. LankaBangla Finance Limited:

## SUMMARY OUTPUT

| Regression Statistics |             |  |  |  |  |  |  |
|-----------------------|-------------|--|--|--|--|--|--|
| Multiple R            | 0.982654213 |  |  |  |  |  |  |
| R Square              | 0.965609303 |  |  |  |  |  |  |
| Adjusted R Square     | 0.86243721  |  |  |  |  |  |  |
| Standard Error        | 0.079797857 |  |  |  |  |  |  |
| Observations          | 5           |  |  |  |  |  |  |

|            |        |   |             |             |             | Significance |
|------------|--------|---|-------------|-------------|-------------|--------------|
|            | $d\!f$ |   | SS          | MS          | F           | F            |
| Regression |        | 3 | 0.178789872 | 0.059596624 | 9.359210231 | 0.234758373  |
| Residual   |        | 1 | 0.006367698 | 0.006367698 |             |              |
| Total      |        | 4 | 0.18515757  |             |             |              |

|                               |              | Standard    |              |             |              |             |              |                    |
|-------------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|--------------------|
|                               | Coefficients | Error       | t Stat       | P-value     | Lower 95%    | Upper 95%   | Lower 95.0%  | <i>Upper 95.0%</i> |
| Intercept                     | -0.126147709 | 0.7833914   | -0.161027692 | 0.898359107 | -10.08007922 | 9.827783805 | -10.08007922 | 9.827783805        |
| Net Interest Margin           | -0.360300438 | 56.93676128 | -0.006328081 | 0.995971472 | -723.8104461 | 723.0898452 | -723.8104461 | 723.0898452        |
| <b>Operating Profit Ratio</b> | 0.647316518  | 0.237398048 | 2.726713729  | 0.223778887 | -2.369111688 | 3.663744724 | -2.369111688 | 3.663744724        |
| Return on Equity              | 0.656072408  | 7.694946995 | 0.085260159  | 0.945852648 | -97.11749953 | 98.42964434 | -97.11749953 | 98.42964434        |

### c. IPDC Finance Limited

#### SUMMARY OUTPUT

| Regression Statistics |             |  |  |  |  |  |  |
|-----------------------|-------------|--|--|--|--|--|--|
| Multiple R            | 0.996344655 |  |  |  |  |  |  |
| R Square              | 0.992702672 |  |  |  |  |  |  |
| Adjusted R Square     | 0.970810688 |  |  |  |  |  |  |
| Standard Error        | 0.096666228 |  |  |  |  |  |  |
| Observations          | 5           |  |  |  |  |  |  |

|            |        |   |             |             |             | Significance |
|------------|--------|---|-------------|-------------|-------------|--------------|
|            | $d\!f$ |   | SS          | MS          | F           | F            |
| Regression |        | 3 | 1.2711736   | 0.423724533 | 45.34548644 | 0.108633295  |
| Residual   |        | 1 | 0.00934436  | 0.00934436  |             |              |
| Total      |        | 4 | 1.280517959 |             |             |              |

|                               |              | Standard    |              |             |              |             |              |                    |
|-------------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|--------------------|
|                               | Coefficients | Error       | t Stat       | P-value     | Lower 95%    | Upper 95%   | Lower 95.0%  | <i>Upper 95.0%</i> |
| Intercept                     | 8.290814835  | 1.912180266 | 4.335791443  | 0.14430555  | -16.00573911 | 32.58736878 | -16.00573911 | 32.58736878        |
| Gross Profit Ratio            | -4.644684501 | 2.513908686 | -1.847594754 | 0.315824578 | -36.58692295 | 27.29755395 | -36.58692295 | 27.29755395        |
| <b>Operating Profit Ratio</b> | 16.62425374  | 5.086937055 | 3.268028199  | 0.189042713 | -48.01140995 | 81.25991743 | -48.01140995 | 81.25991743        |
| Return on Equity              | 23.28423403  | 2.333747798 | 9.977185216  | 0.063595166 | -6.368843292 | 52.93731135 | -6.368843292 | 52.93731135        |

# d. Investment Corporation Of Bangladesh Limited

## SUMMARY OUTPUT

| Regression Statistics |             |  |  |  |  |  |  |  |
|-----------------------|-------------|--|--|--|--|--|--|--|
| Multiple R            | 0.99992801  |  |  |  |  |  |  |  |
| R Square              | 0.999856024 |  |  |  |  |  |  |  |
| Adjusted R Square     | 0.999424097 |  |  |  |  |  |  |  |
| Standard Error        | 0.059688319 |  |  |  |  |  |  |  |
| Observations          | 5           |  |  |  |  |  |  |  |

|            |        |   |             |             |             | Significance |
|------------|--------|---|-------------|-------------|-------------|--------------|
|            | $d\!f$ |   | SS          | MS          | F           | F            |
| Regression |        | 3 | 24.7415424  | 8.247180799 | 2314.871132 | 0.015277222  |
| Residual   |        | 1 | 0.003562695 | 0.003562695 |             |              |
| Total      |        | 4 | 24.74510509 |             |             |              |

|                               |              | Standard    |              |             |              |             |              |             |
|-------------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
|                               | Coefficients | Error       | t Stat       | P-value     | Lower 95%    | Upper 95%   | Lower 95.0%  | Upper 95.0% |
| Intercept                     | -0.75365211  | 0.644709635 | -1.168979133 | 0.450502702 | -8.945464722 | 7.438160502 | -8.945464722 | 7.438160502 |
| Net Interest Margin           | -8.162954743 | 17.2570775  | -0.473020692 | 0.718720911 | -227.4349146 | 211.1090051 | -227.4349146 | 211.1090051 |
| <b>Operating Profit Ratio</b> | 0.905565832  | 0.057127778 | 15.85158508  | 0.040108119 | 0.17968859   | 1.631443075 | 0.17968859   | 1.631443075 |
| Return on Equity              | 7.475858523  | 3.452488819 | 2.165353434  | 0.275426228 | -36.39217126 | 51.3438883  | -36.39217126 | 51.3438883  |

#### e. Islamic Finance & Investment Limited

#### SUMMARY OUTPUT

| Regression Statistics |             |  |  |  |  |  |  |  |  |
|-----------------------|-------------|--|--|--|--|--|--|--|--|
| Multiple R            | 0.992599726 |  |  |  |  |  |  |  |  |
| R Square              | 0.985254215 |  |  |  |  |  |  |  |  |
| Adjusted R Square     | 0.941016862 |  |  |  |  |  |  |  |  |
| Standard Error        | 0.04790188  |  |  |  |  |  |  |  |  |
| Observations          | 5           |  |  |  |  |  |  |  |  |

|            |    |   |             |             |             | Significance |
|------------|----|---|-------------|-------------|-------------|--------------|
|            | df |   | SS          | MS          | F           | F            |
| Regression |    | 3 | 0.153315311 | 0.051105104 | 22.27199718 | 0.154231482  |
| Residual   |    | 1 | 0.00229459  | 0.00229459  |             |              |
| Total      |    | 4 | 0.155609901 |             |             |              |

|                               |              | Standard    |              |             |              |             |              | Upper       |
|-------------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
|                               | Coefficients | Error       | t Stat       | P-value     | Lower 95%    | Upper 95%   | Lower 95.0%  | 95.0%       |
| Intercept                     | 3.618928151  | 1.179526261 | 3.068120032  | 0.200583021 | -11.36837402 | 18.60623032 | -11.36837402 | 18.60623032 |
| Net Interest Margin           | -41.1813856  | 10.32027217 | -3.990339104 | 0.156320868 | -172.3128767 | 89.95010547 | -172.3128767 | 89.95010547 |
| <b>Operating Profit Ratio</b> | -2.089787894 | 1.074703187 | -1.944525632 | 0.302390429 | -15.74518662 | 11.56561083 | -15.74518662 | 11.56561083 |
| Return on Equity              | 4.178435994  | 1.194235285 | 3.498838167  | 0.177226905 | -10.99576203 | 19.35263402 | -10.99576203 | 19.35263402 |

# f. Delta Brac Housing Finance Corporation Limited

## SUMMARY OUTPUT

| Regression Statistics |              |  |  |  |  |  |  |  |  |
|-----------------------|--------------|--|--|--|--|--|--|--|--|
| Multiple R            | 0.785070292  |  |  |  |  |  |  |  |  |
| R Square              | 0.616335363  |  |  |  |  |  |  |  |  |
| Adjusted R Square     | -0.534658547 |  |  |  |  |  |  |  |  |
| Standard Error        | 0.035628163  |  |  |  |  |  |  |  |  |
| Observations          | 5            |  |  |  |  |  |  |  |  |

|            |        |   |             |             |             | Significance |
|------------|--------|---|-------------|-------------|-------------|--------------|
|            | $d\!f$ |   | SS          | MS          | F           | F            |
| Regression |        | 3 | 0.002039164 | 0.000679721 | 0.535480994 | 0.734827609  |
| Residual   |        | 1 | 0.001269366 | 0.001269366 |             |              |
| Total      |        | 4 | 0.00330853  |             |             |              |

|                        |              | Standard    |              |             |              |             |              | Upper       |
|------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
|                        | Coefficients | Error       | t Stat       | P-value     | Lower 95%    | Upper 95%   | Lower 95.0%  | 95.0%       |
| Intercept              | 0.221032966  | 0.407958269 | 0.541802882  | 0.683900418 | -4.962568327 | 5.404634259 | -4.962568327 | 5.404634259 |
| Net Interest Margin    | -16.55764517 | 14.55352012 | -1.137707238 | 0.459046687 | -201.4776514 | 168.3623611 | -201.4776514 | 168.362361  |
| Operating Profit Ratio | -0.077819671 | 0.187244583 | -0.41560439  | 0.749244611 | -2.456987678 | 2.301348336 | -2.456987678 | 2.30134833  |
| Return on Equity       | 4.818968444  | 4.183453397 | 1.151911588  | 0.45513303  | -48.33684691 | 57.9747838  | -48.33684691 | 57.974783   |

## g. Phoenix Finance and Investments Limited

#### SUMMARY OUTPUT

| Regression Statistics |             |  |  |  |  |  |  |  |
|-----------------------|-------------|--|--|--|--|--|--|--|
| Multiple R            | 0.986171019 |  |  |  |  |  |  |  |
| R Square              | 0.972533279 |  |  |  |  |  |  |  |
| Adjusted R Square     | 0.890133116 |  |  |  |  |  |  |  |
| Standard Error        | 0.096298678 |  |  |  |  |  |  |  |
| Observations          | 5           |  |  |  |  |  |  |  |

|            | df | SS          | MS          | F           | Significance F |
|------------|----|-------------|-------------|-------------|----------------|
| Regression | 3  | 0.328350974 | 0.109450325 | 11.80256498 | 0.210045095    |
| Residual   | 1  | 0.009273435 | 0.009273435 |             |                |
| Total      | 4  | 0.33762441  |             |             |                |

|                        | Coefficients | Standard<br>Error | t Stat       | P-value     | Lower 95%    | Upper 95%   | Lower 95.0%  | Upper<br>95.0% |
|------------------------|--------------|-------------------|--------------|-------------|--------------|-------------|--------------|----------------|
| Intercept              | -2.392096447 | 2.029305487       | -1.178775922 |             |              | 23.39267453 | -28.17686743 | 23.39267453    |
| Net Interest Margin    |              | 22.38568879       | 0.68152911   | 0.619160345 | -269.1806463 | 299.6936434 | -269.1806463 | 299.6936434    |
| Operating Profit Ratio | 1.170223536  | 0.597274992       | 1.959270941  | 0.300438784 | -6.418874795 | 8.759321866 | -6.418874795 | 8.759321866    |
| Return on Equity       | 10.56927179  | 5.941804734       | 1.778798238  | 0.326041183 | -64.92851565 | 86.06705922 | -64.92851565 | 86.06705922    |

## h. Bay Leasing & Investment Limited

## SUMMARY OUTPUT

| Regression Statistics |             |  |  |  |  |
|-----------------------|-------------|--|--|--|--|
| Multiple R            | 0.998816395 |  |  |  |  |
| R Square              | 0.99763419  |  |  |  |  |
| Adjusted R Square     | 0.99053676  |  |  |  |  |
| Standard Error        | 0.029644847 |  |  |  |  |
| Observations          | 5           |  |  |  |  |

|            |        |   |             |             |             | Significance |
|------------|--------|---|-------------|-------------|-------------|--------------|
|            | $d\!f$ |   | SS          | MS          | F           | F            |
| Regression |        | 3 | 0.37058676  | 0.12352892  | 140.5627393 | 0.061905425  |
| Residual   |        | 1 | 0.000878817 | 0.000878817 |             |              |
| Total      |        | 4 | 0.371465577 |             |             |              |

|                        |              | Standard    |              |             |              |             |              |                    |
|------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|--------------------|
|                        | Coefficients | Error       | t Stat       | P-value     | Lower 95%    | Upper 95%   | Lower 95.0%  | <i>Upper 95.0%</i> |
| Intercept              | -0.758115625 | 0.116752105 | -6.493378624 | 0.097277141 | -2.241591777 | 0.725360528 | -2.241591777 | 0.725360528        |
| Net Interest Margin    | 16.23174177  | 9.288033376 | 1.74759727   | 0.330875594 | -101.7839119 | 134.2473954 | -101.7839119 | 134.2473954        |
| Operating Profit Ratio | 0.604643697  | 0.032702311 | 18.48932601  | 0.034398231 | 0.189121433  | 1.020165962 | 0.189121433  | 1.02016596         |
| Return on Equity       | 11.73555805  | 2.349518479 | 4.994877954  | 0.125791455 | -18.11790477 | 41.58902087 | -18.11790477 | 41.5890208         |

#### i. FAS Finance & Investment Limited

#### SUMMARY OUTPUT

| Regression Statistics |             |  |  |  |  |
|-----------------------|-------------|--|--|--|--|
| Multiple R            | 0.867696478 |  |  |  |  |
| R Square              | 0.752897178 |  |  |  |  |
| Adjusted R Square     | 0.011588714 |  |  |  |  |
| Standard Error        | 0.116710607 |  |  |  |  |
| Observations          | 5           |  |  |  |  |

|            | $d\!f$ | SS            | MS          | F           | Significance F |
|------------|--------|---------------|-------------|-------------|----------------|
| Regression |        | 3 0.041502917 | 0.013834306 | 1.015632782 | 0.605790781    |
| Residual   |        | 1 0.013621366 | 0.013621366 |             |                |
| Total      |        | 4 0.055124282 |             |             |                |

|                               |              | Standard    |              |             |              |             |              |             |
|-------------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|
|                               | Coefficients | Error       | t Stat       | P-value     | Lower 95%    | Upper 95%   | Lower 95.0%  | Upper 95.0% |
| Intercept                     | 0.249043354  | 0.400246863 | 0.622224375  | 0.645656881 | -4.836575227 | 5.334661935 | -4.836575227 | 5.334661935 |
| Net Interest Margin           | 1.773955266  | 6.299288482 | 0.281612006  | 0.825246033 | -78.26609386 | 81.81400439 | -78.26609386 | 81.81400439 |
| <b>Operating Profit Ratio</b> | -0.357828345 | 0.924102569 | -0.387217131 | 0.764808257 | -12.09966478 | 11.38400809 | -12.09966478 | 11.38400809 |
| Return on Equity              | 4.84601021   | 4.669213547 | 1.037864334  | 0.488172711 | -54.48197306 | 64.17399348 | -54.48197306 | 64.17399348 |

## j. United Finance Limited

#### SUMMARY OUTPUT

| Regression Statistics |             |  |  |  |  |
|-----------------------|-------------|--|--|--|--|
| Multiple R            | 0.950937993 |  |  |  |  |
| R Square              | 0.904283066 |  |  |  |  |
| Adjusted R Square     | 0.617132266 |  |  |  |  |
| Standard Error        | 0.019923548 |  |  |  |  |
| Observations          | 5           |  |  |  |  |

|            |    |   |             |             |             | Significance |
|------------|----|---|-------------|-------------|-------------|--------------|
|            | df |   | SS          | MS          | F           | F            |
| Regression |    | 3 | 0.003750153 | 0.001250051 | 3.149157391 | 0.387539259  |
| Residual   |    | 1 | 0.000396948 | 0.000396948 |             |              |
| Total      |    | 4 | 0.004147101 |             |             |              |

|                               |              | Standard    |              |             |              |             |              |                    |
|-------------------------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|--------------------|
|                               | Coefficients | Error       | t Stat       | P-value     | Lower 95%    | Upper 95%   | Lower 95.0%  | <i>Upper 95.0%</i> |
| Intercept                     | 0.509032097  | 0.226032587 | 2.252029689  | 0.266036901 | -2.362984232 | 3.381048427 | -2.362984232 | 3.381048427        |
| Net Interest Margin           | -4.268355788 | 1.388817125 | -3.073374969 | 0.200262258 | -21.91495051 | 13.37823894 | -21.91495051 | 13.37823894        |
| <b>Operating Profit Ratio</b> | -0.367333353 | 0.469252057 | -0.782806058 | 0.57717717  | -6.32974606  | 5.595079354 | -6.32974606  | 5.595079354        |
| Return on Equity              | 3.065008683  | 1.721340207 | 1.780594371  | 0.325766797 | -18.8066924  | 24.93670977 | -18.8066924  | 24.93670977        |

## 3. Actual Returns

a. IDLC Finance Limited:

| Data       | Monthly              | Monthly  |
|------------|----------------------|----------|
| Date       | <b>Closing Price</b> | Return   |
| 29.12.2016 | 57.00                | (0.0339) |
| 30.11.2016 | 59.00                | (0.0167) |
| 31.10.2016 | 60.00                | (0.0354) |
| 29.09.2016 | 62.20                | 0.0163   |
| 31.08.2016 | 61.20                | 0.0373   |
| 31.07.2016 | 59.00                | 0.0051   |
| 30.06.2016 | 58.70                | 0.0712   |
| 31.05.2016 | 54.80                | (0.0072) |
| 28.04.2016 | 55.20                | 0.0455   |
| 31.03.2016 | 52.80                | (0.0588) |
| 29.02.2016 | 56.10                | (0.0937) |
| 31.01.2016 | 61.90                | (0.0267) |
| 31.12.2015 | 63.60                | 0.0160   |
| 30.11.2015 | 62.60                | 0.0521   |
| 29.10.2015 | 59.50                | (0.0775) |
| 30.09.2015 | 64.50                | 0.1082   |
| 31.08.2015 | 58.20                | (0.0920) |
| 30.07.2015 | 64.10                | 0.2233   |
| 30.06.2015 | 52.40                | (0.0076) |
| 31.05.2015 | 52.80                | 0.2394   |
| 30.04.2015 | 42.60                | (0.1870) |
| 31.03.2015 | 52.40                | (0.3013) |
| 26.02.2015 | 75.00                | (0.0106) |
| 29.01.2015 | 75.80                | 0.0147   |
| 30.12.2014 | 74.70                | 0.0566   |
| 30.11.2014 | 70.70                | (0.0673) |
| 30.10.2014 | 75.80                | 0.0120   |
| 30.09.2014 | 74.90                | 0.2738   |
| 31.08.2014 | 58.80                | 0.2250   |
| 24.07.2014 | 48.00                | 0.1294   |
| 30.06.2014 | 42.50                | (0.0576) |
| 29.05.2014 | 45.10                | (0.1377) |
| 30.04.2014 | 52.30                | (0.0019) |
| 31.03.2014 | 52.40                | (0.3359) |
| 27.02.2014 | 78.90                | 0.0720   |
| 30.01.2014 | 73.60                | 0.1701   |

| 30.12.2013   | 62.90  | 0.0483   |
|--------------|--------|----------|
| 28.11.2013   | 60.00  | 0.0601   |
| 31.10.2013   | 56.60  | (0.0018) |
| 30.09.2013   | 56.70  | (0.1014) |
| 29.08.2013   | 63.10  | 0.1031   |
| 31.07.2013   | 57.20  | (0.2921) |
| 30.06.2013   | 80.80  | 0.2866   |
| 30.05.2013   | 62.80  | 0.0846   |
| 30.04.2013   | 57.90  | (0.0477) |
| 31.03.2013   | 60.80  | (0.3938) |
| 28.02.2013   | 100.30 | 0.0558   |
| 31.01.2013   | 95.00  | 0.0337   |
| 30.12.2012   | 91.90  | (0.0526) |
| 29.11.2012   | 97.00  | (0.0849) |
| 31.10.2012   | 106.00 | (0.0084) |
| 30.09.2012   | 106.90 | 0.0038   |
| 30.08.2012   | 106.50 | 0.0350   |
| 30.07.2012   | 102.90 | (0.1145) |
| 28.06.2012   | 116.20 | (0.0436) |
| 31.05.2012   | 121.50 | (0.0426) |
| 30.04.2012   | 126.90 | 0.0754   |
| 29.03.2012   | 118.00 | 0.0698   |
| 29.02.2012   | 110.30 | 0.0750   |
| 31.01.2012   | 102.60 | (0.2592) |
| 29.12.2011   | 138.50 |          |
| Actual Retur | n      | -0.49%   |

| Date       | Monthly              | Monthly  |
|------------|----------------------|----------|
| Dutt       | <b>Closing Price</b> | Return   |
| 29.12.2016 | 34.80                | 0.2211   |
| 30.11.2016 | 28.50                | 0.0556   |
| 31.10.2016 | 27.00                | (0.1940) |
| 29.09.2016 | 33.50                | 0.1837   |
| 31.08.2016 | 28.30                | (0.0035) |
| 31.07.2016 | 28.40                | 0.0071   |
| 30.06.2016 | 28.20                | (0.0070) |
| 31.05.2016 | 28.40                | (0.1125) |
| 28.04.2016 | 32.00                | (0.0751) |
| 31.03.2016 | 34.60                | (0.1520) |
| 29.02.2016 | 40.80                | 0.4836   |
| 31.01.2016 | 27.50                | (0.0517) |
| 31.12.2015 | 29.00                | 0.0394   |
| 30.11.2015 | 27.90                | (0.0638) |
| 29.10.2015 | 29.80                | (0.1486) |
| 30.09.2015 | 35.00                | 0.2367   |
| 31.08.2015 | 28.30                | (0.0503) |
| 30.07.2015 | 29.80                | 0.0719   |
| 30.06.2015 | 27.80                | (0.1175) |
| 31.05.2015 | 31.50                | 0.3071   |
| 30.04.2015 | 24.10                | (0.2373) |
| 31.03.2015 | 31.60                | (0.2100) |
| 26.02.2015 | 40.00                | (0.0268) |
| 29.01.2015 | 41.10                | (0.0659) |
| 30.12.2014 | 44.00                | 0.0329   |
| 30.11.2014 | 42.60                | (0.0799) |
| 30.10.2014 | 46.30                | (0.1181) |
| 30.09.2014 | 52.50                | 0.1667   |
| 31.08.2014 | 45.00                | 0.0922   |
| 24.07.2014 | 41.20                | (0.0351) |
| 30.06.2014 | 42.70                | (0.0070) |
| 29.05.2014 | 43.00                | (0.1715) |
| 30.04.2014 | 51.90                | (0.1203) |
| 31.03.2014 | 59.00                | (0.1806) |
| 27.02.2014 | 72.00                | (0.0875) |
| 30.01.2014 | 78.90                | 0.1865   |

| b. | LankaBangla | Finance | Limited: |
|----|-------------|---------|----------|
|----|-------------|---------|----------|

| 30.12.2013         28.11.2013         31.10.2013         30.09.2013         29.08.2013         31.07.2013         30.06.2013         30.05.2013         30.04.2013 | 66.50<br>53.00<br>54.30<br>55.60<br>56.90<br>50.20<br>59.70<br>43.80<br>33.40<br>39.70 | $\begin{array}{r} 0.2547 \\ (0.0239) \\ (0.0234) \\ (0.0228) \\ 0.1335 \\ (0.1591) \\ 0.3630 \\ 0.3114 \\ (0.1587) \\ (0.2214) \end{array}$ |
|--|--|---|
| 31.10.2013         30.09.2013         29.08.2013         31.07.2013         30.06.2013         30.05.2013         30.04.2013                                       | 54.30<br>55.60<br>56.90<br>50.20<br>59.70<br>43.80<br>33.40<br>39.70                   | $\begin{array}{c} (0.0234) \\ (0.0228) \\ 0.1335 \\ (0.1591) \\ 0.3630 \\ 0.3114 \\ (0.1587) \end{array}$                                   |
| 30.09.2013           29.08.2013           31.07.2013           30.06.2013           30.05.2013           30.04.2013  | 55.60<br>56.90<br>50.20<br>59.70<br>43.80<br>33.40<br>39.70                            | (0.0228)<br>0.1335<br>(0.1591)<br>0.3630<br>0.3114<br>(0.1587)  |
| 29.08.2013           31.07.2013           30.06.2013           30.05.2013           30.04.2013   | 56.90<br>50.20<br>59.70<br>43.80<br>33.40<br>39.70                                     | 0.1335<br>(0.1591)<br>0.3630<br>0.3114<br>(0.1587)  |
| 31.07.2013         30.06.2013         30.05.2013         30.04.2013  | 50.20<br>59.70<br>43.80<br>33.40<br>39.70  | (0.1591)<br>0.3630<br>0.3114<br>(0.1587)  |
| 30.06.2013           30.05.2013           30.04.2013   | 59.70<br>43.80<br>33.40<br>39.70   | 0.3630<br>0.3114<br>(0.1587)  |
| 30.05.2013           30.04.2013  | 43.80<br>33.40<br>39.70  | 0.3114<br>(0.1587)  |
| 30.04.2013   | 33.40<br>39.70   | (0.1587)  |
|  | 39.70  | 、 <i>、</i> /  |
|  |  | (0.201.4)   |
| 31.03.2013   |  | (0.3214)  |
| 28.02.2013   | 58.50  | (0.0362)  |
| 31.01.2013   | 60.70  | 0.0288  |
| 30.12.2012   | 59.00  | -   |
| 29.11.2012   | 59.00  | (0.0895)  |
| 31.10.2012   | 64.80  | (0.1037)  |
| 30.09.2012   | 72.30  | 0.0028  |
| 30.08.2012   | 72.10  | 0.1075  |
| 30.07.2012   | 65.10  | (0.2071)  |
| 28.06.2012   | 82.10  | (0.0796)  |
| 31.05.2012   | 89.20  | (0.1733)  |
| 30.04.2012   | 107.90   | 0.3387  |
| 29.03.2012   | 80.60  | (0.0984)  |
| 29.02.2012   | 89.40  | (0.3550)  |
| 31.01.2012   | 138.60   | (0.1857)  |
| 29.12.2011   | 170.20   |   |
| Actual Return  | -1.22%   |   |

| Date       | Monthly              | Monthly  |
|------------|----------------------|----------|
| Dute       | <b>Closing Price</b> | Return   |
| 29.12.2016 | 42.70                | 0.0215   |
| 30.11.2016 | 41.80                | 0.1297   |
| 31.10.2016 | 37.00                | (0.0680) |
| 29.09.2016 | 39.70                | 0.0847   |
| 31.08.2016 | 36.60                | 0.2491   |
| 31.07.2016 | 29.30                | 0.2008   |
| 30.06.2016 | 24.40                | (0.0356) |
| 31.05.2016 | 25.30                | 0.1145   |
| 28.04.2016 | 22.70                | (0.0044) |
| 31.03.2016 | 22.80                | (0.1739) |
| 29.02.2016 | 27.60                | (0.0612) |
| 31.01.2016 | 29.40                | 0.1011   |
| 31.12.2015 | 26.70                | (0.0148) |
| 30.11.2015 | 27.10                | 0.1732   |
| 29.10.2015 | 23.10                | 0.1436   |
| 30.09.2015 | 20.20                | 0.0802   |
| 31.08.2015 | 18.70                | 0.0747   |
| 30.07.2015 | 17.40                | 0.1600   |
| 30.06.2015 | 15.00                | (0.0446) |
| 31.05.2015 | 15.70                | 0.1716   |
| 30.04.2015 | 13.40                | (0.0884) |
| 31.03.2015 | 14.70                | (0.1695) |
| 26.02.2015 | 17.70                | 0.0114   |
| 29.01.2015 | 17.50                | (0.0385) |
| 30.12.2014 | 18.20                | 0.0581   |
| 30.11.2014 | 17.20                | (0.0652) |
| 30.10.2014 | 18.40                | 0.1084   |
| 30.09.2014 | 16.60                | 0.1608   |
| 31.08.2014 | 14.30                | (0.0272) |
| 24.07.2014 | 14.70                | (0.0200) |
| 30.06.2014 | 15.00                | (0.0506) |
| 29.05.2014 | 15.80                | (0.0482) |
| 30.04.2014 | 16.60                | (0.0460) |
| 31.03.2014 | 17.40                | (0.1343) |
| 27.02.2014 | 20.10                | (0.1895) |
| 30.01.2014 | 24.80                | 0.2400   |

| 20.10.0012   | 20.00 | 0 1111   |
|--------------|-------|----------|
| 30.12.2013   | 20.00 | 0.1111   |
| 28.11.2013   | 18.00 | 0.0526   |
| 31.10.2013   | 17.10 | (0.0500) |
| 30.09.2013   | 18.00 | 0.0843   |
| 29.08.2013   | 16.60 | 0.0184   |
| 31.07.2013   | 16.30 | (0.0994) |
| 30.06.2013   | 18.10 | 0.0056   |
| 30.05.2013   | 18.00 | 0.1321   |
| 30.04.2013   | 15.90 | (0.0305) |
| 31.03.2013   | 16.40 | (0.2077) |
| 28.02.2013   | 20.70 | 0.1070   |
| 31.01.2013   | 18.70 | 0.0389   |
| 30.12.2012   | 18.00 | (0.0526) |
| 29.11.2012   | 19.00 | (0.0952) |
| 31.10.2012   | 21.00 | (0.0498) |
| 30.09.2012   | 22.10 | 0.1106   |
| 30.08.2012   | 19.90 | 0.1056   |
| 30.07.2012   | 18.00 | (0.1964) |
| 28.06.2012   | 22.40 | (0.0782) |
| 31.05.2012   | 24.30 | (0.1954) |
| 30.04.2012   | 30.20 | 0.1890   |
| 29.03.2012   | 25.40 | (0.1119) |
| 29.02.2012   | 28.60 | 0.2328   |
| 31.01.2012   | 23.20 | (0.2540) |
| 29.12.2011   | 31.10 |          |
| Actual Retur | n     | 1.28%    |

## c. IPDC Finance Limited:

| Dete       | Monthly              | Monthly  |
|------------|----------------------|----------|
| Date       | <b>Closing Price</b> | Return   |
| 29.12.2016 | 104.50               | 0.0471   |
| 30.11.2016 | 99.80                | 0.0184   |
| 31.10.2016 | 98.00                | (0.0658) |
| 29.09.2016 | 104.90               | 0.0019   |
| 31.08.2016 | 104.70               | (0.0038) |
| 31.07.2016 | 105.10               | (0.0683) |
| 30.06.2016 | 112.80               | 0.1937   |
| 31.05.2016 | 94.50                | 0.0350   |
| 28.04.2016 | 91.30                | (0.0861) |
| 31.03.2016 | 99.90                | (0.0273) |
| 29.02.2016 | 102.70               | 0.0199   |
| 31.01.2016 | 100.70               | (0.0580) |
| 31.12.2015 | 106.90               | (0.0308) |
| 30.11.2015 | 110.30               | (0.1528) |
| 29.10.2015 | 130.20               | (0.0434) |
| 30.09.2015 | 136.10               | (0.0051) |
| 31.08.2015 | 136.80               | 0.0806   |
| 30.07.2015 | 126.60               | 0.0080   |
| 30.06.2015 | 125.60               | 0.1481   |
| 31.05.2015 | 109.40               | 0.1152   |
| 30.04.2015 | 98.10                | (0.2465) |
| 31.03.2015 | 130.20               | (0.0558) |
| 26.02.2015 | 137.90               | 0.0219   |
| 29.01.2015 | 134.95               | (0.0200) |
| 30.12.2014 | 137.71               | (0.0556) |
| 30.11.2014 | 145.83               | (0.0655) |
| 30.10.2014 | 156.05               | 0.0964   |
| 30.09.2014 | 142.33               | (0.1476) |
| 31.08.2014 | 166.98               | (0.0631) |
| 24.07.2014 | 178.23               | (0.0566) |
| 30.06.2014 | 188.93               | 0.1048   |
| 29.05.2014 | 171.00               | (0.0480) |
| 30.04.2014 | 179.63               | 0.0018   |
| 31.03.2014 | 179.30               | 0.0898   |
| 27.02.2014 | 164.53               | 0.0254   |
| 30.01.2014 | 160.45               | 0.0982   |

| 30.12.2013   | 146.10 | (0.0371) |
|--------------|--------|----------|
| 28.11.2013   | 151.73 | 0.0209   |
| 31.10.2013   | 148.63 | (0.2049) |
| 30.09.2013   | 186.93 | (0.0995) |
| 29.08.2013   | 207.58 | 0.1114   |
| 31.07.2013   | 186.78 | 0.0397   |
| 30.06.2013   | 179.65 | 0.2839   |
| 30.05.2013   | 139.93 | 0.1246   |
| 30.04.2013   | 124.43 | 0.0085   |
| 31.03.2013   | 123.38 | (0.0602) |
| 28.02.2013   | 131.28 | (0.0731) |
| 31.01.2013   | 141.63 | (0.0610) |
| 30.12.2012   | 150.83 | (0.0098) |
| 29.11.2012   | 152.33 | (0.1097) |
| 31.10.2012   | 171.10 | (0.2102) |
| 30.09.2012   | 216.63 | 0.0727   |
| 30.08.2012   | 201.95 | 0.1862   |
| 30.07.2012   | 170.25 | (0.1450) |
| 28.06.2012   | 199.13 | (0.0125) |
| 31.05.2012   | 201.65 | (0.0116) |
| 30.04.2012   | 204.03 | 0.1958   |
| 29.03.2012   | 170.63 | 0.2065   |
| 29.02.2012   | 141.43 | 0.0043   |
| 31.01.2012   | 140.83 | (0.1326) |
| 29.12.2011   | 162.35 |          |
| Actual Retur | n      | -0.18%   |

d. Investment Corporation Of Bangladesh Limited:

| Date       | Monthly              | Monthly  |
|------------|----------------------|----------|
| Date       | <b>Closing Price</b> | Return   |
| 29.12.2016 | 19.30                | 0.2138   |
| 30.11.2016 | 15.90                | 0.1042   |
| 31.10.2016 | 14.40                | (0.0943) |
| 29.09.2016 | 15.90                | 0.2422   |
| 31.08.2016 | 12.80                | 0.0159   |
| 31.07.2016 | 12.60                | -        |
| 30.06.2016 | 12.60                | 0.0080   |
| 31.05.2016 | 12.50                | (0.0234) |
| 28.04.2016 | 12.80                | (0.0791) |
| 31.03.2016 | 13.90                | (0.0071) |
| 29.02.2016 | 14.00                | (0.0604) |
| 31.01.2016 | 14.90                | (0.0387) |
| 31.12.2015 | 15.50                | 0.0764   |
| 30.11.2015 | 14.40                | 0.0360   |
| 29.10.2015 | 13.90                | (0.1627) |
| 30.09.2015 | 16.60                | 0.2769   |
| 31.08.2015 | 13.00                | (0.0370) |
| 30.07.2015 | 13.50                | 0.0800   |
| 30.06.2015 | 12.50                | (0.0234) |
| 31.05.2015 | 12.80                | 0.0756   |
| 30.04.2015 | 11.90                | (0.1905) |
| 31.03.2015 | 14.70                | (0.1145) |
| 26.02.2015 | 16.60                | (0.0292) |
| 29.01.2015 | 17.10                | (0.0656) |
| 30.12.2014 | 18.30                | 0.0339   |
| 30.11.2014 | 17.70                | (0.1281) |
| 30.10.2014 | 20.30                | 0.2688   |
| 30.09.2014 | 16.00                | 0.2121   |
| 31.08.2014 | 13.20                | 0.0233   |
| 24.07.2014 | 12.90                | 0.0078   |
| 30.06.2014 | 12.80                | (0.0154) |
| 29.05.2014 | 13.00                | (0.0511) |
| 30.04.2014 | 13.70                | (0.1274) |
| 31.03.2014 | 15.70                | (0.1374) |
| 27.02.2014 | 18.20                | (0.1495) |
| 30.01.2014 | 21.40                | 0.1444   |

| 30.12.2013   | 18.70 | 0.1333   |
|--------------|-------|----------|
| 28.11.2013   | 16.50 | 0.0645   |
| 31.10.2013   | 15.50 | 0.0065   |
| 30.09.2013   | 15.40 | (0.0314) |
| 29.08.2013   | 15.90 | 0.0325   |
| 31.07.2013   | 15.40 | 0.0132   |
| 30.06.2013   | 15.20 | (0.0194) |
| 30.05.2013   | 15.50 | 0.0764   |
| 30.04.2013   | 14.40 | (0.0588) |
| 31.03.2013   | 15.30 | (0.3108) |
| 28.02.2013   | 22.20 | (0.0089) |
| 31.01.2013   | 22.40 | (0.0088) |
| 30.12.2012   | 22.60 | (0.0342) |
| 29.11.2012   | 23.40 | (0.0859) |
| 31.10.2012   | 25.60 | (0.2622) |
| 30.09.2012   | 34.70 | 0.0327   |
| 30.08.2012   | 33.60 | 0.0402   |
| 30.07.2012   | 32.30 | (0.0927) |
| 28.06.2012   | 35.60 | (0.0872) |
| 31.05.2012   | 39.00 | (0.0201) |
| 30.04.2012   | 39.80 | 0.1740   |
| 29.03.2012   | 33.90 | 0.0796   |
| 29.02.2012   | 31.40 | 0.1135   |
| 31.01.2012   | 28.20 | (0.1802) |
| 29.12.2011   | 34.40 |          |
| Actual Retur | n     | -0.25%   |

e. Islamic Finance & Investment Limited:

| f. | Delta Brac Housing Finance |
|----|----------------------------|
|    | Corporation Limited:       |

| Date       | Monthly              | Monthly  |
|------------|----------------------|----------|
| Date       | <b>Closing Price</b> | Return   |
| 29.12.2016 | 102.20               | (0.0020) |
| 30.11.2016 | 102.40               | 0.0354   |
| 31.10.2016 | 98.90                | (0.1050) |
| 29.09.2016 | 110.50               | (0.0213) |
| 31.08.2016 | 112.90               | 0.0190   |
| 31.07.2016 | 110.80               | 0.0384   |
| 30.06.2016 | 106.70               | 0.0201   |
| 31.05.2016 | 104.60               | 0.0058   |
| 28.04.2016 | 104.00               | (0.0326) |
| 31.03.2016 | 107.50               | 0.0228   |
| 29.02.2016 | 105.10               | (0.2232) |
| 31.01.2016 | 135.30               | 0.1674   |
| 31.12.2015 | 115.90               | 0.0924   |
| 30.11.2015 | 106.10               | 0.1133   |
| 29.10.2015 | 95.30                | (0.0432) |
| 30.09.2015 | 99.60                | 0.0174   |
| 31.08.2015 | 97.90                | 0.1357   |
| 30.07.2015 | 86.20                | 0.0616   |
| 30.06.2015 | 81.20                | (0.0217) |
| 31.05.2015 | 83.00                | 0.1528   |
| 30.04.2015 | 72.00                | (0.0863) |
| 31.03.2015 | 78.80                | 0.0090   |
| 26.02.2015 | 78.10                | 0.0290   |
| 29.01.2015 | 75.90                | 0.0601   |
| 30.12.2014 | 71.60                | 0.0362   |
| 30.11.2014 | 69.10                | 0.0313   |
| 30.10.2014 | 67.00                | 0.0355   |
| 30.09.2014 | 64.70                | 0.0624   |
| 31.08.2014 | 60.90                | 0.0665   |
| 24.07.2014 | 57.10                | (0.0790) |
| 30.06.2014 | 62.00                | (0.0592) |
| 29.05.2014 | 65.90                | 0.0698   |
| 30.04.2014 | 61.60                | (0.0048) |
| 31.03.2014 | 61.90                | (0.0802) |
| 27.02.2014 | 67.30                | (0.0088) |
| 30.01.2014 | 67.90                | 0.2345   |

| 30.12.2013   | 55.00 | 0.0280   |
|--------------|-------|----------|
| 28.11.2013   | 53.50 | 0.0094   |
| 31.10.2013   | 53.00 | (0.1410) |
| 30.09.2013   | 61.70 | (0.0329) |
| 29.08.2013   | 63.80 | 0.0616   |
| 31.07.2013   | 60.10 | (0.0921) |
| 30.06.2013   | 66.20 | 0.0782   |
| 30.05.2013   | 61.40 | 0.2379   |
| 30.04.2013   | 49.60 | (0.0624) |
| 31.03.2013   | 52.90 | (0.0957) |
| 28.02.2013   | 58.50 | 0.0354   |
| 31.01.2013   | 56.50 | 0.0089   |
| 30.12.2012   | 56.00 | (0.0175) |
| 29.11.2012   | 57.00 | (0.0547) |
| 31.10.2012   | 60.30 | (0.1158) |
| 30.09.2012   | 68.20 | (0.1026) |
| 30.08.2012   | 76.00 | (0.0231) |
| 30.07.2012   | 77.80 | (0.0694) |
| 28.06.2012   | 83.60 | (0.0188) |
| 31.05.2012   | 85.20 | (0.0362) |
| 30.04.2012   | 88.40 | (0.0112) |
| 29.03.2012   | 89.40 | 0.1010   |
| 29.02.2012   | 81.20 | 0.1278   |
| 31.01.2012   | 72.00 | (0.2140) |
| 29.12.2011   | 91.60 |          |
| Actual Retur | n     | 0.58%    |

| Date       | Monthly              | Monthly  |
|------------|----------------------|----------|
| Date       | <b>Closing Price</b> | Return   |
| 29.12.2016 | 26.90                | 0.0189   |
| 30.11.2016 | 26.40                | 0.2632   |
| 31.10.2016 | 20.90                | (0.0752) |
| 29.09.2016 | 22.60                | 0.2283   |
| 31.08.2016 | 18.40                | 0.0395   |
| 31.07.2016 | 17.70                | 0.0599   |
| 30.06.2016 | 16.70                | 0.0245   |
| 31.05.2016 | 16.30                | 0.0252   |
| 28.04.2016 | 15.90                | (0.2167) |
| 31.03.2016 | 20.30                | (0.1714) |
| 29.02.2016 | 24.50                | 0.1343   |
| 31.01.2016 | 21.60                | 0.0335   |
| 31.12.2015 | 20.90                | 0.0195   |
| 30.11.2015 | 20.50                | 0.2577   |
| 29.10.2015 | 16.30                | (0.1510) |
| 30.09.2015 | 19.20                | 0.1163   |
| 31.08.2015 | 17.20                | (0.1269) |
| 30.07.2015 | 19.70                | 0.0207   |
| 30.06.2015 | 19.30                | (0.0631) |
| 31.05.2015 | 20.60                | 0.3464   |
| 30.04.2015 | 15.30                | (0.3462) |
| 31.03.2015 | 23.40                | (0.1000) |
| 26.02.2015 | 26.00                | 0.0359   |
| 29.01.2015 | 25.10                | (0.0669) |
| 30.12.2014 | 26.90                | 0.0307   |
| 30.11.2014 | 26.10                | (0.0645) |
| 30.10.2014 | 27.90                | 0.0372   |
| 30.09.2014 | 26.90                | 0.0803   |
| 31.08.2014 | 24.90                | 0.0163   |
| 24.07.2014 | 24.50                | (0.0430) |
| 30.06.2014 | 25.60                | (0.0229) |
| 29.05.2014 | 26.20                | 0.0155   |
| 30.04.2014 | 25.80                | (0.0947) |
| 31.03.2014 | 28.50                | (0.1715) |
| 27.02.2014 | 34.40                | (0.0899) |
| 30.01.2014 | 37.80                | 0.0529   |

| g. | Phoenix Finance and Investments |
|----|---------------------------------|
|    | Limited:                        |

| 30.12.2013    | 35.90 | 0.1397   |
|---------------|-------|----------|
| 28.11.2013    | 31.50 | 0.1250   |
| 31.10.2013    | 28.00 | (0.0106) |
| 30.09.2013    | 28.30 | (0.0841) |
| 29.08.2013    | 30.90 | (0.0636) |
| 31.07.2013    | 33.00 | (0.1033) |
| 30.06.2013    | 36.80 | 0.0985   |
| 30.05.2013    | 33.50 | 0.3730   |
| 30.04.2013    | 24.40 | (0.2802) |
| 31.03.2013    | 33.90 | (0.2348) |
| 28.02.2013    | 44.30 | 0.0137   |
| 31.01.2013    | 43.70 | (0.0202) |
| 30.12.2012    | 44.60 | (0.0346) |
| 29.11.2012    | 46.20 | (0.1047) |
| 31.10.2012    | 51.60 | (0.0444) |
| 30.09.2012    | 54.00 | 0.0093   |
| 30.08.2012    | 53.50 | 0.0308   |
| 30.07.2012    | 51.90 | (0.2003) |
| 28.06.2012    | 64.90 | (0.0414) |
| 31.05.2012    | 67.70 | (0.0961) |
| 30.04.2012    | 74.90 | (0.1167) |
| 29.03.2012    | 84.80 | 0.1553   |
| 29.02.2012    | 73.40 | 0.2092   |
| 31.01.2012    | 60.70 | (0.1279) |
| 29.12.2011    | 69.60 | 0 500/   |
| Actual Return |       | -0.59%   |

| Date       | Monthly              | Monthly  |
|------------|----------------------|----------|
| Date       | <b>Closing Price</b> | Return   |
| 29.12.2016 | 24.50                | 0.1611   |
| 30.11.2016 | 21.10                | 0.0990   |
| 31.10.2016 | 19.20                | (0.0352) |
| 29.09.2016 | 19.90                | 0.2438   |
| 31.08.2016 | 16.00                | 0.0191   |
| 31.07.2016 | 15.70                | 0.0195   |
| 30.06.2016 | 15.40                | 0.0267   |
| 31.05.2016 | 15.00                | (0.0196) |
| 28.04.2016 | 15.30                | (0.1947) |
| 31.03.2016 | 19.00                | (0.0952) |
| 29.02.2016 | 21.00                | 0.0448   |
| 31.01.2016 | 20.10                | (0.0099) |
| 31.12.2015 | 20.30                | 0.0914   |
| 30.11.2015 | 18.60                | 0.0449   |
| 29.10.2015 | 17.80                | (0.1144) |
| 30.09.2015 | 20.10                | 0.0865   |
| 31.08.2015 | 18.50                | (0.0609) |
| 30.07.2015 | 19.70                | -        |
| 30.06.2015 | 19.70                | (0.0708) |
| 31.05.2015 | 21.20                | 0.0392   |
| 30.04.2015 | 20.40                | (0.1969) |
| 31.03.2015 | 25.40                | (0.0993) |
| 26.02.2015 | 28.20                | (0.0070) |
| 29.01.2015 | 28.40                | (0.0502) |
| 30.12.2014 | 29.90                | 0.0170   |
| 30.11.2014 | 29.40                | (0.0813) |
| 30.10.2014 | 32.00                | (0.0123) |
| 30.09.2014 | 32.40                | 0.2510   |
| 31.08.2014 | 25.90                | 0.0444   |
| 24.07.2014 | 24.80                | -        |
| 30.06.2014 | 24.80                | (0.0712) |
| 29.05.2014 | 26.70                | (0.2216) |
| 30.04.2014 | 34.30                | 0.0059   |
| 31.03.2014 | 34.10                | (0.1367) |
| 27.02.2014 | 39.50                | 0.0128   |
| 30.01.2014 | 39.00                | (0.0824) |

| -             |       |          |
|---------------|-------|----------|
| 30.12.2013    | 42.50 | 0.5018   |
| 28.11.2013    | 28.30 | 0.0328   |
| 31.10.2013    | 27.40 | 0.0418   |
| 30.09.2013    | 26.30 | (0.0993) |
| 29.08.2013    | 29.20 | 0.0618   |
| 31.07.2013    | 27.50 | (0.2424) |
| 30.06.2013    | 36.30 | 0.1415   |
| 30.05.2013    | 31.80 | 0.2569   |
| 30.04.2013    | 25.30 | (0.1759) |
| 31.03.2013    | 30.70 | (0.1921) |
| 28.02.2013    | 38.00 | 0.0826   |
| 31.01.2013    | 35.10 | (0.0057) |
| 30.12.2012    | 35.30 | (0.0381) |
| 29.11.2012    | 36.70 | (0.0662) |
| 31.10.2012    | 39.30 | (0.1638) |
| 30.09.2012    | 47.00 | 0.1007   |
| 30.08.2012    | 42.70 | 0.0949   |
| 30.07.2012    | 39.00 | (0.1314) |
| 28.06.2012    | 44.90 | (0.1002) |
| 31.05.2012    | 49.90 | (0.0960) |
| 30.04.2012    | 55.20 | (0.1082) |
| 29.03.2012    | 61.90 | 0.0581   |
| 29.02.2012    | 58.50 | 0.1890   |
| 31.01.2012    | 49.20 | (0.2981) |
| 29.12.2011    | 70.10 |          |
| Actual Return | n     | -0.85%   |

h. Bay Leasing & Investment Limited:

| Date       | Monthly              | Monthly  |
|------------|----------------------|----------|
| Dutt       | <b>Closing Price</b> | Return   |
| 29.12.2016 | 14.50                | 0.0821   |
| 30.11.2016 | 13.40                | 0.2762   |
| 31.10.2016 | 10.50                | 0.0294   |
| 29.09.2016 | 10.20                | 0.3247   |
| 31.08.2016 | 7.70                 | (0.0941) |
| 31.07.2016 | 8.50                 | (0.0230) |
| 30.06.2016 | 8.70                 | (0.1553) |
| 31.05.2016 | 10.30                | 0.1444   |
| 28.04.2016 | 9.00                 | (0.1667) |
| 31.03.2016 | 10.80                | (0.0270) |
| 29.02.2016 | 11.10                | (0.0750) |
| 31.01.2016 | 12.00                | 0.0526   |
| 31.12.2015 | 11.40                | 0.1068   |
| 30.11.2015 | 10.30                | 0.0510   |
| 29.10.2015 | 9.80                 | (0.2576) |
| 30.09.2015 | 13.20                | 0.1282   |
| 31.08.2015 | 11.70                | (0.1136) |
| 30.07.2015 | 13.20                | 0.1092   |
| 30.06.2015 | 11.90                | 0.0439   |
| 31.05.2015 | 11.40                | 0.0179   |
| 30.04.2015 | 11.20                | (0.2057) |
| 31.03.2015 | 14.10                | (0.1350) |
| 26.02.2015 | 16.30                | (0.0468) |
| 29.01.2015 | 17.10                | (0.1000) |
| 30.12.2014 | 19.00                | (0.0452) |
| 30.11.2014 | 19.90                | 0.0699   |
| 30.10.2014 | 18.60                | 0.1923   |
| 30.09.2014 | 15.60                | (0.0189) |
| 31.08.2014 | 15.90                | (0.0809) |
| 24.07.2014 | 17.30                | 0.0485   |
| 30.06.2014 | 16.50                | (0.0571) |
| 29.05.2014 | 17.50                | 0.1364   |
| 30.04.2014 | 15.40                | 0.0336   |
| 31.03.2014 | 14.90                | (0.0387) |
| 27.02.2014 | 15.50                | (0.0432) |
| 30.01.2014 | 16.20                | 0.0872   |

| 30.12.2013   | 14.90 | 0.0797   |
|--------------|-------|----------|
| 28.11.2013   | 13.80 | 0.0222   |
| 31.10.2013   | 13.50 | (0.0288) |
| 30.09.2013   | 13.90 | 0.0373   |
| 29.08.2013   | 13.40 | 0.0075   |
| 31.07.2013   | 13.30 | (0.2176) |
| 30.06.2013   | 17.00 | (0.0341) |
| 30.05.2013   | 17.60 | 0.3435   |
| 30.04.2013   | 13.10 | (0.1027) |
| 31.03.2013   | 14.60 | (0.4552) |
| 28.02.2013   | 26.80 | (0.2493) |
| 31.01.2013   | 35.70 | 0.3029   |
| 30.12.2012   | 27.40 | 0.0873   |
| 29.11.2012   | 25.20 | (0.1280) |
| 31.10.2012   | 28.90 | (0.1574) |
| 30.09.2012   | 34.30 | 0.1787   |
| 30.08.2012   | 29.10 | 0.0246   |
| 30.07.2012   | 28.40 | (0.2585) |
| 28.06.2012   | 38.30 | (0.0254) |
| 31.05.2012   | 39.30 | (0.0461) |
| 30.04.2012   | 41.20 | (0.1710) |
| 29.03.2012   | 49.70 | 0.0205   |
| 29.02.2012   | 48.70 | 0.1763   |
| 31.01.2012   | 41.40 | (0.2800) |
| 29.12.2011   | 57.50 |          |
| Actual Retur | n     | -1.04%   |

## i. FAS Finance & Investment Limited:

# j. United Finance Limited:

| Date       | Monthly<br>Closing Price | Monthly<br>Return |
|------------|--------------------------|-------------------|
|            | Ç                        |                   |
| 29.12.2016 | 22.90                    | 0.0553            |
| 30.11.2016 | 21.70                    | 0.0905            |
| 31.10.2016 | 19.90                    | (0.0478)          |
| 29.09.2016 | 20.90                    | 0.1117            |
| 31.08.2016 | 18.80                    | 0.0867            |
| 31.07.2016 | 17.30                    | (0.0114)          |
| 30.06.2016 | 17.50                    | 0.0234            |
| 31.05.2016 | 17.10                    | 0.0301            |
| 28.04.2016 | 16.60                    | (0.0460)          |
| 31.03.2016 | 17.40                    | (0.1512)          |
| 29.02.2016 | 20.50                    | (0.0929)          |
| 31.01.2016 | 22.60                    | 0.0865            |
| 31.12.2015 | 20.80                    | -                 |
| 30.11.2015 | 20.80                    | 0.1429            |
| 29.10.2015 | 18.20                    | (0.1765)          |
| 30.09.2015 | 22.10                    | 0.1218            |
| 31.08.2015 | 19.70                    | 0.0260            |
| 30.07.2015 | 19.20                    | -                 |
| 30.06.2015 | 19.20                    | (0.0352)          |
| 31.05.2015 | 19.90                    | 0.1570            |
| 30.04.2015 | 17.20                    | (0.1443)          |
| 31.03.2015 | 20.10                    | (0.2444)          |
| 26.02.2015 | 26.60                    | (0.0601)          |
| 29.01.2015 | 28.30                    | (0.0471)          |
| 30.12.2014 | 29.70                    | 0.1293            |
| 30.11.2014 | 26.30                    | (0.0223)          |
| 30.10.2014 | 26.90                    | 0.0675            |
| 30.09.2014 | 25.20                    | 0.1613            |
| 31.08.2014 | 21.70                    | (0.0356)          |
| 24.07.2014 | 22.50                    | (0.0217)          |
| 30.06.2014 | 23.00                    | (0.0336)          |
| 29.05.2014 | 23.80                    | (0.0165)          |
| 30.04.2014 | 24.20                    | (0.0242)          |
| 31.03.2014 | 24.80                    | (0.2485)          |
| 27.02.2014 | 33.00                    | (0.0884)          |
| 30.01.2014 | 36.20                    | 0.0904            |

| 30.12.2013   | 33.20 | 0.1488   |
|--------------|-------|----------|
| 28.11.2013   | 28.90 | 0.0743   |
| 31.10.2013   | 26.90 | 0.0346   |
| 30.09.2013   | 26.00 | (0.0580) |
| 29.08.2013   | 27.60 | -        |
| 31.07.2013   | 27.60 | (0.0891) |
| 30.06.2013   | 30.30 | 0.0377   |
| 30.05.2013   | 29.20 | 0.1918   |
| 30.04.2013   | 24.50 | (0.0239) |
| 31.03.2013   | 25.10 | (0.3289) |
| 28.02.2013   | 37.40 | 0.1000   |
| 31.01.2013   | 34.00 | 0.0897   |
| 30.12.2012   | 31.20 | (0.0545) |
| 29.11.2012   | 33.00 | (0.0379) |
| 31.10.2012   | 34.30 | (0.0679) |
| 30.09.2012   | 36.80 | 0.0605   |
| 30.08.2012   | 34.70 | 0.0547   |
| 30.07.2012   | 32.90 | (0.1542) |
| 28.06.2012   | 38.90 | (0.0782) |
| 31.05.2012   | 42.20 | (0.0725) |
| 30.04.2012   | 45.50 | (0.0299) |
| 29.03.2012   | 46.90 | (0.0676) |
| 29.02.2012   | 50.30 | 0.1590   |
| 31.01.2012   | 43.40 | (0.2291) |
| 29.12.2011   | 56.30 |          |
| Actual Retur | n     | -0.85%   |

#### k. DGEN/DSEX

| Dete       | Monthly              | Monthly  |
|------------|----------------------|----------|
| Date       | <b>Closing Price</b> | Return   |
| 29.12.2016 | 5,036.05             | 0.0489   |
| 30.11.2016 | 4,801.24             | 0.0455   |
| 31.10.2016 | 4,592.18             | (0.0219) |
| 29.09.2016 | 4,695.19             | 0.0372   |
| 31.08.2016 | 4,526.58             | 0.0003   |
| 31.07.2016 | 4,525.35             | 0.0039   |
| 30.06.2016 | 4,507.58             | 0.0200   |
| 31.05.2016 | 4,419.39             | 0.0533   |
| 28.04.2016 | 4,195.70             | (0.0371) |
| 31.03.2016 | 4,357.54             | (0.0342) |
| 29.02.2016 | 4,511.97             | (0.0064) |
| 31.01.2016 | 4,540.89             | (0.0192) |
| 31.12.2015 | 4,629.64             | 0.0106   |
| 30.11.2015 | 4,581.00             | 0.0036   |
| 29.10.2015 | 4,564.49             | (0.0593) |
| 30.09.2015 | 4,852.08             | 0.0175   |
| 31.08.2015 | 4,768.67             | (0.0049) |
| 30.07.2015 | 4,792.31             | 0.0456   |
| 30.06.2015 | 4,583.11             | (0.0008) |
| 31.05.2015 | 4,586.95             | 0.1333   |
| 30.04.2015 | 4,047.29             | (0.1067) |
| 31.03.2015 | 4,530.48             | (0.0489) |
| 26.02.2015 | 4,763.22             | 0.0083   |
| 29.01.2015 | 4,724.05             | (0.0290) |
| 30.12.2014 | 4,864.96             | 0.0200   |
| 30.11.2014 | 4,769.43             | (0.0781) |
| 30.10.2014 | 5,173.23             | 0.0195   |
| 30.09.2014 | 5,074.31             | 0.1154   |
| 31.08.2014 | 4,549.52             | 0.0276   |
| 24.07.2014 | 4,427.16             | (0.0119) |
| 30.06.2014 | 4,480.52             | 0.0113   |
| 29.05.2014 | 4,430.48             | (0.0299) |
| 30.04.2014 | 4,566.86             | 0.0167   |
| 31.03.2014 | 4,491.98             | (0.0543) |
| 27.02.2014 | 4,749.87             | (0.0007) |
| 30.01.2014 | 4,753.17             | 0.1141   |

| 30.12.2013    | 4,266.55 | 0.0085   |
|---------------|----------|----------|
| 28.11.2013    | 4,230.73 | 0.0663   |
| 31.10.2013    | 3,967.73 | 0.0076   |
| 30.09.2013    | 3,937.68 | (0.0460) |
| 29.08.2013    | 4,127.48 | 0.0474   |
| 31.07.2013    | 3,940.81 | (0.0399) |
| 30.06.2013    | 4,104.65 | 0.0584   |
| 30.05.2013    | 3,878.07 | 0.1277   |
| 30.04.2013    | 3,438.90 | (0.0421) |
| 31.03.2013    | 3,590.05 | (0.0965) |
| 28.02.2013    | 3,973.28 | (0.0372) |
| 31.01.2013    | 4,126.75 | (0.0219) |
| 30.12.2012    | 4,219.31 | 0.0021   |
| 29.11.2012    | 4,210.58 | (0.0630) |
| 31.10.2012    | 4,493.92 | (0.0111) |
| 30.09.2012    | 4,544.41 | 0.0219   |
| 30.08.2012    | 4,446.87 | 0.0692   |
| 30.07.2012    | 4,159.17 | (0.0905) |
| 28.06.2012    | 4,572.88 | (0.0341) |
| 31.05.2012    | 4,734.33 | (0.0715) |
| 30.04.2012    | 5,098.90 | 0.0218   |
| 29.03.2012    | 4,990.32 | 0.0628   |
| 29.02.2012    | 4,695.41 | 0.1303   |
| 31.01.2012    | 4,153.96 | (0.2099) |
| 29.12.2011    | 5,257.61 |          |
| Actual Return | n        | 0.12%    |