

An Internship Report on

**“A Fundamental Analysis of Stock Valuation of Grameen Phone Limited and Robi Axiata  
Limited and Recommending Investing Decisions”**

Submitted by

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BRAC University

An internship report submitted to the BRAC Business School in partial fulfillment of the  
requirements for the degree of  
Bachelor of Business Administration (BBA)

BRAC Business School

BRAC University

September 2023

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## **Declaration**

It is hereby declared that

1. The internship report submitted is my/our own original work while completing degree at Brac University.
2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I/We have acknowledged all main sources of help.

### **Student's Full Name & Signature:**



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### **Supervisor's Full Name & Signature:**

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**Mohammad Mujibul Haque, *PhD***  
Professor & Associate Dean (Acting Dean)  
BRAC Business School  
BRAC University

## Letter of Transmittal

Mohammad Mujibul Haque, *PhD*  
Professor & Associate Dean (Acting Dean),  
BRAC Business School  
BRAC University  
66 Mohakhali, Dhaka-1212

Subject: Submission of internship Report on “**A Fundamental Analysis of Stock Valuation of Grameen Phone Limited and Robi Axiata Limited and Recommending Investing Decisions**”

Dear Sir,

I am honored for the opportunity to submit this internship report complying with all the requirements of the Bachelor of Business Administration degree at BRAC Business School, BRAC University. I am also grateful for the opportunity to complete my 3-month internship program in the Equity Research department at IDLC Securities Limited. I yearned to work in such an organization as it would enhance and strengthen my passion for finance.

I tried to complete my report by obtaining the most efficient data from trusted sources giving my best efforts and thus, I believe that the report will be enough to meet all the desires.

Sincerely yours,



Juhayer Mahtab  
20104136  
BRAC Business School  
BRAC University  
Date: December 28, 2023

## Non-Disclosure Agreement

This agreement is made to testify that this report does not contain any confidential or sensitive information from the organization and entered into an agreement between IDLC Securities Limited and the undersigned student at BRAC University, Mr. Juhayer Mahtab.



Juhayer Mahtab

ID: 20104136

BRAC Business School

BRAC University

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Tanay Kumar Roy

Head of Equity Research

IDLC Security Limited

## **Acknowledgement**

First and foremost, I would like to express my utmost gratitude to IDLC Securities Limited and the department of Equity Research. However, I would like to mention my on-field supervisor Mr. Tanay Kumar Sarkar, who is the Head of Equity Research. They assisted me in every of my activities during my internship period as well as completing this report. They provided useful insights so that this report could meet all expectations. Secondly, I would like to express my gratitude to my academic supervisor Mr. Mohammad Mujibul Haque, *PhD*, Professor and Associate Dean (Acting Dean), BRAC Business School, and my academic co-supervisor Dr. Abu Saad Md. Masnun Al Mahi, Assistant Professor, BRAC Business School. They reviewed my reports in regular intervals correcting my mistakes and advising me how to represent the report with more vigor. Lastly, I would like to express my gratitude to my family and friends, namely Bushra Mubasher, Fatima Hossain Samiha, Taufiq Ishtiaque, Laiba Tabassum, Atqiya Maisha Talukdar and Namin Shadman Oritro for assisting me in every step so that I could complete my university smoothly.

## **Executive Summary**

In this report, I have done stock valuation for the companies Grameen Phone Limited and Robi using fundamental analysis supported by the top-down valuation approach to recommend investment decisions for the investors. After the valuation, the intrinsic values are compared with the actual market close price dated on 17<sup>th</sup> December, 2023. The investment decision is given based on this comparison; to invest in an undervalued stock and not to invest in an overvalued stock.

In the first part of the report, my internship experience at IDLC Securities Limited is covered. It contains information about my responsibilities and contribution to the organization. It also covers the challenges that I faced and my recommendations to both the organization and students regarding the internship program. It also sheds light on the advantages of this internship program.

In the organization part of the report, the organization's functional departments' practices and performances have been discussed, namely, Finance, Accounting, Marketing, HRM, and Operations. The organization's SWOT analysis and industry favorability using Five Porter's Forces have also been done. Recommendations have been provided based on these analyses. The scope and limitations have also been discussed along with the methodology.

In the project part, as top-down method suggests, the overall economy is discussed taking GDP, population, and unemployment as parameters taking data from 2017 to 2022. Then the telecommunication industry is analyzed using the industry cycle along with the future prospect of the industry. Forecasts have been done based on judgement and statistical reports for the year 2023. Finally, Robi's and Grameenphone's performances have been critically evaluated reviewing financial highlights. Then, the stock valuation is done using the Dividend Discount Model. Growth rate has been adjusted as par the previous analyses. Finally, investment decisions are recommended. The methodology and significance have been discussed discreetly for this part.

At the end of the project part, the stock of Grameen Phone Limited was seen to be undervalued and the stock of Robi was seen to be overvalued. Thus, recommendations were given for investors to buy the stock of Grameen Phone Limited and not to buy, rather sell the stock of Robi. It is also advised that portfolio composition is not taken into consideration in this stock valuation.

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## **Chapter 1: Overview of Internship**

### **1.1 Information of Student**

**Name:** Juhayer Mahtab

**ID:** 20104136

**Program:** Bachelor of Business Administration (B.B.A)

**Major:** Finance

### **1.2 Internship information**

#### **1.2.1 Period, Company Name, Department, Address**

As I was a finance major student and an ardent student of Finance, I decided to do my internship for three months starting from September 12, 2023 to December 12, 2023 at IDLC Securities Limited, a sister concern of IDLC Finance Limited. My workplace was the headquarters of IDLC Securities Limited situated at DR Tower (4<sup>th</sup> Floor), 65/2/2 Bir Protik Gazi Golam Dastagir Road, Purana Paltan, Dhaka 1000. I was assigned as an Equity Research Intern in the Equity Research Department.

#### **1.2.2 Internship Company Supervisor Information**

For the whole period of my internship at the organization, my onsite supervisor was Mr. Tanay Kumar Roy. He is the Head of the Equity Research Department. He joined IDLCSL in 2016 as a research analyst and became the Head of the Department in 2022. He graduated from the Institution of Business Administration IBA, University of Dhaka.

Although I have worked directly under his supervision, my work included communicating and working with the other members of the team as well.

### **1.2.3 Job Responsibilities**

As an equity research intern, my main task was to analyze the financial position of assigned DSE Listed Companies across all sectors. I updated their financial statements to the latest information available from trusted sources like Lankabd, company websites, etc. I also calculated different ratios, such as liquidity ratios, profitability ratios, debt ratios, and equity ratios. Moreover, I was also tasked with writing reports on the financial performance of various companies. UPGDCL is an example among many.

Our work as a research intern was not limited to the boundaries of our country. As a research intern, I was assigned the task of evaluating adverse macroeconomic and financial situations of neighboring countries or similar policy-following countries and comparing that to our own or analyzing the effect on the economy of our country. For example, I was tasked to evaluate the reasons for currency depreciation in Vietnam, Pakistan, and Cambodia and steps to overcome the exchange rate problems in order to have better insights into how currency depreciation can have a significant impact on our economy.

## **1.3 Internship Outcome**

### **1.3.1 My Contribution to IDLC Securities Limited**

IDLC Securities Limited aimed to create a database for Banking and Non-Banking Financial Institutions for a long time. I, as an intern, helped create the database up to the latest information available. Moreover, I also created financial performance reports of some assigned companies based on their financial ratios and other key performance metric tools. I believe these reports and the database will help the company evaluate a DSE Listed Company at a glance and in an easier way.

Moreover, my evaluation of neighboring countries or similar policies following countries will help the other researchers understand various adverse situations the country faces or might be facing in the future. This understanding is not only limited to the reasons but also the possible solutions.

I believe the organization can benefit from the use of these reports and databases to evaluate an industry, company, and finally value stock.

### **1.3.2 Advantages for the Student**

There are innumerable advantages for a student who is doing an internship. Interning at IDCL Securities was no exception. I got to know about many things which I believe are already playing an important role in my self-development.

To start with, I got to know about the basics of corporate culture in our country. Although culture varies from one organization to another, there are some basic elements of culture every organization follows, such as dressing and dining etiquette, communication dos and do nots, interpersonal skills, etc. I got to know about all these by doing internship at IDLC Securities Limited. Moreover, I also got to know how nurturing all these in myself will shape me as a better human overall.

Then, I was always enthusiastic and ardent about finance, specially the stock market and investments. As I worked in a renowned brokerage house, I know how to understand whether a company is performing well or not. I can also understand how to determine whether a company's stock is undervalued, overvalued, or fairly valued and which stocks to buy or not. This knowledge will come to my aid when I am investing in the capital market or I am playing a similar role as a research intern in an organization.

Moreover, I understand when the situation of the capital market of a country will show progress or deteriorate and the affecting factors, such as depreciation or appreciation of currency, political unrest, fiscal or monetary policy, etc.

Lastly, I got to meet many renowned people in this sector and make connections. I believe it will help me in further stages of life.

### **1.3.3 Challenges**

Although there were innumerable benefits, there were some challenges as well. Although the benefits outweigh the challenges, I will still say the challenges also had a significant impact on my internship journey as a whole.

Firstly, the distance between my office from my home took almost two hours to cover by public transport. My home is in Shyamoli and I had to leave my home at 7.30 A.M. to reach my office on

time at 9.30 A.M. But this challenge was overcome due to the opening of Metro Rail on 4<sup>th</sup> November, 2023. The distance could be covered within 15 minutes afterward.

Secondly, the sight of a computer screen for 7 hours straight was painful for the first two weeks. I got mild headaches now and then. Although I was habituated soon afterward. It is very normal to take a few weeks to settle into a new environment.

Lastly, the computer that I was given was very slow for the first week. I believe the softwares were not updated properly as the hardware specifications of the computer were praiseworthy.

#### **1.3.4 Recommendation**

After completing my internship, I strongly recommend IDLC Securities Limited for intern students, specially finance graduates. However, I have some recommendations of my own for future interns and the organization to make the workplace even better.

Firstly, the students are to be well-mannered and communicative. Every employee is very helpful and understanding. If the students communicate their issues or problems well, every supervisor or team member listens and provides a solution.

Secondly, the students should make connections and talk to the team more and more, be it work-related or not. I found the dining to be the best place for this as the whole department and other related departments dine together always for lunch.

Thirdly, IDLC Securities Limited should widen the range of tasks for their research interns. Although the tasks are insightful and didactic, they are repetitive and monotonous after a month or two. This can demotivate the interns and decline their performance progress.

Lastly, IDLC Securities Limited should always keep the computers of the interns updated. For example, I believe having MS Excel 2019 instead of MS Excel 2013 would make a handful of work easier.

## **Chapter 2: Organization Part**

### **2.1 Introduction**

#### **2.1.1 Objective**

This part provides an overall overview of IDLC as a whole, emphasizing IDLC Securities Limited. The management and marketing practices of IDLC Securities Limited are discussed here. Moreover, the operational management practices as well as accounting and information system practices are also discussed. This part also provides insights into the financial performance over the last few years. Lastly, the industry and competitive analysis is done in this part of the project.

#### **2.1.2 Scope**

This part of the report can be studied further in order to know more about the various aspects of the organization and analyze them more in detail. In the future, more data are going to be available for further analysis. If these data can be integrated into this established report, further analysis can provide more valuable results. The organisation can know better about their current adopted strategies for Human Resource Management practices, marketing practices, financial performance and compliance with accounting standards. Hence, they can also work on improvements as suggested or through their further personal observation and judgment.

Thus, this research can be conducted further by both an individual and the organization as a field of study.

#### **2.1.3 Methodology**

In this part, the overview of the organization is done by analyzing its vision and mission statements, core values, and the products and services offered by IDLC SL. Then the management practices are briefly discussed by analyzing the management style, leadership style, compensation system, appraisal method, and how these are factored for IDLC Securities Limited.

The marketing practices are also discussed analyzing their brand promotion and advertising strategies along with studying the marketing channels adopted by the organization.



The accounting and finance practices are analyzed by taking the 3 years data from 2020-2022 under consideration. The different ratios are analyzed to know how the organization is doing from the perspective of financial obligations and standards. The operations management and information systems are also analyzed briefly.

The inferences in this part are made based on available information on the company's and other credible websites providing information about the organization and the industry.

The information that could not be found available on the company websites or other public sources has been taken after interviewing the employees at IDLCSL, mostly known from the research team.

#### **2.1.4 Limitations**

The time for this research was not ample. Thus, many inferences were made by not analyzing them up to a higher extent than they were. This might have provided some results deviating from the standards.

The data taken from the organization were subject to limitations due to confidentiality. This limits the scope of analysis.

The period over which the research was conducted does not reflect the company's performance in diversified economic conditions, such as peak and trough. Moreover, it also does not reflect the significant changes in company's policies and regulations that were adopted to cope with unfavorable situations.

#### **2.1.5. Significance of Study**

This report has notable significance for myself and the organization. I, through conducting this research got to learn about how a brokerage firm functions, specially IDLC Securities Limited, and the strategies taken by such type of firms to remain competitive in the market. I also learned about the limitations such companies have in formulating their strategies as well as the limitations that arise due to the regulatory bodies and external factors surrounding the operation area of the organization. This study makes me knowledgeable about such organizations and also enhances my

knowledge about how to analyze a firm's performance with respect to its marketing, management, financial, accounting, and operations practices.

For the organization, it can review my study and know about their strengths, weaknesses, opportunities, and threats. It can also know whether the external and internal environment is favorable or not and thus take necessary corrective actions. It can know further about its area of improvements that are suggested by me and take corrective actions if they deem necessary. It can know about the factors that are contributing the most to its success and take actions to enhance their contributions as well the factors that are bringing failures and take necessary corrective actions.

## **2.2 Overview of the Company**

IDLC emerged as the country's largest Non-Banking Financial Institution over 30 years ago in 1985. IDLC Group is one of the most acknowledged financial institutions in the industry, with a rigid and diverse presence in Corporate, SME, Retail, and Capital Market segments. Today, IDLC has a major presence and contribution in 19 cities. To add, the organization is offering its services in 35 branches and booths, with over 1300 employees, and to over 45000 clients.

The group has 4 sister concerns at present, namely IDLC Finance Limited, IDLC Asset Management Limited, IDLC Securities Limited, and IDLC Asset Management Limited. IDLC Securities Limited was founded in 2006. It has a proven track record of providing quality customer service, relevant research experience and expertise, strict regulatory compliance, and the highest standard of corporate ethics to not only local but also foreign investors. Functioning over 10 years, the organization has risen to become the country's third-largest stock broker by reliably providing world-class services to its clients. The Bangladesh Securities and Exchange Commission (BSEC) has licensed the brokerage house to act as both a stockbroker and dealer.

### **2.2.1 Vision Statement**

IDLC intends to be the best financial brand in the country as visible in its vision statement "We will be the best financial brand in the country." IDLC Securities Limited has non dedicated vision statement of their own.

### **2.2.2 Mission Statement**

“We will focus on quality growth, superior customer experience, and sustainable business practices.”

IDLC has always focused on quality growth and providing superior customer experience while adopting sustainable business practices. They aim to do so as well in future years to come.

The mission statement of IDLC Securities says, “We help our clients build a Sustainable Future.” Thus, IDLC Securities Limited aims to help the clients in such a way that it builds a sustainable future complying with the sustainability goal of its parent company.

### **2.2.3 Core Values**

Core values of IDLC include

- Integrity
- Customer Focus
- Equal Opportunity
- Trust and Respect
- Passion
- Simplicity
- Eco-Friendly

The core values of IDLC Securities Limited include

- Putting clients’ interests first
- Executing efficient trade operation
- Focusing on knowledge-based brokerage services
- Providing long-term customer value

### **2.2.4 Products and Services of IDLC Securities Limited**

IDLC Securities Limited serves as both a dealer and broker. The services offered by IDLCSL are shortly discussed below:

- i) **Assistance in Opening a BO Account:** BO stands for Beneficiary Owner's account. In order to buy or sell stocks or bonds through IDLCSL a client has to open a BO account with the organization. IDLCSL helps the clients in the entire process.
- ii) **Brokerage Services:** IDLCSL offers clients "Easy IPO" in order to help a company go public. Moreover, it also provides international and premium brokerage services, for example, stock rating, assistance in asset planning, updates on investment dynamics, etc.
- iii) **Investment and Trading Services:** IDLCSL always assists its clients by providing fruitful investment strategies in various options like bonds, equities, close-ended and open-ended mutual funds. It places orders of clients to buy and sell stocks, communicating via text, WhatsApp, or emails as both a broker and dealer.
- iv) **Research Service:** IDLCSL also publishes their analysis on their website regarding various stocks of various companies. It helps the clients better understand the value of the stocks or the growth of the company in the future, resulting in making easy decisions about investment. The organization's relationship managers also address their queries if they have any.
- v) **Depository Services:** IDLCSL along with CDBL, ensures effective and efficient delivery, settlement, transmission, and transfer of securities and funds, as well as transparency and ethical standards for each client complying with government policies.

## 2.2.5 Illustration of IDLC Securities Limited's Highlights

### Financial Highlights of 2022

BDT Mn	2018	2019	2020	2021	2022
Total turnover of IDLCSL	125,934.40	80,529.32	108,112.27	242,703.56	138,939.77
Total turnover of IDLCSL growth (%)	-27.74%	-36.05%	34.25%	124.49%	-42.75%
Total assets	4,934.67	4,541.25	5,214.78	6,053.52	5,619.60
Total assets growth (%)	19.31%	-7.97%	14.83%	16.08%	-7.17%
Total shareholders' equity	3,473.65	3,572.24	3,738.30	4,083.39	4,192.75
Total shareholders' equity growth (%)	11.76%	2.84%	4.65%	9.23%	2.68%
Brokerage commission income	387.85	257.68	357.93	757.23	439.22
Brokerage commission expense	54.48	40.69	48.00	75.54	48.15
Net brokerage commission income	333.37	216.99	309.93	681.68	391.06
Net brokerage commission income growth (%)	-30.62%	-34.91%	42.83%	119.95%	-42.63%
Net interest income	149.26	167.69	128.89	194.88	266.08
Net interest income growth (%)	82.18%	12.34%	-23.14%	51.20%	36.54%
Income from investment	268.00	64.12	140.21	112.38	84.03
Investment income growth (%)	4.76%	-76.08%	118.68%	-19.85%	-25.23%
Total interest and investment income	417.26	231.80	269.10	307.26	350.11
Total interest and investment income growth (%)	23.54%	-44.45%	16.09%	14.18%	13.95%
Operating expenses	237.63	233.45	230.72	302.29	277.52
Operating expenses growth (%)	-4.00%	-1.76%	-1.17%	31.02%	-8.19%
Net profit before tax & provision	518.00	220.94	353.88	692.65	467.88
Net profit before tax & provision growth (%)	-10.02%	-57.35%	60.17%	95.73%	-32.45%
Net profit after tax	365.53	98.58	166.06	345.10	263.32
Net profit after tax growth (%)	-3.67%	-73.03%	68.44%	107.82%	-23.70%
Return on total assets	8.06%	2.08%	3.40%	6.13%	4.51%
Return on equity	11.11%	2.80%	4.54%	8.82%	6.36%

Figure 1: Tabular Illustration of Financial Highlights of IDLC Securities Limited (2018-2022)  
(Source: IDLC Securities Limited Financial Report CY 2022; <https://idlc.com/financial-reports>)

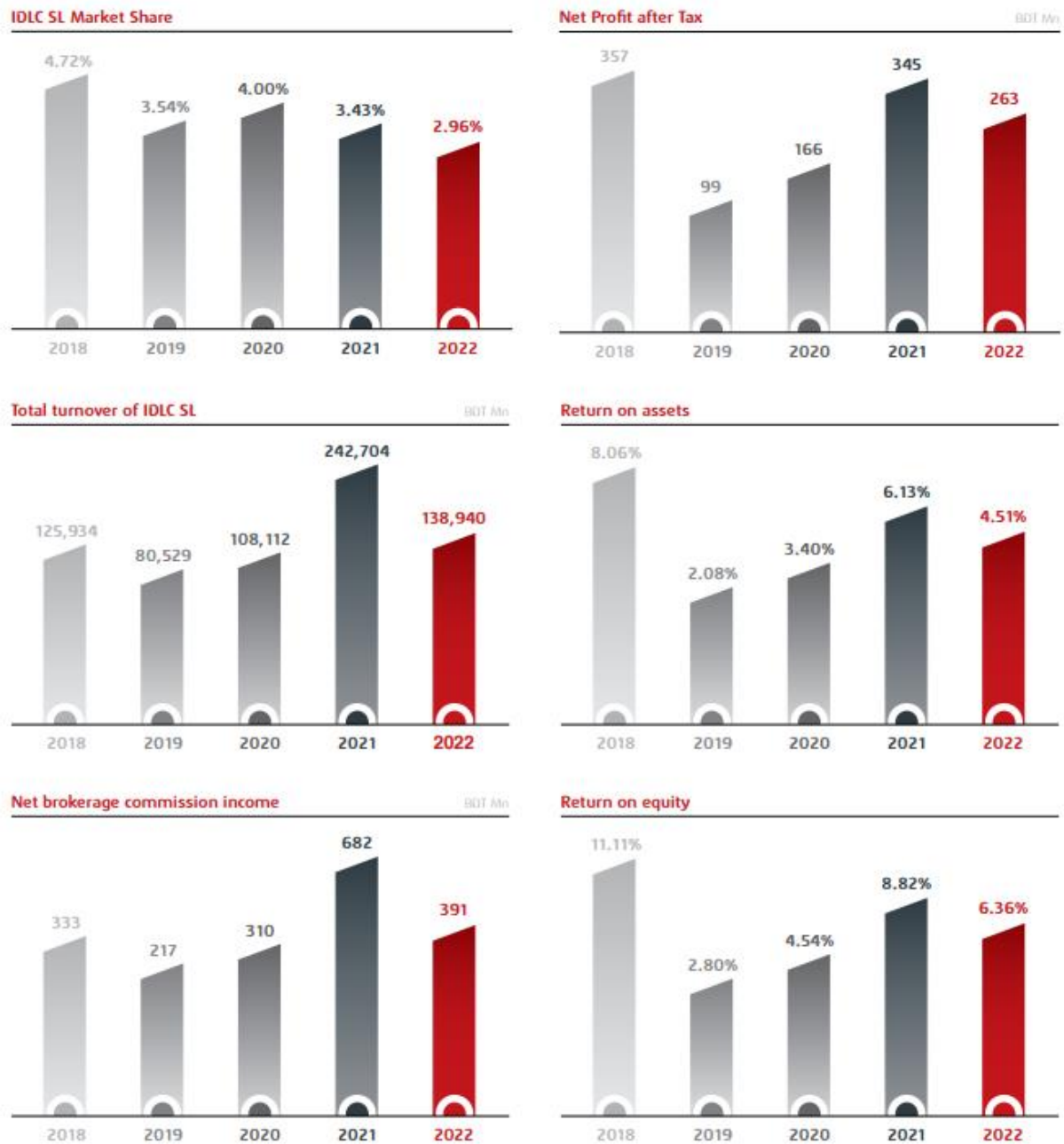


Figure 2: Graphical Representation of Financials of IDLC Securities Limited (2018-2022) (Source: IDLC Securities Limited Financial Report CY 2022; <https://idlc.com/financial-reports>)

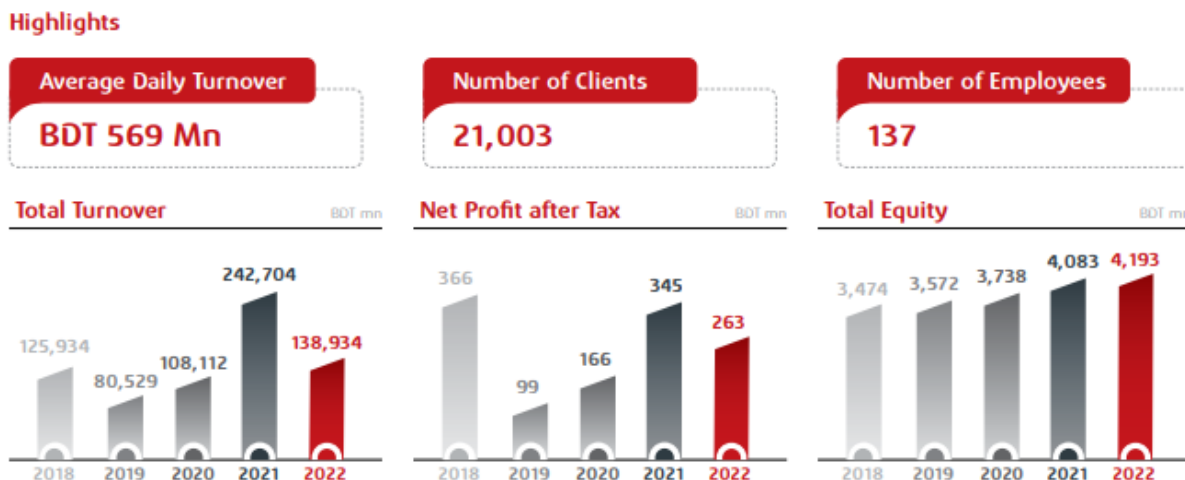


Figure 3: Highlights of IDLC Securities Limited (2018-2022) (Source: IDLC Securities Limited Financial Report CY 2022; <https://idlc.com/financial-reports>)

## 2.3 Management Practices of IDLC Securities Limited

IDLC group always focuses on adopting the best management practices based on the short and long-term goals they want to achieve. They also adopt these management practices focusing on the welfare of their clients, employees, and other stakeholders, at the same time focusing on sustainability.

IDLC Securities Limited, being one of the subsidiaries, follows the same motivation as IDLC, the parent company when adopting their management practices.

### 2.3.1 Management Team of IDLC Securities Limited

The employees of IDLC Securities Limited playing the role of Board of Directors:

- MD. Khalilur Rahman, Chairman of IDLC Group
- MD. Jamal Uddin, Director
- Asif Sad Bin Shams, Director
- Sayed Javed Noor, Director
- Md. Meshbah Uddin Ahmed, Director

The employees of IDLC Securities Limited comprising the Top Management Committee:

- Md. Saifuddin, CFA. Managing Director

- Saifuddowla Shamim, Head of Business
- Kazi Monirul Islam, CFA. Head of Investment and Strategic Planning
- Md. Momin Uddin, Head of International and Institutional Sales
- Shakhawat Hossain, Head of Finance of Operation

The employees of IDLC Securities Limited Research Team:

- Kazi Monirul Islam, CFA. Head of Investment Strategic Planning
- Tanay Kumar Roy, Head of Equity Research
- Shopnil Paul, Research Analyst
- MD. Ifrat Khan, Research Associate
- Faiaz Rumman Khan, Data Analyst

### **2.3.2 Leadership Style and Impact of Leadership Style on Achieving Goals and Objectives**

From my understanding, the leadership style is “laissez-faire”. This means the process by which the activities are carried out without interference.

Here, the top management is the committee of Management which is responsible for making the long-term strategic goals, taking the decisions, and planning the course of actions to achieve those goals. The plans are disbursed by the top management but the employees are responsible for carrying out these plans and achieving the desired results without constant interference. However, feedback is taken from the top management and corrective actions are suggested throughout the process.

Besides, all the teams participate in decision-making at times, and the opinion of every team is equally taken into consideration.

The IDLC Securities Limited’s goals and objectives cannot be achieved through individual contribution. The tasks are to be carried out only by ensuring a cooperating relationship among all the teams and within the teams. Moreover, if the employees are pressured by targets and limited by constraints consistently by top management, the productivity of the employees is greatly hampered. This might lead to a failure in achieving the targeted goals and objectives.



Since the beginning IDLC Securities Limited followed this leadership style and its track record proves that the employees are functioning at their full potential flourishing their creativity.

On the contrary, an autocratic leadership style will do nothing but hamper the productivity of the employees creating major hindrances in achieving desired results and performances. Thus, the leadership style that is followed in the organization creates a positive impact in achieving the targeted goals and objectives ensuring the best performance of the employees.

### **2.3.3 Human Resource Planning Process of IDLC Securities Limited**

Planning is the most important factor for achieving a long-term position in the industry. IDLC Securities Limited believes that human capital holds the most importance in achieving its strategic objectives. Thus, IDLC Securities Limited plans its human resource practices after carefully analyzing the strategic objective of the organization.

However, the focus remains on three questions:

- What is the situation and position of IDLC Securities Limited?
- Where do we want to position the organization in the future?
- How to get to the desired position?

IDLC Securities Limited plans its strategic human resource management plan by first identifying the gaps of the present employees and what set of skills, knowledge, and abilities employees need to achieve the strategic goal of the organization. After identifying the gaps, the organization develops recruiting strategies to recruit top-tier employees based on the required knowledge, skills, attributes, and cultural fit. IDLCSL is committed to providing the needed training and development to produce an effective and efficient workforce to achieve its set of strategic goals and objectives.

### **2.3.4 Employee Engagement**

As a service-oriented business, IDLCSL ensures employee engagement in every way feasible to enhance employees' enthusiasm and adherence to their work and the organization.

Employees can enjoy many enjoyable activities to help them better adjust to their work pressure and monotony. Some activities include ping-pong, a small gym, and a central TV for viewing game scores and news headlines. Moreover, occasions such as New Year, Pohela Falgun, Pohela Boishakh, annual picnics, sporting events such as football and cricket tournaments, and many other events are held to refresh employees.

### **2.3.5 Compensation System**

IDLCSL offers both monetary and fringe benefits through its comprehensive payment system. Employees are allocated a variety of salaries, fringe benefits, and types of remuneration. Essentially, there are:

- Basic salary
- Provision funds
- Health insurance
- Pension plan
- 25 days of mandatory leave per year, including maternity, paternity, and wedding leave.
- Two festival bonuses.
- A monthly mobile allowance.
- Salary review every year.

### **2.3.6 Training and Development Programs**

IDLCSL always arranges different workshops, seminars, awareness programs, online sessions, etc. to make employees known and adjust to current trends. When a new employee joins, he/she goes through an indebted training and development program. Workshops on business etiquette, management and leadership roles, interpersonal skills, problem-solving, time management, and other topics are common. Several awareness programs, such as sexual harassment, office etiquette and behavior, and so on, are held regularly to keep employees informed and up-skilled.

### **2.3.7 Appraisal System**

Employee performance evaluation is very important for achieving the goals of the organization. Every employee is judged based on their performance, execution of responsibilities, and

achievement of goals.

Feedback is typically solicited from managers, peers, team members, and cross-team members. A 360-degree holistic view applied to evaluate employees fairly and IDLCSL also takes necessary and feasible initiatives to increase the performance of underperforming employees and the best performers get several awards, gifts, and benefits.

### **2.3.8 Comment on Management Practices**

To summarize, the management practices of IDLC Securities Limited as well as IDLC finance limited are praiseworthy and have proven to be efficient and effective. These practices have been a vital part of their growth.

## **2.4 Marketing Practices**

IDLC Securities Limited has a team dedicated to its marketing practices following the guidelines of the parent group. The organization adopts different marketing strategies according to need.

The main purpose of the marketing team is to advertise the products and services explaining their benefits in order to portray their attractiveness to the present and potential customers.

### **2.4.1 Target Customers, Targeting and Positioning Strategy**

#### **2.4.1.1 Segmentation of IDLC Securities Limited**

IDLC Securities Limited segments its customers according to demographic, psychographic, behavioral, and geographic factors.

Based on demography, age, and income are critically considered. Based on psychographic factors, lifestyle, social status, and interests are considered the most when deciding the target and potential customers. IDLC Securities Limited provides its services to customers not only residing in our country but also abroad. They segment their customers as foreign customers and resident customers. Lastly, how the customers react to their marketing campaigns and feel about their products and services is another basis of their segmentation.

#### **2.4.1.2 Target Group of IDLC Securities Limited**

IDLC Securities Limited does not necessarily target consumers based on their gender. Rather, they target customers who are in a sound occupation and willing to expand their cash inflow through means of investment. Middle to higher age and income class people are most likely to fall into this category. Although, many young entrepreneurs are willing to expand their business. IDLC Securities Limited has a keen eye on identifying and attracting them.

Moreover, IDLC Securities Limited has ten branches in total around Dhaka, Narayanganj, Sylhet, Chittagong, and a digital booth in Bogura. From this, it can be inferred that IDLC Securities Limited mainly targets residents of mega cities in Bangladesh that have comparatively higher incomes and willingness to invest.

Lastly, IDLC Securities Limited tries to attract people with high sentiments and perceptions of feelings as well as customers who are more interested in the products and services made. Thus, IDLC Securities Limited includes both rational and emotional touches to its advertisements as well as other branding and advertising activities.

#### **2.4.1.3 Positioning Strategy of IDLC Securities Limited**

IDLC Securities Limited has always been vocal about what it offers and why they are superior in providing quality customer service. It tries to create a long-term impact on its customer's mind by stating what they offer and how they plan on offering it. To support, IDLC Securities Limited states what they offer and what comes along with their services on their website. This creates a long-lasting impression in the customer's mind. Besides, this also communicates with their emotional appeals.

## Why Choose Us ?



### WE PUT YOUR INTERESTS FIRST

We prioritize your goals and aspirations above everything else



### FOCUS ON KNOWLEDGE-BASED BROKERAGE SERVICE

Our research team is one of the best in the business - and they are always monitoring all the variables that will affect your growth



### LONG TERM CUSTOMER VALUE

Even with the ups and downs of the market, we work tirelessly to enable the maximum growth of your assets



### MOST EFFICIENT TRADE EXECUTION

We are always at your disposal for any task at hand

Figure 4: Illustration of Positioning Strategy of IDLC Securities Limited (Source: IDLC Securities Limited's Website; <https://securities.idlc.com/>)

### 2.4.2 Marketing Channels

IDLC Securities Limited markets its products and services in free marketing channels, such as social media like LinkedIn, Facebook page, and the company's website. Besides, they also use paid marketing channels like boosting social media pages and posts. Moreover, IDLC Securities Limited also advertises its promotions and offers utilizing TV Commercials. Last but not least, IDLC Securities Limited also attracts customers by means of long banners, X-Banners, and boards.



Figure 5: IDLC Securities Limited Facebook Page (Source: IDLC Securities Limited Facebook Page; <https://www.facebook.com/idlcsbook/>)

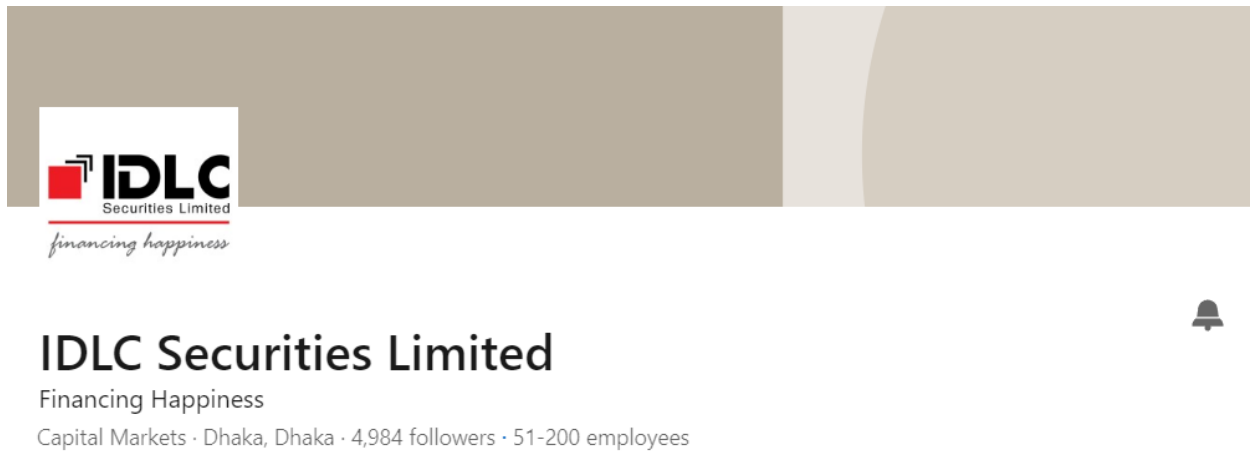


Figure 6: IDLC Securities Limited LinkedIn Homepage (Source: IDLC Securities Limited's LinkedIn Page; <https://www.linkedin.com/company/idlcsl/mycompany/>)

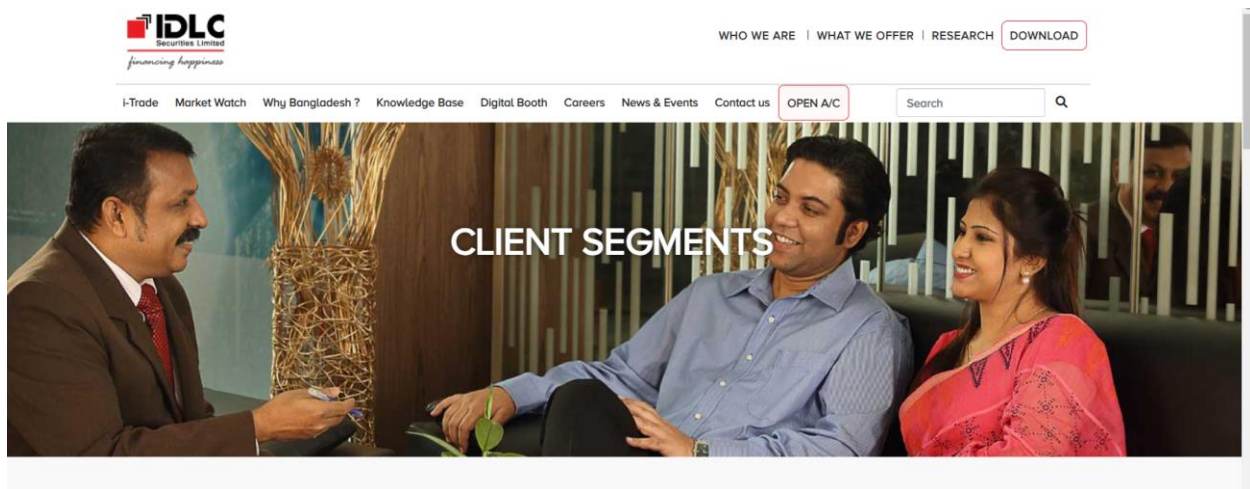


Figure 7: IDLC Securities Limited Website Homepage (Source: IDLC Securities Website; <https://securities.idlc.com/>)

### 2.4.3 Product Development and Competitive Practices

IDLC Securities Limited identifies gaps in the markets and works efficiently to fill those gaps and stay competitive in the marketplace. When developing a new product, IDLC Securities Limited always does a proper evaluation of the product as well as test runs whether it will be useful or not.

One such example is the development of its trading platform, i-Trade. i-Trade is the internet trading platform of IDLC Securities Limited that was developed when it was seen that everything was being digitalized. In this era of technology, customers will not be present face to face to place

orders or state a query. The development of trading platforms allowed brokerage houses to utilize the Internet to make it easy for customers around the world as well as employees. Besides, i-Trade was also a measure for IDLC Securities Limited to remain relevant with the other trading platforms, such as TradeXpress of Lanka Bangla Securities Limited.

IDLC Securities Limited ensured the relevancy and functioning of i-Trade in the marketplace by performing test runs and other important tests before launching it in the marketplace.

#### **2.4.4 Advertising, Promotion and Branding Strategies**

As time passes by, the company utilizes various marketing and branding strategies to gain the attention of people.

Facebook and LinkedIn pages are often updated with new posts. LinkedIn posts a "Morning Newsflash" enlightening the people about various financial news or events taken from financial sections of newspapers. The Facebook page is also updated on a regular basis. IDLCSL also posts about various economic news or trends about the economy of Bangladesh apart from the capital market

IDLCSL communicates their vision and values through their posts. They communicate with the people on an emotional as well as a rational level. For example, holiday greetings messages have always been posted on pages to strengthen corporate relationships with clients and potential customers. IDLC's dynamic website is also used for digital marketing purposes. The posts they create always focus on the brand's colours, values, and visions in order to keep the brand value intact or communicate it to their customers.

Below are some posts from IDLCSL's Facebook and LinkedIn pages:

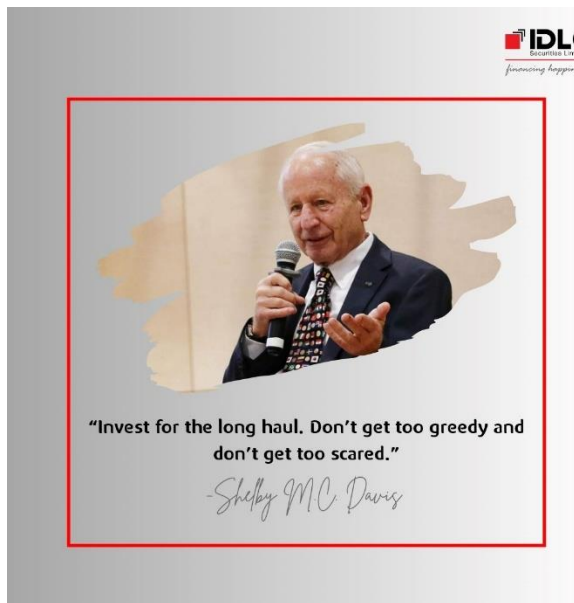


Figure 8: A Facebook Post Highlighting a Quote about Investing by Shelby MC Davis (Source: IDLC Securities Limited's Facebook Page; <https://www.facebook.com/idlcslbook/>)



Figure 9: Eid Wish by IDLCSL Posted on Facebook Page (Source: IDLC Securities Limited's Facebook Page; <https://www.facebook.com/idlcslbook/>)





Figure 10: LinkedIn Post Providing News About the Monetary Policy for H1 FY24 Published by Central Bank (Source: IDLC Securities Limited LinkedIn Page; <https://www.linkedin.com/company/idlcsl/mycompany/>)

#### **2.4.5 Comment on Marketing Practices**

To summarize, the marketing practices of ILDC Securities Limited as well as IDLC finance limited are still lacking many aspects that prove to be even more effective. IDLC Securities Limited should work on adapting more marketing practices complying with the guidelines of the IDLC parent group. Only then, it can attract even more customers and penetrate more in the market.

### **2.5 Financial Performance and Accounting Practices**

#### **2.5.1 Financial Performance**

Financial performance is analyzed by taking the financial statements from 2020 to 2022 into consideration. Ratios, such as Return on Assets, Return on Equity, growth status of total assets, total equity, net profit after tax, etc. are considered.

The analysis is done below:

#### **Financial Highlights (2018-2022)**

BDT Mn	2018	2019	2020	2021	2022
Total turnover of IDLCSL	125,934.40	80,529.32	108,112.27	242,703.56	138,939.77
Total turnover of IDLCSL growth (%)	-27.74%	-36.05%	34.25%	124.49%	-42.75%
Total assets	4,934.67	4,541.25	5,214.78	6,053.52	5,619.60
Total assets growth (%)	19.31%	-7.97%	14.83%	16.08%	-7.17%
Total shareholders' equity	3,473.65	3,572.24	3,738.30	4,083.39	4,192.75
Total shareholders' equity growth (%)	11.76%	2.84%	4.65%	9.23%	2.68%
Brokerage commission income	387.85	257.68	357.93	757.23	439.22
Brokerage commission expense	54.48	40.69	48.00	75.54	48.15
Net brokerage commission income	333.37	216.99	309.93	681.68	391.06
Net brokerage commission income growth (%)	-30.62%	-34.91%	42.83%	119.95%	-42.63%
Net interest income	149.26	167.69	128.89	194.88	266.08
Net interest income growth (%)	82.18%	12.34%	-23.14%	51.20%	36.54%
Income from investment	268.00	64.12	140.21	112.38	84.03
Investment income growth (%)	4.76%	-76.08%	118.68%	-19.85%	-25.23%
Total interest and investment income	417.26	231.80	269.10	307.26	350.11
Total interest and investment income growth (%)	23.54%	-44.45%	16.09%	14.18%	13.95%
Operating expenses	237.63	233.45	230.72	302.29	277.52
Operating expenses growth (%)	-4.00%	-1.76%	-1.17%	31.02%	-8.19%
Net profit before tax & provision	518.00	220.94	353.88	692.65	467.88
Net profit before tax & provision growth (%)	-10.02%	-57.35%	60.17%	95.73%	-32.45%
Net profit after tax	365.53	98.58	166.06	345.10	263.32
Net profit after tax growth (%)	-3.67%	-73.03%	68.44%	107.82%	-23.70%
Return on total assets	8.06%	2.08%	3.40%	6.13%	4.51%
Return on equity	11.11%	2.80%	4.54%	8.82%	6.36%

Figure 11: Financial Highlights of IDLC Securities Limited (2018-2022) (Source: IDLC Securities Limited Financial Report CY 2022; <https://idlc.com/financial-reports>)



Figure 12: Illustrations of Financial Highlights (Source: IDLC Securities Limited Financial Report CY 2022; <https://idlc.com/financial-reports>)

### 2.5.1.1 Highlights of Financial Ratios from 2020-2022

<b>Financial Ratios</b>			
<b>Liquidity Ratios</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Current Ratio</b>	3.52	3.02	3.80
<b>Quick Ratio</b>	2.92	2.59	3.17
<b>Days Sales Outstanding</b>	44.78	47.43	17.13
<b>Efficiency Ratios</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Asset Turnover Ratio</b>	0.12	0.18	0.14
<b>Inventory Turnover Ratio</b>	-	-	-
<b>Receivables Turnover Ratio</b>	5.87	9.71	8.91
<b>Market Value Ratios</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>BVPS</b>	186.91	204.17	209.64
<b>Dividend Yield Ratio</b>	0%	0%	17%
<b>EPS</b>	8.30	17.25	13.17
<b>Profitability Ratios</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Net Profit Margin</b>	26%	32%	33%
<b>Gross Profit Margin</b>	91%	93%	93%
<b>Operating Profit Margin</b>	55%	64%	58%
<b>Return on Assets</b>	3%	6%	5%
<b>Return on Equity</b>	4%	8%	6%
<b>Leverage Ratios</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Debt to Equity</b>	2%	2%	1%
<b>Debt to Assets</b>	2%	1%	1%
<b>Equity to Assets</b>	72%	67%	75%

<b>Times Earned Interest Coverage Ratio</b>	3%	1%	1%
<b>Du Pont Analysis</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
Net Profit Margin	26%	32%	33%
Asset Turnover Ratio	0.12	0.18	0.14
Equity Multiplier	1.39	1.48	1.34
<b>Return on Equity</b>	4%	9%	6%

Table 1: Financial Ratios (Calculations Derived from Information Collected from IDLC Securities' Financial Reports; <https://idlc.com/financial-reports>)

### 2.5.1.2 Analysis of Financial Performance

The capital market did not perform up to expectations in 2022, due to the ramifications of the Russian-Ukraine war and global recessionary forecasts. The DSEX index dropped by 8.1% in comparison to 2021. As a result of the market situation, IDLCSL's turnover recessed by 43% in 2022 compared to 2021. As a result, net brokerage commission income also dropped by 43% in 2022. In response, IDLCSL maintained a strong liquidity position by diversifying the portfolio basket, mitigating overall NPAT de-growth to 23.70%. A positive on the performance however is that interest income increased by 37% due to higher interest income from margin loans, which increased by 28.6% year on year.

From the ratios, it can be inferred that in 2020, assets exceeded the liabilities by 3.52 times. The ratio decreased to 3.02 times in 2021 and 3.80 times in 2022. In 2020, there was least assets worth value, however, the same cannot be said for liabilities. Due to the pandemic, some assets might have been sold off to meet need for funds. However, it can be seen that the company was more able to fund its liabilities in 2020 without external financing than 2021. In 2022, the company took only about 17 days to collect money from its borrowers. That indicates a positive impact on Cash Conversion Cycle. However, in 2021, the company took about 47 days to receive money from its borrowers indicating that it had a negative impact on Cash Conversion Cycle.

The efficiency ratios reflect the best figures in 2021. The company being a brokerage firm, has no records of inventory. In 2021, the firm generated the most revenue from assets and in 2021, the firm generated most revenue from receivables.

The Net Asset Value per share in 2022 is seen to be the most. In 2020 and 2021, the company did not pay out dividend.

Judging by the profitability ratios, the firm generated the most earnings from assets, revenues and equity in 2022. The firm generated the least income in 2020.

In 2022, it can be said that the company borrowed less from market than in 2020 and 2021. As a result, the debt to equity ratio is least as seen to be 1%. In 2020 and 2022, it is seen the equity to assets ratio is highest equally standing at 75% meaning that the company's assets were mostly owned by the investors and owners. In 2021, the company might have leased assets from external parties when they needed additional assets to fund operations.

Lastly, from the Du Pont Analysis it can be seen that the Net Profit Margin, Asset Turnover Ratio and Equity Multiplier are the least in 2020. This justifies the lowest return on equity. However, in 2021, all these three drivers significantly increased resulting in a higher Return on Equity standing at 9%. In 2022, even though the Net Profit Margin was higher, the other two drivers were significantly lower than that in 2021. Thus, the Return on Equity stood at 6%, still higher than that in 2020.

### **2.5.2 Accounting Practices**

The organization's financial statements are prepared based on going concern using accrual accounting principles, except the cash flow statement, which is stated at market value, in accordance with International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS) as adopted in Bangladesh by the Institute of Chartered Accountants of Bangladesh.

Based on the financial statements over the last 3 years, all the eight steps of the accounting cycle are followed.

For depreciation, the organization uses the straight-line depreciation method to record depreciation of its assets.

The board audit committee comprised the same members for the years 2020 and 2021 with Mr. Niaz Habib as the chairman, Mr. Mohammad Mahbubur Rahman FCA, Mr. Md. Kamrul Hasan FCA, Mr. Syed Shahriyar Hasan and Ms. Mahia Juned as members.

In 2022, the board audit committee comprised Mr. Farooq Sobhan as the Chairman, Mr. Mohammad Mahbubur Rahaman FCA, Mr. Md. Kamrul Hasan FCA, Ms. Mahia Juned, and Mr. Sayed Bealal Hossain as members.

The auditors were tasked to appraise the audit procedures and review the management letter, make recommendations about the appointment of external auditors, evaluate the rules and regulations set by the regulatory bodies, and report any rectifications by external auditors.

The external auditors for all the 3 years were Hoda Vasi Chowdhury and Co.

According to the opinion of the auditors, the financial statements fairly presented all the materials of the financial position and cash flows for the year in accordance with International Financial Reporting Standards (IFRS).

### **2.5.3 Comment on Accounting Practices and Financial Performance**

To summarize, IDLC Securities Limited is complying with almost every accounting standard possible. It is creating a very good perception in the eyes of the stakeholders and is a vital part of their growth.

Moreover, the financial performance over the years is remarkable justifying its position as one of the leading brokerage firms in our country. From the ratios and financial highlights, it can be said that the company was seen to be not performing up to expectations in 2020. The reasons can be said to be the pandemic and the deterioration of the economic condition of the whole nation and world. However, the firm recovered very well in 2021 and in 2022, they performed even better than 2021. This ongoing positive performance can be expected in the coming years.

## **2.6 Operations Management and Information System Practices**

In IDLCSL, data handling is essential in order to ensure effective and smooth communication among the employees and also with the clients. Thus, the management of operations and information system practices are very rigid.

### **2.6.1 Quality Assurance, Scheduling and Allocation of Resources**

The quality management techniques are customer-focused and continuous improvement-focused. The decisions are always rational and supported by evidence. The overseeing of all activities is always performed keeping the customers' experience in mind. Moreover, employee engagement and employee participation are always ensured to produce effective outcomes and retain the satisfaction of employees. The benefit over cost for every operation is measured and corrective actions are taken if costs exceed the benefits.

The tasks or operations have a justified but lenient deadline with a feasible target to achieve. Depending on the expected results of an operation, resources are allocated justifiably. It is important to ensure the effective performance of all the departments to achieve the expected results. Thus, resources are distributed evenly unless a department requires additional resources to carry out an operation.

### **2.6.2 Information System**

IDLCSL has a cloud server where every employee has access to view and edit. Every employee has his/her dedicated folder where he/she can upload data or information. Other employees even from separate departments can access the files in need. This results in effective communication within and among the departments. The departments also have separate group chats or platforms for communication within the department.

### **2.6.3 Comment on Operations Management and Information Systems**

To conclude, IDLC Securities Limited has adopted an OM System and Information Systems that have proven to be quite successful for them. But it is also to be noted that there is always room for improvement.



## 2.7 Industry and Competitive Analysis

IDLC Securities is one of the leading brokerage firms in the country. IDLC Securities Limited is a subsidiary of the group IDLC. IDLC group falls under the industry of Financial Institutions, and so does IDLC Securities Limited.

### 2.7.1 Porter's Five Forces Analysis

The Porter's Five Forces analysis is done combining my own judgment along with a report on "Altman's Z Score and Porter's 5 Forces Analysis on NBFIs of Bangladesh" and enlightened below:

- **Threat of New Entrant:** The entry cost is high as it is not possible to meet capital requirements with current deposits. As there are already 23 listed NBFIs, the government is less likely to introduce new NBFIs. As the level of sunk cost is higher, potential entrants think much before entering.
- **Bargaining Power of Suppliers:** The only credible sources of creditors are the banks for the NBFI. The NBFI cannot think about switching as the cost of switching is high the other potential sources are risky and international loans are riskier due to exchange rate fluctuation.
- **Bargaining Power of Buyers:** Customers of NBFIs are the borrowers and they have the utmost trust in banks and other markets unless they cannot avail funds from NBFIs at a lower rate or trading services at a lower commission (Ismail, 2018). Moreover, the number of NBFIs in our country is moderately high for customers to switch to another NBFI for loans or trading services.
- **Threat of Substitute Products:** The central bank of Bangladesh's regulations allow banks to embrace financial services for all areas of business, but most of them can be covered up by NBFI. Product innovation is always feasible with banks, and at present product differentiation is treated as a selling point and factor of success.  
However as a brokerage firm, IDLCSL faces the threat of not substitute, but similar products from other brokerage firms.
- **Rivalry Among Existing Firms:** As there are a sufficient number of NBFIs and brokerage firms, IDLC group and IDLCSL face intense rivalry from other NBFIs or brokerage firms.

So, to conclude, the results of Porter’s Five Forces analysis are reviewed below:

<b>Force</b>	<b>Intensity</b>
Threat of New Entrants	Low
Bargaining Power of Suppliers	High for banks as creditors, low for NBFIs as service providers
Bargaining Power of Buyers	High
Threat of Substitutes	High
Rivalry	High

Table 2: Porter’s Five Forces Derivations for IDLC Securities Limited

## 2.7.2 SWOT Analysis of IDLCSL

### Strengths:

- IDLCSL has a strong brand value and reputation among its customers and many years of experience in overcoming challenges with judgment and intuitions.
- IDLCSL has a huge presence in our country serving customers in different locations operating in 10 branches.
- IDLCSL has prominent employees in customer experience and research departments who can retain customers by providing top-quality service.
- IDLCSL has a wide range of services to offer along with its well-established trading tools.

### Weaknesses:

- IDLCSL has a few marketing strategies. Adopting more might increase its reach among people further.

### Opportunities:

- Bangladesh is a developing country, so business is expanding quickly. Even if the capital market has not grown as expected, it will grow rapidly in the future.

- There was a time in Bangladesh when many investors were uneducated, but now people are more serious about their financial management. And there will come a time when people will be more serious about their financial literacy and knowledge investment.
- Specific blue-chip organizations might appeal to investors due to their alluring valuation levels or high-profit yield.
- An expansion in interest might introduce speculation and potentially open doors in bonds.

### **Challenges:**

- There is a lot of uncertainty regarding the political situation in our country that might affect the economy as well.
- Various risks arise due to regulatory changes or prohibitions among the NBFIs.
- The shift in technology may render the technologies used by IDLCSL obsolete and compel the organization to adopt newer technologies.

## **2.8 Summary and Conclusion**

To conclude, it can be said that IDLC Securities Limited has very rigid HRM and Operations Management procedures that have proven to be very impactful in bringing them success and achievement. Moreover, it is remarkably communicating its vision and values with the stakeholders and clients, all while maintaining the guidelines provided by the parent group and other regulators.

It is financially strong and it will continue to grow no doubt. The accounting principles are followed and that is strongly reflected in their statements which build a positive reputation for them.

Analyzing Porter's Five Forces, the industry is unfavourable but IDLC Securities Limited adopts mitigating strategies to maintain their relevancy in the industry. It recognizes its opportunities and takes corrective actions to better overcome challenges while building its internal strengths.

## **2.9 Recommendations**

It is recommended that IDLC Securities Limited focus more on its marketing strategy. In today's era, a company builds its reputation and attracts customers by advertising its products and services

in every attractive channel. IDLC Securities Limited has a weak marketing plan comparatively. To further solidify this statement, IDLC Securities Limited does not advertise its offer on YouTube which is a very popular platform among the people of our country. Organisations like Foodpanda advertise their offers and products in Youtube and other digital medias that can get public attention. IDLC Securities Limited can adopt that strategy. IDLC Securities Limited does effective advertisement through boards, banners and other traditional methods. These are not effective as strategies adopted by other organisations that are keeping themselves up to date with the ongoing trends.

Moreover, IDLCSL can provide clients with handbooks or small handouts in an easily written language or format to make them understand the basic financial terms well to ensure strong understanding and communication.

IDLC Securities Limited has well detailed financial statements that are easy to understand for the investors and comply with accounting guidelines as well. However, they can be further perfected by representing more information in their notes attached, for example, keeping the specific composition of sources of funds in percentages and their breakdowns.

It is evident from Porter's Five Forces that the overall industry is highly competitive and intense. Thus, IDLC Securities Limited should more emphasis on research on how to stand out from rival organizations like Lanka Bangla. They have to adopt the ongoing trends and enhance the benefits offered by rival firms to stay relevant.

Based on the SWOT analysis, it can be said that IDLC Securities should encourage the already educated investors by applying emotional and rational appeals to increase their customer base. They should also keep themselves updated on how the rival companies are adopting their strategies to increase their customer base.

Lastly, IDLCSL can work on its trading tools and applications to provide an even more friendly interface that's easy to use and interpret for the clients as well as employees.

## **Chapter 3: Project Part**

### **“A Fundamental Analysis of Stock Valuation of Grameen Phone Limited and Robi Axiata Limited and Recommending Investing Decisions”**

#### **3.1 Introduction**

In this project, the valuation of Grameen Phone Limited and Robi Axiata Limited is done for the date ended on 17<sup>th</sup> December 2023. After the valuation, comments are made on whether the stocks are undervalued, over-valued, or fairly valued.

Stock valuation is an important tool for assessing the intrinsic value of a stock. This helps one to understand whether the value of a stock in the market is fairly stated or not according to the perceived intrinsic value. It is to be noted that many factors in this tool of assessment are subjective. But it is better to have a perceived intrinsic value for a stock before investing than to invest by doing no analysis at all.

##### **3.1.1 Background**

At present, the number of investors in the stock market is growing at a much higher rate than it did in the past. However it is seen that once an investor does not get his expected return, he/she sells the shares and never looks back at the stock market.

However, the reason for not getting the expected return is very simple. The investor did not invest in the right stock in the market. To avoid this, people rely on financial analysts or consult investment guidance often. However it is to be noted and understood that the analyst's perceived value might not match the investor. Thus, an investor should know how to value a stock by himself or herself in order to determine his/her intrinsic value for the stock. There are namely two methods to value an organization's stocks, technical analysis and fundamental analysis.

In fundamental analysis, the analyst studies the financials of the company as well as the industry performance and growth and the nation's economy. In technical analysis, the analyst heavily relies on the historical trading data and movement of stock prices and returns.

### 3.1.2 Objective

The objectives of the report work are listed below:

- 1) Using the top-down approach to analyze the organizations' internal and external factors.
  - i) Determine the macroeconomic and microeconomic factors.
  - ii) Scrutinize the telecommunication industry.
  - iii) Analyzing the internal and external environment of the organizations.
- 2) Determining the perceived value of organizations' stock.
  - i) Analyzing the historical trading data of organizations to compare the actual stock price to the intrinsic value.
  - ii) Determining whether the stock is underpriced, fairly valued or overpriced based on the comparison to the price in the market on the actual date.
- 3) Recommending investing decision for the investors.
  - i) Recommending investing decisions combining the above analyses.
  - ii) Recommending the best investment option among the two if there is a room for confusion i.e., both the stocks are undervalued in the market.
  - iii) Justifying the reasons for investing in the suggested stock.

**Overall objective: “Recommending investing decision by doing the company valuation of Grameen Phone Limited and Robi through fundamental analysis using the top down approach.”**

### 3.1.3 Significance

Investors suffer significant losses when they invest in stocks they do not thoroughly research. Before deciding to invest, an in-depth analysis of the organization's financial health is required. However, there are frequently gaps in one's analysis that result in serious consequences. Most of the time, simply studying the organization is insufficient. An investor must research both economic and industry factors. Only then can the investor determine a reliable intrinsic value and make investment decisions.

Non-professional investors rely heavily on professional analysts to make investment decisions for them all over the world. Those who do not invest are concerned with short-term gains rather than

long-term gains. In our country, the telecommunications industry is just one of the public sectors where investment decisions are made without thorough analysis and research. As a result, the investors suffer significant losses.

### **3.2 Methodology**

Firstly, the reasoning behind choosing Grameen Phone Limited and Robi Axiata Limited needs to be addressed. Robi and GP are two listed companies. As a result, information about these companies is publicly disclosed. This information from trusted sources such as the companies' websites can be easily interpreted and used to come to sound conclusions. BSCCL, even after being a listed company is under the strict supervision of the government and its operations are not identical to the above-mentioned two companies. Banglalink and Teletalk have not been selected for valuation as these are not listed companies.

In this report, the fundamental analysis method is used to value the stocks of both companies. In this analysis, the economy of the country, then the industry, and then the organization are analyzed. Analyzing in the exact order is known as the top-down approach which is followed here.

Since the industry is the same for both companies, the analysis done here applies to both companies' valuations. The economy is analyzed by studying the macroeconomic indicators, GDP, employment, and population over the five years 2018-2022. Economic projection is done for the period 2023-2027.

Then the industry is analyzed by determining the industry cycle taken as a combination of the business cycle of the mobile network operators Robi, GP, Teletalk, and Banglalink. Revenue, profit, customer base, and adoption of new technologies are used as key indicators. The prospect of the industry is analyzed for the 5 years, 2023-2027.

The companies' financial standings are determined by analyzing revenue, profit, EPS, inventory level, EBIT, debt level, debt to EBIT, equity, and equity debt.

After all this, the stocks are valued by using the Dividend Discount Model. The growth rate is taken as a subjective measurement but justified for both companies. 2023 is taken as the base year of forecast while the future values up to 2027 are discounted to the present by the required rate of

return. Then the intrinsic values are determined and compared to the actual value of the stock on 17<sup>th</sup> December 2023. Then investment decisions are recommended.

All the data and information used are derived from secondary sources, such as company websites, DSE websites, newspapers, journals, articles, published reports, etc. No primary data is used.

It is to be noted that stock valuation is heavily subjected to assumptions and forecasts. Forecasting error or assumption errors are completely ignored while the calculations are done.

Important formulas used for calculation are:

The required rate of return by the Capital Asset Management Pricing Model has been calculated using:

Required Rate of Return = Risk Free Rate + Market Premium x Beta

Here, Market Premium = Market Return – Risk Free Rate

Systematic Risk Associated with Company's Stock is indicated by Beta

Intrinsic Value = PV of All Projected Dividends + PV of Terminal Value

Here, 2023 is used as the base year for approximation.

$$\text{PV of Projected Dividend} = \frac{\text{Calculated Dividend}}{(1 + \text{Discount Rate})^n}$$

$$\text{Terminal Price (2027)} = \frac{\text{Dividend Value (2028)}}{(\text{Required Rate of Return} - \text{Adjusted Terminal Growth Rate})^1}$$

$$\text{PV of Terminal Value} = \frac{\text{Calculated Terminal Value}}{(1 + \text{Discount Rate})^n}$$



### 3.3 Findings and Analysis

#### 3.3.1 Macroeconomic Analysis

The macroeconomic analysis focuses on analyzing the economic factors of the whole nation that affect every industry. An organization or industry cannot control these factors. It can only mitigate the effects up to a certain extent.

There are many areas for performing a macroeconomic analysis. Here population growth rate, GDP growth rate, and unemployment are discussed.

#### 3.3.2 A Look at Macroeconomic Trends for the Past 5 Years (2018-2022)

Label	2018	2019	2020	2021	2022
Population (million)	161	163	165	167	169
Population Growth		1.24%	1.23%	1.21%	1.20%
GDP (BDT in Billion)	26392	29514	31705	35302	39717
Economic Growth (Real GDP, ann. var %)	7%	8%	3%	7%	7%
Unemployment (% of Population)	4.40%	4.40%	5.20%	5.10%	4.70%

Table 3: Macroeconomic Trends of Bangladesh from 2018-2022 (Source: [www.focus-economics.com](http://www.focus-economics.com), [www.statista.com](http://www.statista.com))

### 3.3.3.1 Analysis of Macroeconomic Parameter: Population and Unemployment as Part of Population

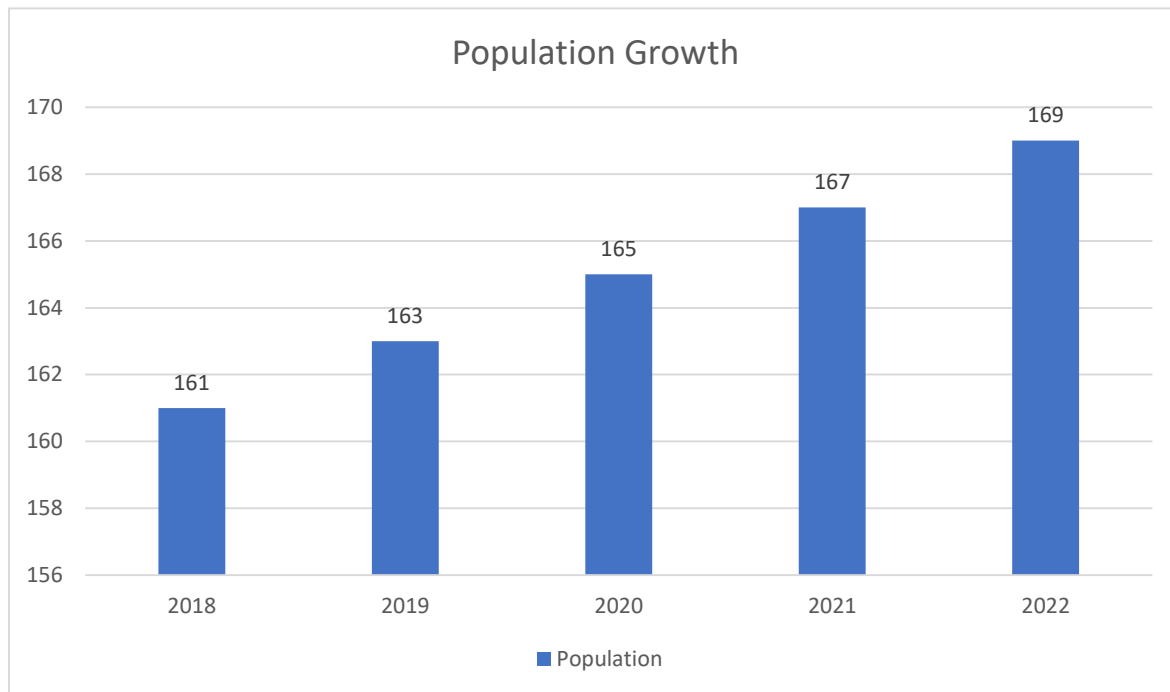


Figure 13: Chart Depicting Population Over the Years (Derived From Table 3)

Population growth has always been an alarming social problem in our country that did not have its negative impacts only on the society but also on the economy. In 1950, the population of the country grew to around 38 million from 29 million in 1900. In the next 50 years, there was an alarming growth rate of 341 percentage. However, from 2000 to 2020 the population increased by only 35 million.

In the past, there was no proper family planning. There was a severe increase in early marriage. The number of illiterate people was very high. In rural societies, the number of polygamies increased as well which was a major cause of the increase of the birth rate. Due to poverty, people thought an increasing number of children meant more sources of income. The more children there are, the more is the source of income. For example, in 1975, there was an increase of almost 18% in population when it grew to 89 million from 77 million in 1975.

However, in recent times population growth has slowed down. The literacy rate has increased by a significant amount. Proper family planning lessons and sex education have been made compulsory in teaching curriculums. Many development programs and social initiatives are taken as well. It is evident from the chart above that the population growth has decreased by a huge margin. In 2019, the growth rate has decreased to 1.24%. Surprisingly, the growth rate has been decreasing ever since. In 2022, the growth rate has gone down to 1.20%.

Another underlying reason behind this is the decrease in fertility rate. It is estimated by the United Nations that in 1972, a family used to have seven children per woman. In 2021, the number declined to 1.98 and the birth rate per woman was 2.3. In 1950, it was 5 births per woman. By 2050, the global fertility rate is projected to decline to 2.1. By 2045, the growth rate is estimated to drop to 0.37% due to the increasing fertility decline (Bhuiyan, 2022).

However, by the reports of June 2023, it is known that there has been a slight increase in fertility rate to 2.15 from 2.05 in 2021 among women aged from 15 to 49. Moreover, there was an increase in new born babies during birth rate that is expected to give rise to our working-age population in the near future. The aging population of Bangladesh has been increasing as well. 9.29% of the total population has been reported to be 60 years or older as of November 2023. According to Dr. Mohammad Mainul Islam, every one people is aged between 15 to 24 years out of 5 people in our country (Pieal, 2023).

Data on the population of Bangladesh by age group is given below:

Label	2018	2019	2020	2021	2022
0-14 years	28.17%	27.56%	26.98%	26.45%	25.97%
15-64 years	5.25%	5.44%	5.63%	5.83%	6.04%
65 or older	66.58%	67%	67.38%	67.72%	67.99%

Table 4: Population of Bangladesh by Age Group (Source: www.statista.com)

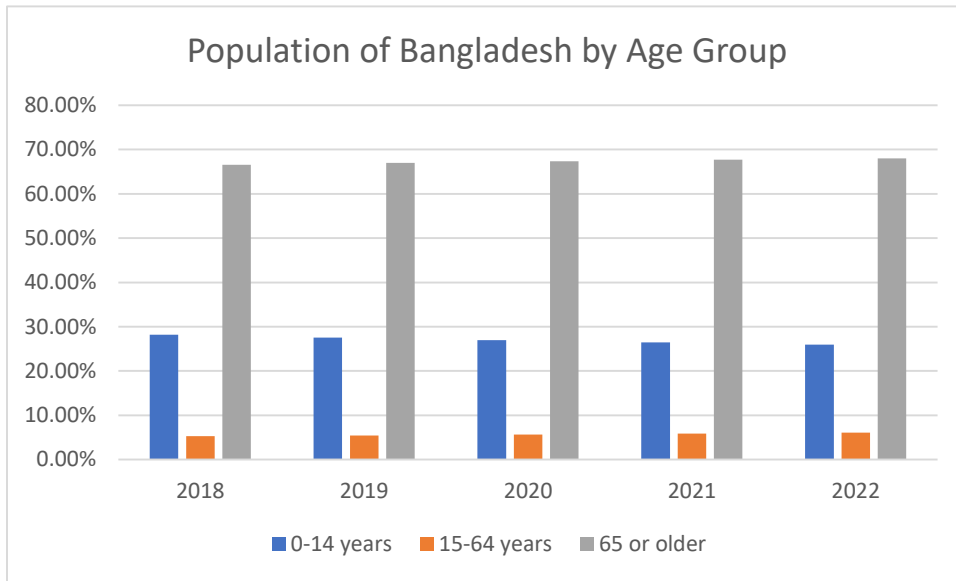


Figure 14: Chart Depicting Population by Age Group from 2018 to 2022 (Derived from Table 4)

Lastly, the unemployment rate remains a concerning matter for our country for decades. The unemployment rate in our country remained the same from 2018 to 2019. During the pandemic, there was a significant layoff and the unemployment rate rose to 5.20%.

However, in 2022, there was a decline in the unemployment rate. The reason is the increase in employment in the agriculture sector. People who lacked the skills to be in the service sector got employed in the agriculture sector. The increase in demand for agricultural needs and production is another driving factor here. That is why employment increased in the industrial sector by 12.1 million and dropped to 27.4 million from 27.5 million (Zaman, 2023).

In the future, the unemployment rate is supposed to rise due to inflation, poor quality jobs, and job security.

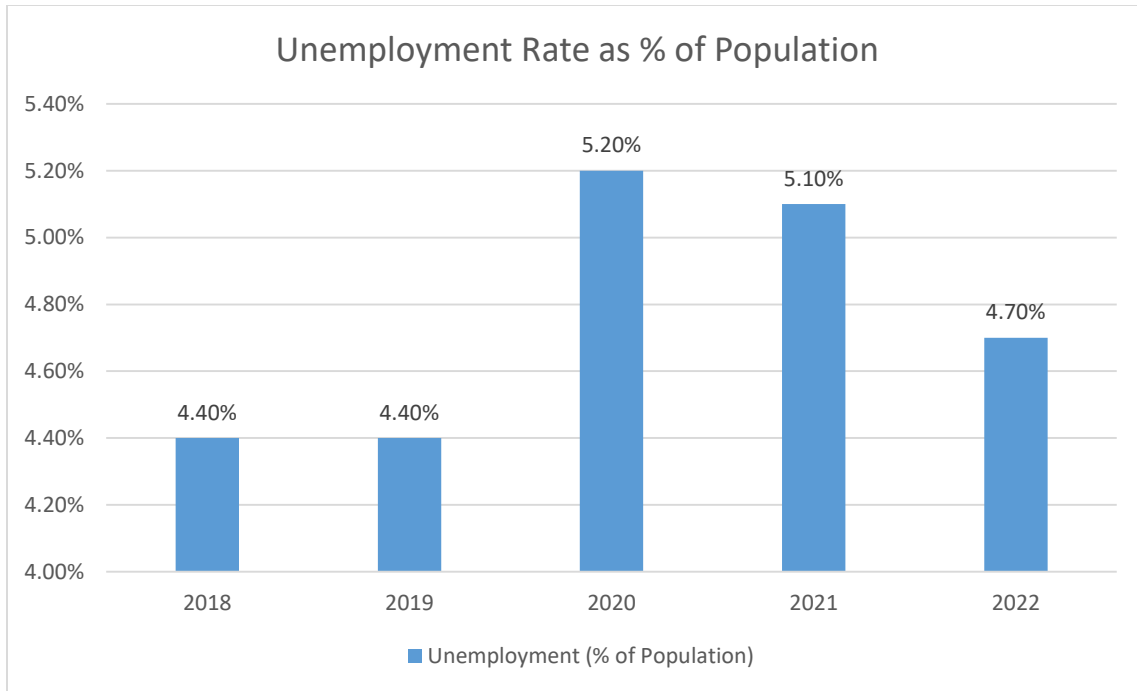


Figure 15: Chart Depicting Unemployment Rate from 2018 to 2022 (Derived from Table 3)

### 3.3.3.2 Analysis of Macroeconomic Parameter: GDP and GDP Growth Rate

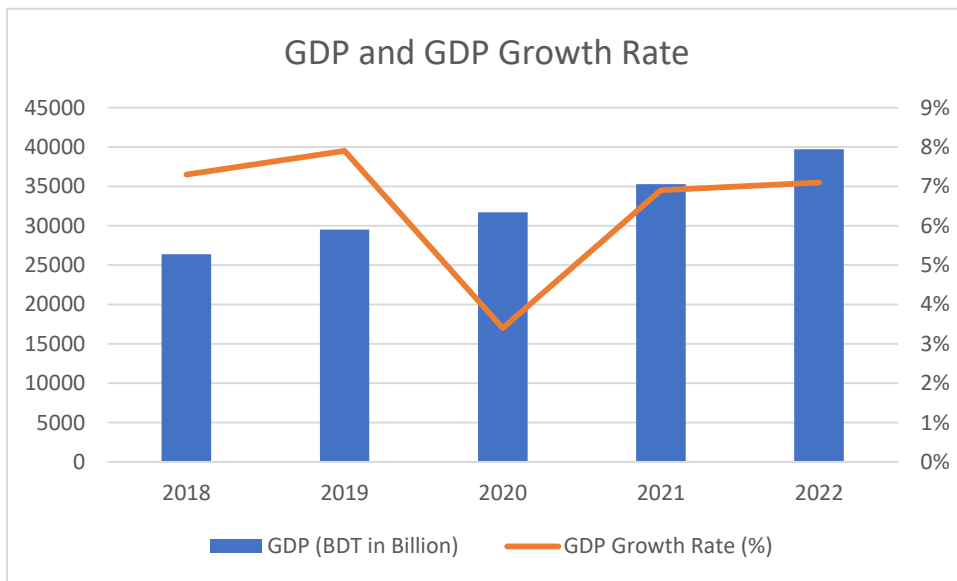


Figure 16: Chart Depicting GDP and GDP Growth Rate from 2018 to 2022 (Derived From Table 3)

From the above chart, it is evident that in the past five years, the country has maintained a positive GDP growth. However, due to the global pandemic, decrease in productivity, and low participation rate, the GDP growth rate seems to be the lowest in 2020 standing at 3%, the GDP being equivalent to a worth of 31,705 billion. The country recovered very well in 2021, evident from the GDP rate standing at 7% which remained the same in 2022.

In 2022, the performance of the nation's productivity was not satisfactory in terms of inflation, GDP surplus, and deficit. Due to the foreign reserve crisis and depreciation of the currency, the inflation problem persists and the threat of recession emerges. However, there seems to be no growth in income. This gap results in slow productivity restricting GDP growth.

As of October 2023, the World Bank lowered its growth projection for Bangladesh to 5.6% in CY2023 and 9% inflation (The Business Standard, 2023). The organization has not been certain as the election is approaching. Moreover, the stabilization of the imports and exports industry is highly dependent on the eradication of fluctuations in currency rates.

However, Bangladesh had a positive growth during the pandemic, making it one of the few Asian countries to be resilient during COVID-19 (Munir et al., 2023). The GDP growth rate per capita in 2022 is higher than that in India.

At present, our country is emerging as a fast- growing market. This is driven by a large domestic market of consumers and a praiseworthy rate of digital adoption. The country houses more than 2500 startups. The consumer market is also increasing and by 2030, it is expected to go up by 15% of the total population. The country is facing its challenges as other countries are facing but the Central Bank has been working to put inflationary pressures at ease.

### **3.3.4 Five-Year Forecast from 2023**

Carefully, analyzing the trends and projections of the macroeconomic parameters above, it can be concluded that the fertility rate will be stabilizing but very slowly. As a result, the population growth rate will continue to slow down. By 2027, it cannot be surely said that the quality of healthcare in our country will be how we want to see it compared to the developed countries of the continent or the world. Thus, even if the fertility rate decline stabilizes and the population grows, the growth rate will be declining. The population age group of elderly people will increase as well

as the population among 15-64 years. Thus, if the nation can utilize the youth generation to their potential the employment rate will increase.

However, declining population growth also means a decline labour force and the country's production. So, GDP might not increase as much as we want it to increase. To make it worse, the unemployment rate is also projected to increase, even though at a declining rate from 2026. As macroeconomic problems and uncertainties remain evident till 2023, there can be layoffs, shortages of jobs, and less demand even in the industrial sector, the unemployment rate increase might be more than expected for 2023 to 2024. After that even though, the rate will not decrease, it might increase at a very slow rate than the year prior as the economy of the country grows and continues to stabilize.

By the year 2023-2024, the problems persisting and related to the exchange rate and inflation will not stabilize. This stabilization is projected to come gradually. As a result, even though the inflation rate might ease up at 8.5% in FY24 and remain almost constant in FY25, by 2027, the inflationary pressure might not be there. Moreover, Bangladesh's economy might be tapped into many of its untapped sectors by then. The country might be a good attraction for investors abroad due to its attractive startup landscape. The unemployment rate may also rise due to these startups giving jobs, overall increasing productivity with uncertainties out of the way.

The macroeconomic trends might look like the statistics shown below:

<b>Label</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
Population (million)	171	173	175	176	177
Population Growth	1.18%	1.17%	1.16%	0.57%	0.57%
GDP (BDT in Billion)	42112	44639	47585	50963	54633
Economic Growth (Real GDP, ann. var %)	6%	6.2%	6.60%	7.10%	7.20%
Unemployment (% of Population)	5.10%	5.20%	5.20%	5.25%	5.25%

Table 5: Macroeconomic Trends of Bangladesh from 2023-2027 (Source: [www.statista.com](http://www.statista.com) and Personal Judgement)

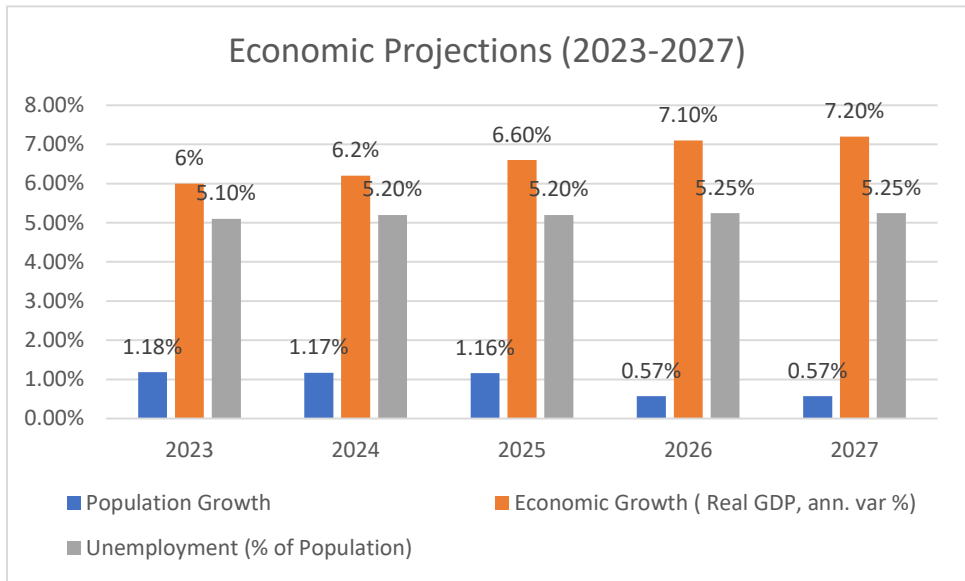


Figure 17: Chart Depicting Macroeconomic Projections from 2023 to 2027 (Source: [www.statista.com](http://www.statista.com) and Personal Judgement)

### 3.4 Industry Analysis: Telecommunication Industry

The telecommunication industry of our country has been remarkably growing over the years. Under the industry, there are three listed companies in the capital market, namely Grameen Phone Limited, Robi, and Bangladesh Submarine Cable Company Limited which houses the mobile operator Teletalk. However, there are other companies belonging to this industry that are non-listed, for example, Banglalink, Airtel, and Bangladesh Telecommunications Company Limited.

Although the competition is intense among the companies in the telecommunication industry at present, it is to be noted that the market is not dominated by major players. However, there are key players in this industry that are also referred to as market leaders, for example, Bangladesh Digital Communications Limited, Robi Axiata Limited, Grameen Phone Limited, and Teletalk Bangladesh Limited within BSCCL.



### 3.4.1 Life Cycle Analysis of the Industry

For analyzing the life cycle of the industry, the business lifecycle of Teletalk Bangladesh Limited, Grameen Phone Limited, and Robi is analyzed. The tools of analysis are yearly sales, customer-based market share, technical change, competitor analysis, and profit.

#### 3.4.1.1 Analysis of Yearly Sales

Revenue (in millions)	2020	2021	2022
Banglalink	45600	47940	53740
GP	139606	143066	150403
Robi	75642	81425	85860
Teletalk	5752	5434	4980

Table 6: Revenue YoY from 2020-2022 (

From the table above, it is seen that the revenue of Grameen Phone Ltd., Robi Axiata Limited, and Banglalink have been rising significantly whereas the revenue growth of Teletalk has been declining by a significant margin (Suhadha Afrin & Suhadha Afrin, 2023).

Below is the revenue growth rate for a more appropriate analysis:

Revenue Growth Rate	2020	2021	2022
Banglalink	0.70%	5.13%	12.10%
GP	-2.82%	2.48%	5.13%
Robi	1.11%	7.64%	5.45%

Teletalk	0.00%	-5.53%	-8.35%
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Table 7: Revenue Growth Rate YoY from 2020-2022 (Derived from Table 6)

It is evident that Banglalink, GP, and Robi have been having positive growth rates whereas Teletalk has a negative growth rate in terms of revenue. Banglalink has remarkable growth rates, compared to GP and Robi. Robi had a declining growth rate in 2022 compared to 2021.

Illustrations of the two tables are provided below:

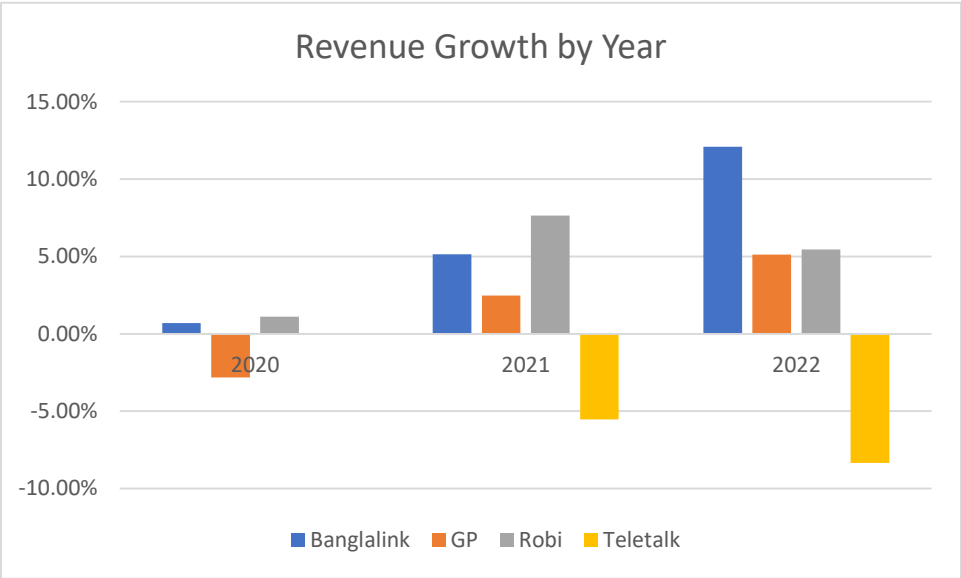


Figure 18: Chart Depicting Revenue from 2020 to 2022 Derived from Table 7)

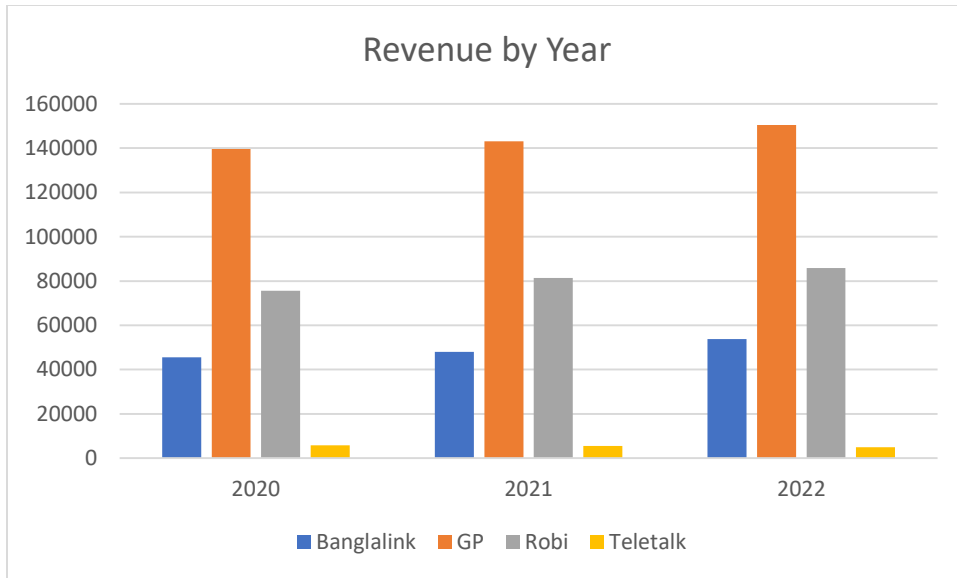


Figure 19: Chart Depicting Revenue from 2020 to 2022 (Derived from Table 6)

### 3.4.1.2 Analysis of Customer Based Market Share

Customer Base (in millions)	2021	2022	2023 (As of October)
Total Subscriber	181.02	180.19	189.67
Banglalink	37.22	39.81	43.09
GP	83.46	79.29	82.19
Robi	53.67	54.4	57.96
Teletalk	6.67	6.69	6.43

Table 8: Customer Base of Mobile Network Operators from 2021 to October 2023 (Source: Publications, <http://www.btrc.gov.bd/>)

It is seen that Grameen Phone has the largest customer base in the industry whereas the customer base of Teletalk is the lowest and declining. Out of 189 million subscribers in October 2023, Grameen Phone Limited alone had almost 83 million subscriptions.

If we look at percentages, Grameen Phone Limited had around 40% market share, Robi held the second place at around 30%, and Banglalink held around 25%. Teletalk barely had 4%.

Customer Base (%)	2021	2022	2023 (As of October)
Banglalink	21%	22%	23%
GP	46%	44%	43%
Robi	30%	30%	31%
Teletalk	4%	4%	3%

Table 9: Customer Base (%) of Mobile Network Operators from 2021 to October 2023 (Derived from Table 8)

Illustration of above tables in graphs are provided below:

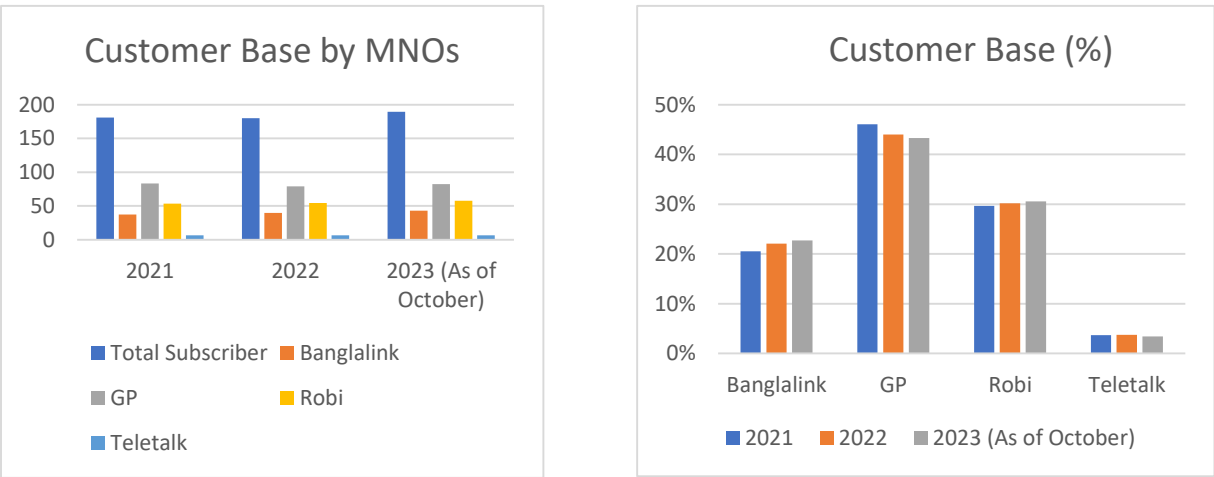


Figure 20: Charts Depicting Customer Based Market Share of Mobile Network Operators from 2021 to October 2023. (Derived from Table 8)

### 3.4.1.3 Analysis of Other Indicators

Despite growth in revenue, Banglalink and Grameen Phone Limited have faced losses. For Banglalink, in 2021, the operating profit dropped by almost 23% to 49 million (The Business Standard, 2022). In the previous the operating profit was 63 million. In 2022, the company had a remarkable revenue growth of 12% (The Daily Star, 2023). The earnings report also suggests a significant rise in the profits.

For Grameen Phone Ltd. the profit declined from 32,299 million in 2021 to 30,089 million in 2022. In 2020, the profit was 37,187 million. Robi’s profit rose from 1,533 million in 2020 to 1,803 million in 2021. It again rose to 1,827 million in 2022.

Banglalink, Robi, and Grameen Phone Limited have been very adaptive to technological changes, integration of new marketing strategies, and product development strategies. Teletalk on the other hand is failing in all three.

### 3.4.1.4 Drawing Conclusion

Company	Inference	Status
Banglalink	High sales growth, declining profit, moderate change in technology, moderately competitive	Growth
GP	High sales growth, declining profit, high changes in technology, highly competitive, retaining customer base	Shakeout
Robi	High Sales Growth, rising profit, new strategies to stay	Growth

Table 10: Industry Analysis  
From the table, it is one in the

Findings of Life Cycle  
above seen that company is shakeout

stage and companies growth		competitive and adopting new technologies		two are in the stage.
Teletalk is in a stage. can be said industry as	Teletalk	Declining sales, profit, customer base, inability to adopt new strategies to stay competitive	Declining	seen to be declining Thus, it that the a whole is

in a growth to shakeout stage. It still has the potential to grow in the near future before it goes to the maturity stage and adopts strategies to retain its competitiveness in the economy.

### 3.5 Prospect of Telecommunication Industry in Bangladesh

The Bangladesh Telecommunication Market size is forecasted to grow to approximately USD 15 billion by 2028 at a compound annual growth rate of almost 24% starting its growth at USD 5.03 billion in 2023 (*Bangladesh Telecom Market Insights*, n.d.). There have been notable changes and developments in favor of digital inclusion. Moreover, the growth of mobile data customers in our country is increasing because of the rising popularity of mobile data services. According to a report by GSMA, Bangladesh’s smartphone adoption rate will rise from 47% as reported in 2021 to 63% by 2025. The subscriber penetration rate will increase to 59% by the end of 2025 from 55% as seen in 2021 according to research titled “The Mobile Economy Asia Pacific 2022”.

The country would be implementing the 5G in locations and stages as needed as stated by the Ministry of Posts and Telecommunications as per a report of Financial Express. It is safe to expect that a capacity of 13,200 Gbps can be received if Bangladesh receives the underwater cable. However, the large cost and investment required to launch 5G outweigh the benefits as of now. Thus, the operators will not take steps to implement 5G just for competitive advantage.

As seen earlier in the macroeconomic projections, GDP will be growing by the end of 2027. To ensure the intended production and GDP growth, the use of communication technologies cannot be disputed. Thus, to support the macroeconomic trends, it can be assumed that the use of smartphones will increase significantly giving rise to mobile subscribers.

It was known from a survey by the Bangladesh Bureau of Statistics and the ICT Department that 89.9% of individuals use mobile phones. Out of them, almost 31% use smartphones (Dhaka Tribune, 2022). As digitalization in our country increases, the old technology adopted by phones will become obsolete. Thus, the number of smartphone users will rise as well as mobile subscribers who want to reap the benefits of mobile data services. From the statistics, it is known that only 8% are not interested in using the internet on mobile phones.

Moreover, it is seen that the population growth rate is expected to decline in the future. However, the projections still show positive growth. Growth of population means more opportunities for customer penetration base. Thus, it can be safely assumed that population growth results in a higher customer base in this industry. According to the survey, 41% of the users are among the age group of 15-64 years. As seen in the macroeconomic analysis, the rate of population growth among the age groups is seen to be highest in this group in the coming 5 years. Thus, the number of subscribers is expected to increase as well.

Moreover, the number of data services internet users might increase as well as the Government is getting ready to implement the 5G network. It gives access to faster download speeds, increased connectivity for multiple devices, and artificial intelligence. Teletalk would get a total of BDT 2365.4 million from the government to introduce 5G services.

According to projected data from the International Telecommunication Union, internet penetration in Bangladesh till 2026 might be like:

Internet Penetration in Bangladesh from 2019 - 2026

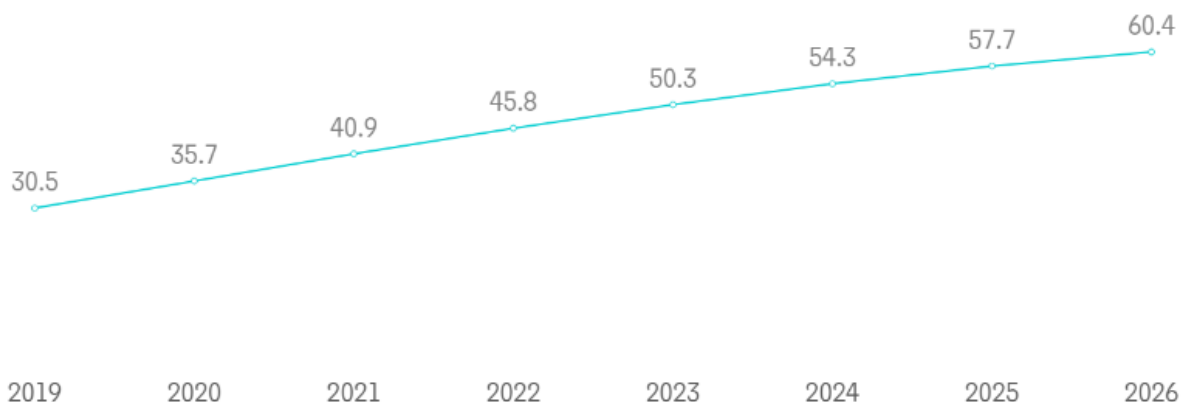


Figure 21: Chart Depicting Internet Penetration in Bangladesh from 2019-2026 (Source: International Telecommunication Union, 2023; <https://www.mordorintelligence.com/industry-reports/bangladesh-telecom-market?fbclid=IwAR0LcM-Teint32iGdamngrWGK6mW9vC3rGY25-XsUD4NevELN03cFKDPG0I>)

As stated earlier the market size is expected to grow at a compound annual growth rate of 24% to USD 15 billion in 2028 from USD 5.03 billion in 2023. If year on year analysis is done, the market size growth trend can be seen like:

Year	2023	2024	2025	2026	2027	2028
Projected Market Size (USD in billion)	5	6	8	10	12	15

Table 11: Projected Market Size of Bangladesh Telco Industry from 2023-2028



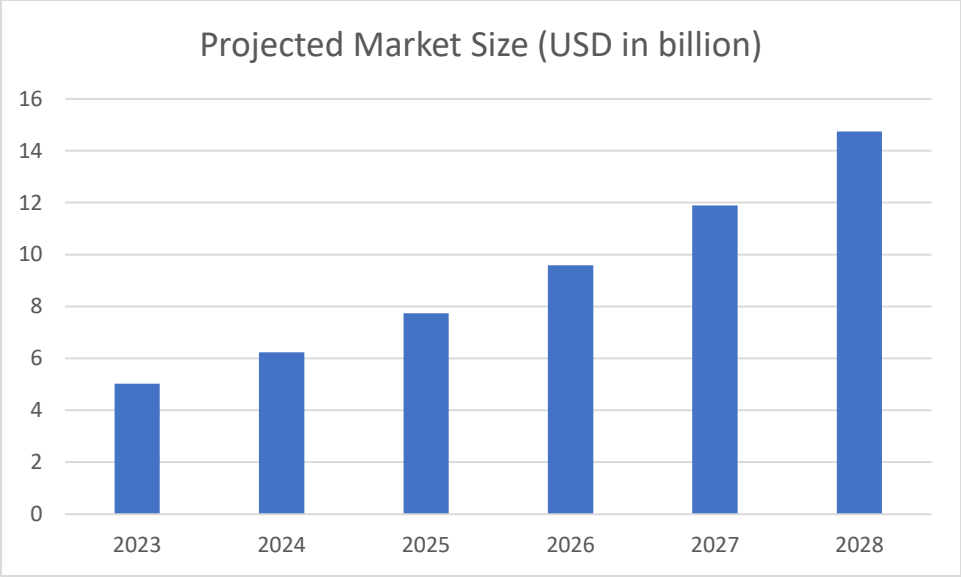


Figure 22: Graph Depicting Projected Market Size of Bangladesh Telco Industry from 2023-2028 (Derived from Table 11)

**3.6 Valuation of Grameen Phone Limited and Robi Axiata Limited**

For doing the valuation of the stock price that ended on 17 December 2023, analyzing the financial strength of Grameen Phone Limited and Robi Axiata is important. The analysis is done by selecting some measurement criteria over the last 3 years.

After that, the intrinsic value of the stock is determined for the year ended on 31<sup>st</sup> December 2023. As the stock prices of telecommunication companies do not fluctuate that much in a month, it is safe to assume that the intrinsic value of shares on 31<sup>st</sup> December 2023 will be more or less the same on 17<sup>th</sup> December 2023.

**3.6.1 Analysis of the Financial Strength of Robi Axiata Limited and Grameen Phone Limited**

The table below shows some financial performance indicators for Robi Axiata Limited for the year 2020 to 2022.

Label	2020	2021	2022
-------	------	------	------

<b>Revenue</b>	75,642,696,000	81,424,640,000	85,859,740,000
<b>Revenue Growth</b>		8%	5%
<b>NPAT</b>	1,553,315,000	1,803,352,000	1,827,199,000
<b>NPAT Growth</b>		16%	1%
<b>EPS</b>	0.33	0.34	0.35
<b>Debt</b>	11,542,322,925	12,267,000,000	14,767,839,020
<b>EBIT</b>	10,526,025,000	9,254,664,000	13,512,482,000
<b>Debt/EBIT</b>	1.10	1.33	1.09
<b>Equity</b>	65,956,131,000	66,207,563,000	67,126,541,000
<b>Inventory</b>	155,881,000	350,814,000	503,914,000
<b>Debt/Equity</b>	0.18	0.18	0.22
<b>ROE</b>	2%	3%	3%
<b>Cash Flow from Operations</b>	25,458,453,000	32,560,580,000	37,274,521,000

Table 12: Financial Measures of Robi Axiata Limited from 2020-2022, (Source: Annual Report, [www.robi.com.bd](http://www.robi.com.bd); The Wall Street Journal, [www.wsj.com](http://www.wsj.com))

It is seen that over the 3 years, the revenue is growing for Robi Axiata Limited. Although the sales are growing at a declining rate. The profit is rising which is allowing the EPS to increase as well. The firm's debt is exceeding its profit generated from operations. However, in 2022, it is seen that there has been a remarkable rise in EBIT. Although the NPAT growth is not as remarkable as interest charges for the debts increased. The firm's equity is increasing and return on equity is increasing as well which means growth for the shareholders. The company is generating remarkable cash flow from its operations over the years.

Now let us take at the same financial highlights for Grameen Phone Limited for the same period:

<b>Label</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>
<b>Revenue</b>	139,606,161,000	143,065,872,000	150,403,469,000
<b>Revenue Growth</b>		2%	5%
<b>NPAT</b>	37,187,037,000	34,129,056,000	30,089,700,000
<b>NPAT Growth</b>		-8%	-12%
<b>EPS</b>	27.54	25.28	22.29
<b>Debt</b>	1,250,582,736	5,486,641,380	5,036,972,622
<b>EBIT</b>	63,439,605,000	63,335,572,000	63,598,187,000
<b>Debt/EBIT</b>	0.02	0.09	0.08
<b>Equity</b>	52,107,614,000	49,878,558,000	46,210,758,000

<b>Inventory</b>	201,068,000	260,230,000	1,088,393,000
<b>Debt/Equity</b>	0.02	0.11	0.11
<b>ROE</b>	71%	68%	65%
<b>Cash Flow from Operations</b>	33,571,965,000	57,813,963,000	63,812,694,000

Table 13: Financial Measures of Grameen Phone Limited from 2020-2022 (Source: Annual Report, [www.grameenphone.com](http://www.grameenphone.com))

It is seen that the sales of Grameen Phone Limited are not growing as much as the rate for Robi Axiata Limited. The profit is not growing at a positive rate as well although the company is generating remarkable profit. The earnings per share is declining due to the declining profit as well. The firm has lower debt leverage than Robi Axiata Limited, which reflects the stabilizing EBIT growth. However, the rise of debt from 2020 to 2021 can be explained as Grameen Phone Limited invested in many modernized resources and network enhancements to improve customer experience to support quality for the increased customer base. The inventory level of Grameen Phone Limited is increasing, although the cost of holding inventory might be causing a decline in EBIT. It is seen that the firm is declining in equity value as well as a significant decrease in R.O.E. This means the firm is declining in its capability to turn equity financing into profits as well as a potential distress for the firm.

**3.6.1.1 Summary of the Analysis of the Financial Strength of Robi Axiata Limited and Grameen Phone Limited**

As seen above Robi Axiata Limited has remarkable growth prospects and expectations in the years ahead. Its growth stage in the business cycle adds to it. The firm is generating high profits and adopting newer strategies. However, the firm has a very high leverage. Although debt financing is usually more attractive to shareholders than equity financing, this is a negative impression on the

shareholders in our country. The shareholders in our country are not as risk-prone as that of other countries. So, they require more return to adjust for the riskiness of the investment.

On the other hand, Grameen Phone Limited has sales growth but declining profit growth. The firm is not that riskier in terms of debt financing as it is seen that the firm is not taking too much debt compared to the cash generated from operations. However, the firm's equity is decreasing as well as R.O.E. The required rate by the investors might not be as high as for Robi Axiata Limited.

Moreover, Robi is in its growth stage whereas Grameen Phone Limited is in its shakeout stage. A growing firm has more attractiveness to investors as they believe the company's growth means maximization for the shareholders. But it is to be noted that Grameen Phone Limited also possesses attraction from investors.

### **3.6.2 Valuation by Dividend Discount Model**

The stock price is valued by using the Dividend Discount Model. It is calculated by taking the summation of the present value of expected dividends from 2024 till 2026 and the present value of share price for the terminal year 2027.

Although the dividend of 2023 is calculated taking the expected growth rate, the dividend is not discounted to present value. Because 2023 is taken as the base year of approximation.

#### **3.6.2.1 Determining CAPM Return**

The required rate of return by the investors have been calculated by using the CAPM model:

$$\text{Required Rate of Return, } K = R_f - (R_m \times \beta)$$

Monthly rate of returns have been calculated taking close prices over the years 2020 to 2021. The prices of Robi Axiata Limited are not available for the year 2020 as they began trading in 2021.

The monthly return has been calculated by the formula:

$$\text{Rate of Return} = \frac{\text{Price at Month 1} - \text{Price at Month 0}}{\text{Price at Month 0}} \times 100$$

<b>Grameen Phone Limited</b>	<b>Robi Axiata Limited</b>	<b>DSEX Index</b>	<b>Grameen Phone Limited</b>	<b>Robi Axiata Limited</b>	<b>DSEX Index</b>
Average Monthly Returns			Average Yearly Returns		
0.73%	-2.26%	1.49%	8.82%	-27.10%	17.90%

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Table 14: Average Monthly and Yearly Rate of Returns for Grameen Phone Limited, Robi Axiata Limited and DSE Index

The average yearly rate of return has been calculated by multiplying the average month rate by 12. This rate has been taken as the market rate for that stock. The average yearly return for Grameen Phone Ltd. has been found to be 8.82% and for Robi Axiata Ltd. it has been found to be -27.10%.

	<b>Beta</b>
GP, DSEX	0.95
Robi, DSEX	0.20
DSEX, DSEX	1.00

Table 15: Beta Calculation for GP and Robi

The beta calculation for GP and Robi has been calculated by using the slope function of Excel taking the monthly returns of GP against DSEX and the monthly returns of Robi against DSEX. Here, all the DSEX Index monthly returns in Table 21 are taken as known X-Axis variables.

During the calculation of Robi’s systematic risk, all the monthly returns of Robi in Table 21 are taken as known Y-Axis variables and all the monthly returns of Grameen Phone Limited in Table 21 are taken as known Y-Axis variables during the calculation of systematic risk of Grameen Phone Limited

The beta for GP is 0.95 whereas for Robi, it is 0.20.

The required rate of return by the Capital Asset Management Pricing Model has been calculated using:

$$\text{Required Rate of Return} = \text{Risk Free Rate} + \text{Market Premium} \times \text{Beta}$$

$$\text{Here, Market Premium} = \text{Market Return} - \text{Risk Free Rate}$$

Systematic Risk Associated with Company’s Stock is indicated by Beta



Company	Risk-Free Rate	Market Return	Market Premium	Beta	CAPM Return
GP	8.33%	17.90%	9.57%	0.95	17.44%
ROBI		17.90%	9.57%	0.20	10.21%

Table 16: Required Rate of Return for GP and Robi

The risk-free rate is taken as the cutoff yield for the 10-year T-bill issued on 21st December 2022, which is 8.33%.

The market premium is the difference between the risk-free rate and market return. The market return is taken as the average yearly return of DSEX which is 17.90%. Then the CAPM return is calculated using the formula stated above. It is seen that the required rate of return by investors of Grameen Phone Limited is 17.44% whereas for Robi Axiata Limited, it is 10.21%.

**3.6.2.2 Determining the Growth Rate**

Here, two-stage growth model is used. It is assumed that the dividend will grow at a constant rate from 2024 to 2026 and then at a constant rate from 2027. The growth rate at the second stage is the terminal growth rate which has been taken for both the companies based on subjective judgement. The terminal growth rate is the growth rate at which the firm is expected to grow indefinitely. As Grameen Phone Limited has better stability overall than Robi Axiata Limited the growth rate is assumed to be 5% whereas for Robi is it assumed to be 2%. However, it is to be noted that these growth rates will be adjusted positively or negatively based on the analysis done on the respective companies, industry, and economy.

The growth rate for Robi Axiata Limited is determined in the following table:

Average Growth Rate	Necessary Adjustment	Adjusted Growth	Terminal Value	Adjusted Terminal Value
19.29%	3%	22.29%	2%	5%

<b>Robi</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>
Dividend	0	0.5	0.7	0.69	0.84	1.03	1.26	1.32	1.39
Dividend Growth Rate (%)			40%	-1%	22%	22%	22%	5%	5%

Table 17: Growth Rate of Robi Axiata Limited

It is seen that Robi has given a dividend of BDT 0.5 per share in 2021 and BDT 0.7 in 2022. The expected dividend for 2023 is taken as the dividend yield from the current price of BDT30. The dividend yield is 2.33%. Then the average growth rate is found taking the average growth rates of 2022 and 2023. The growth rate comes to be 19.29%. This 19.29% is taken as a constant growth until 2026. However, it is seen from previous analysis that the economic projections, industry projections, and financial analysis state that Robi Axiata Limited will have good growth in the coming 5 years. Thus, a growth rate of positive 3% has been adjusted to the constant growth rate and the terminal growth rate is 5%.

This means that the growth rate is 22.29% until 2026 and then from 2027, it is 7%. The dividends expected are BDT 0.69, 0.84, 1.03, 1.26, 1.32 and 1.39 for 2023, 2024, 2025, 2026, 2027 and 2028 respectively.

The growth rate for Grameen Phone Limited is determined in the following table:

Average Growth Rate	Necessary Adjustment	Adjusted Growth	Terminal Value	Adjusted Terminal Value
22.64%	2%	24.64%	5%	7%

GP	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Dividend	13	27.5	25	22.00	22.02	27.45	34.21	42.64	45.62	48.82
Dividend Growth Rate (%)		112%	-9%	-12%	0%	24.64%	24.64%	24.64%	7.00%	7.00%

Table 18: Growth Rate of Grameen Phone Limited

The expected dividend in 2023 has been calculated using the dividend yield which is 7.7%, multiplied by the current market price BDT 286. The average growth rate was found to be 22.64%. However, the projections state that GP will have growth in the future although not as Robi. Thus, the value was adjusted by a positive 2% which gave the adjusted terminal value of 7%. The dividends thus found are BDT 22.02, 27.45, 32.21, 42.64, 45.62 and 48.82 for 2023, 2024, 2025, 2026, 2027 and 2028 respectively.

The dividends for 2023 have been calculated using the dividend yield so that the outliers have no extreme effect on the average growth calculation. Otherwise, there would be unavoidable errors that might just provide wrong results.

### 3.6.2.3 Determining the Intrinsic Value of Share as on December 2023

As we have the growth rate and rate of return that will be used as discount rate as well, the intrinsic value as on December 2023 can be calculated by using the following equation.

$$\text{Intrinsic Value} = \text{PV of All Projected Dividends} + \text{PV of Terminal Value}$$

Here, 2023 is used as the base year for approximation.

$$\text{PV of Projected Dividend} = \frac{\text{Calculated Dividend}}{(1 + \text{Discount Rate})^n}$$

$$\text{Terminal Value} = \frac{\text{Dividend Value (2028)}}{(\text{Required Rate of Return} - \text{Adjusted Terminal Growth Rate})^1}$$

$$\text{PV of Terminal Value} = \frac{\text{Calculated Terminal Value}}{(1 + \text{Discount Rate})^n}$$

Label	Calculated Value	Discount Rate	Time (n)	Discounted Value	Intrinsic Value
Dividend(2024)	0.84	10.21%	1	0.77	<b>21.86</b>
Dividend(2025)	1.03		2	0.94	
Dividend(2026)	1.26		3	1.14	
Dividend(2027)	1.32		4	0.90	
P(2027)	26.72		4	18.12	

Table 19: Intrinsic Value of Robi as of December 2023

Here, using the above formulas in Excel it is seen that the summation of all the projected dividends and share value in 2027 at present is BDT 21.86.

Label	Calculated Value	Discount Rate (k)	Time (n)	Discounted Value	Intrinsic Value
Dividend(2024)	27.45	17.44%	1	23.37	<b>344.32</b>
Dividend(2025)	34.21		2	24.80	
Dividend(2026)	42.64		3	26.32	
Dividend (2027)	45.62		4	23.98	
P(2027)	467.63		4	245.84	

Table 20: Intrinsic Value of GP as of December 2023

It is seen that the summation of all the projected dividends and share value in 2027 at present is BDT 344.32.

Thus, the perceived values of Robi and GP as investors in December 2023 are respectively BDT 21.86 and BDT 344.32.

### **3.7 Summary and Conclusions**

In this project, the fundamental analysis using the top-down approach was used as seen above for the valuation of Grameen Phone Ltd. and Robi. As the approach suggests, a critical analysis of the macroeconomy, industry, and organizations was done.

The analysis for the economy of our country was done by considering the three parameters GDP, population, and unemployment rate from the years 2018-2022. The GDP growth rate, population growth rate population breakup by age groups, and unemployment growth rate were forecasted till 2027. The bridge between the telecommunication industry and the economy of our country is evident from this critical analysis. As it can be seen that the population will be growing among the age group 15-64 years, it can be inferred that the number of mobile phone subscribers will grow as well. On top of that it is forecasted that the GDP will continue to grow meaning more business operations meaning more usage of internet-enabled mobile phones.

Further, from the industry analysis it can be inferred that the whole industry is in its shakeout stage which means there are endless opportunities to grow in the future. The industry analysis is done by analyzing the revenue growth, profit growth, and customer base for all the operators Grameen Phone Ltd., Robi, Teletalk, and Banglalink. It can be concluded from the analysis that Robi and Grameen Phone Ltd. hold dominant positions and market share in the industry.

The five-year prospect analysis of the industry suggests that there will be more mobile phone subscribers. This will lead to an increased customer base among the telecommunication companies. Thus, there will be more potential investors in this industry.

The company valuation for both Grameen Phone Limited and Robi is done by evaluating the financials of Grameen Phone Ltd. and Robi. It can be inferred from the evaluation that both

companies will be showing growth. However, Robi will be showing more growth than Grameen Phone Ltd.

Then, the stocks are valued using the dividend discount model. It is seen that the intrinsic value of Grameen Phone Ltd. has come to be BDT 344.32 and Robi to be BDT 21.86

If we take a look at the DSE website and find the closing price of both companies on 17 December 2023, we can see that Robi closed at BDT 30 and Grameen Phone Ltd. closed at BDT 286.

So, compared to the intrinsic value we got, it can be said that Robi is currently overvalued in the market and Grameen Phone Ltd. is undervalued.

### **3.8 Recommendations**

As the stock of Grameen Phone Ltd. is undervalued, an investor should buy the stock of Grameen Phone Ltd. An investor already owning the stock should hold on to it and not sell it as the market is not giving its fair share of price.

On the other hand, an investor should not buy the stock of Robi as it is overvalued in the market currently. An investor already owning the stock of Robi should immediately sell it as he/she will be given more than what is fair.

It should be noted that these recommendations are provided from the valuation done considering these organizations as separate entities. If a portfolio was constructed, it might have occurred that investing in Robi in more composition might seem to be the better idea. This valuation does not take the concept of portfolio into consideration.

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**Appendix A.**

**Appendix-1: Close Prices, Monthly Return Data of Robi, Grameen Phone Limited and DSEX Index Data, Monthly Return Data of DSEX Index**

<b>Date</b>	<b>Grameen Phone Limited</b>	<b>Robi Axiata Limited</b>	<b>DSEX Index</b>	<b>Grameen Phone Limited</b>	<b>Robi Axiata Limited</b>	<b>DSEX Index</b>
	Price			Monthly Returns		
12/1/2022	286.6	30	6206.81	0.00%	0.00%	-0.47%
11/1/2022	286.6	30	6235.95	0.00%	0.00%	-1.13%
10/1/2022	286.6	30	6307.34	0.00%	0.00%	-3.19%
9/1/2022	286.6	30	6515.11	-0.42%	0.00%	0.90%
8/1/2022	287.8	30	6457.22	-0.17%	0.00%	1.53%
7/1/2022	288.3	30	6359.77	-1.97%	-0.33%	-0.27%
6/1/2022	294.1	30.1	6376.94	-4.23%	2.38%	-0.25%
5/1/2022	307.1	29.4	6392.85	-6.57%	-9.26%	-5.60%

4/1/2 022	328.7	32.4	6771.91	-0.06%	-3.57%	0.21%
3/1/2 022	328.9	33.6	6757.83	-3.26%	-5.62%	0.27%
2/1/2 022	340	35.6	6739.44	-2.75%	-5.07%	-1.66%
1/1/2 022	349.6	37.5	6853.13	0.03%	8.38%	1.43%
12/1/ 2021	349.5	34.6	6756.65	0.34%	-8.95%	0.80%
11/1/ 2021	348.3	38	6703.25	-7.83%	-5.24%	-8.87%
10/1/ 2021	377.9	40.1	7356.04	-0.60%	-2.67%	0.37%
9/1/2 021	380.2	41.2	7329.03	4.85%	-3.51%	6.69%
8/1/2 021	362.6	42.7	6869.24	-4.40%	-0.70%	6.91%
7/1/2 021	379.3	43	6425.25	8.56%	-2.27%	4.47%
6/1/2 021	349.4	44	6150.48	2.46%	-7.76%	11.48%
5/1/2 021	341	47.7	5517.01	0.59%	5.30%	0.68%

4/1/2 021	339	45.3	5479.61	3.20%	2.26%	3.82%
3/1/2 021	328.5	44.3	5278.16	-2.90%	0.91%	-2.34%
2/1/2 021	338.3	43.9	5404.79	-5.61%	-16.22%	-3.81%
1/1/2 021	358.4	52.4	5618.95	3.26%		4.01%
12/1/ 2020	347.1	N/A	5402.06	8.77%		11.00%
11/1/ 2020	319.1	N/A	4866.84	-3.22%		0.43%
10/1/ 2020	329.7	N/A	4846.1	-0.09%		-2.36%
9/1/2 020	330.00	N/A	4963.29	3.64%		1.72%
8/1/2 020	318.4	N/A	4879.14	23.17%		15.77%
7/1/2 020	258.5	N/A	4214.42	8.25%		5.65%
6/1/2 020	238.8	N/A	3989.08	-6.68%		-1.76%
5/1/2 020	255.9	N/A	4060.44	7.16%		1.30%

4/1/2					
020	238.8	N/A	4008.28		

Table 21: Monthly Rate of Returns for Grameen Phone Limited, Robi Axiata Limited and DSE Index (Source: [www.dsebd.org](http://www.dsebd.org), [www.investing.com](http://www.investing.com))

### Appendix-2: Calculation of Beta

**Data Ranges in Excel:** Monthly Returns of Grameen Phone Limited = F4:F36

Monthly Returns of Robi = G4:G36

Monthly Returns of DSEX Index = H4:H36

### Systematic Risk of Grameen Phone Limited

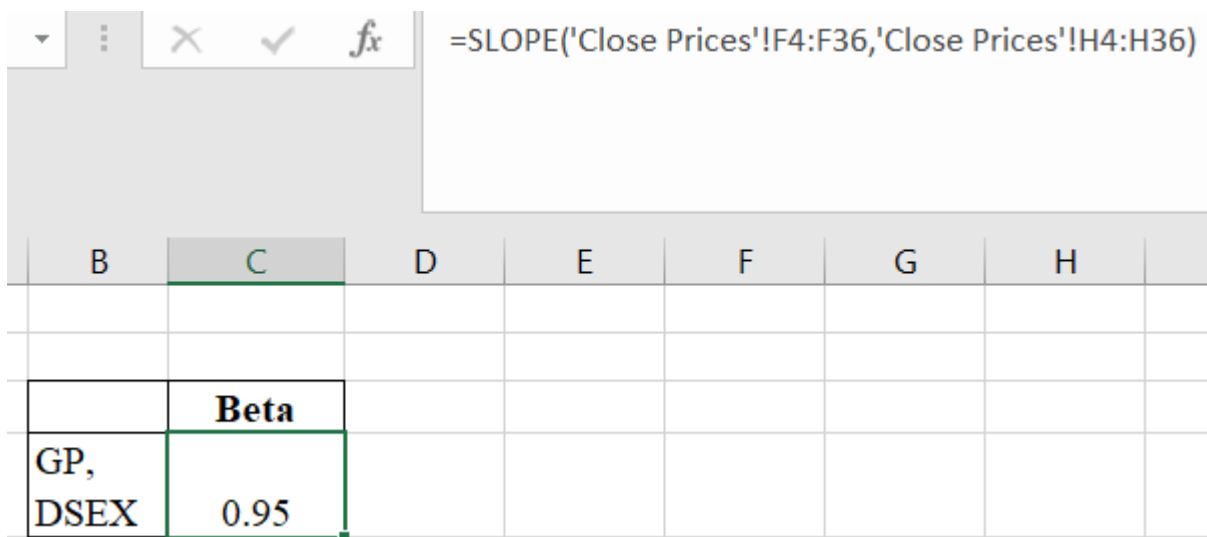


Figure 23: Calculation of Systematic Risk of Grameen Phone Limited Using Slope Function in Excel

## Systematic Risk of Robi

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$=\text{SLOPE}(\text{'Close Prices'!G4:G36}, \text{'Close Prices'!H\$4:H\$36})$

A	B	C	D	E	F	G	H	I
		<b>Beta</b>						
	GP, DSEX	0.95						
	ROBI, DSEX	0.20						

Figure 24: Calculation of Systematic Risk of Robi Using Slope Function in Excel

### **Appendix-3: Proposal of the Report**

#### **“A Fundamental Analysis of Stock Valuation of Grameen Phone Limited and Robi Axiata Limited and Recommending Investing Decisions”**

##### **Objectives:**

The objectives of the report work are listed below:

- 4) Implementing the top-down approach to analyze the organizations’ internal and external factors.
  - i) Analyzing the macroeconomic and microeconomic factors.
  - ii) Analyzing the telecommunication industry.
  - iii) Analyzing the internal environment of the organizations.
- 5) Determining the intrinsic value of organizations’ stock.
  - i) Analyzing the historical trading data of organizations to compare the actual stock price to the intrinsic value.
  - ii) Determining whether the stock is underpriced or overpriced based on the comparison.
- 6) Recommending the investors whether to invest or not.
  - i) Recommending investing decisions combining the analysis from 1 and 2.
  - ii) Recommending the best investment option among the two if both the stocks are undervalued in the market
  - iii) Justifying the reasons for investing in the suggested stock.

##### **Background Information:**

The actual price of a stock is not always perceived to be justified. An investor has his/her own perceived value for a stock, referred to as the intrinsic value. An investor is wise to invest in undervalued stocks where the intrinsic value is higher compared to the actual price as the investor can buy the share at a lower price and have a potentially greater yield. However, investors also face consequences due to flawed analysis.

As a result, fundamental analysis is adopted by most investors as it studies the economic factors such as inflation, interest rates, employment, etc as well the industry factors such as industry size,

industry growth, number of competitors, etc. The analysis is followed by the study of the internal environment of the organizations, for example, quality of management, number of employees, earnings, etc. Combining all these, the investor reaches a perceived value to determine whether the stock is undervalued or overvalued. Fundamental analysis can be both quantitative and qualitative.

### **Preliminary Methodology:**

This report aims to do a fundamental analysis of the stock price of Robi Axiata Limited and Grameen Phone Limited for the day ended on 17<sup>th</sup> December 2023, and thus, recommend to investors whether to invest or not based on the analysis.

The report will present both qualitative and quantitative information. The information will rely on secondary data as data will be collected from already established research, company websites among many other websites, and DSE historical trading prices. Primary data will not be used in this research.

The report will implement a top-down approach for the valuation of both the organizations' stock (1<sup>st</sup>- Macroeconomic Analysis, 2<sup>nd</sup>- Industry Analysis, 3<sup>rd</sup>- Organization Analysis).

For the macroeconomic analysis, analysis of fiscal policy and monetary policy will be done. Moreover, employment growth, inflation, and GDP will also be taken into consideration.

For the analysis of the industry, the business cycle approach and life cycle approach will be taken.

For the analysis of the company, the internal and external environment of the organization will be analyzed along with the rate of return of the organization. The likely tools of analysis will be the number of employees, turnover ratio, and different financial measures of the organizations derived from the financial statements.

In order to find the intrinsic value, different ratios, such as profitability ratios, debt ratios, and liquidity ratios will be measured. Other financial models, such as the dividend discount model, price-to-earnings model, cash flow model, etc will be used. Moreover, the SML graph will also be taken as a tool of analysis.

### **Significance of the Issue:**

Investors incur heavy losses investing in stocks they do not analyze. An in-depth study to assess the financial health of the organization is a must before deciding to invest. However, there often remain gaps in one's analysis that lead to severe consequences. Most of the time, studying the organization is not enough. An investor has to study the economic factors and industry factors as well. The investor can only then determine a reliable intrinsic value and make investing decisions.

It is evident throughout the world that non-professional investors rely heavily on professional analysts to make investment decisions for them. Those who do not, invest think of the gains at present and not the long run. The telecommunication industry in our country is just one of the public sectors where investment decisions are made without in-depth analysis and study. Thus, the investors incur substantial losses.

### **Timeline of Work:**

The main issue will be completed by 20<sup>th</sup> December 2023 as the report requires data to be collected on December 17, 2023.

The data collection will start from the first week of November 2023. The top-down approach analysis will be completed by December 10, 2023. The intrinsic value calculation will be done by December 16, 2023. The analysis of undervalued, overvalued, or fair-valued stock will be completed by December 19, 2023. The whole report will be compiled following the guidelines by December 20, 2023.