

Report On  
M&A advisory process in Bangladesh- a case study on the foreign  
acquisition of a FMCG Company

By

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

BRAC Business School  
BRAC University

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## **Declaration**

It is hereby declared that

1. The internship report submitted is my 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 have acknowledged all main sources of help.

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

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**Nishat Afnan Mim**

Student ID: 18304057

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

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**Mohammad Mujibul Haque, PhD**

Professor and Associate Dean, BRAC Business School

BRAC University

## **Letter of Transmittal**

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

Subject: Submission of Internship Report on M&A advisory process in Bangladesh- a case study on the foreign acquisition of a FMCG Company.

Dear Sir,

Thank you for your guidance during my BUS400 Internship Course. Following your instructions, I have prepared this report during my internship tenure at BRAC EPL Investment Limited. It has been a rewarding experience to apply the theoretical knowledge learned in lectures to real-world scenarios, and I have made an effort to reflect this in the final report.

I believe that I have fulfilled all the requirements outlined in the BBA Internship Guideline Structure and adhered to the directives provided by my company's superiors. I kindly request that you accept this report, and I am available to provide clarification if you have any further questions about its content.

Sincerely yours,

---

Nishat Afnan Mim  
ID - 18104057  
BRAC Business School  
BRAC University  
Date: May 3,2023

## **Non-Disclosure Agreement**

This agreement is made and entered into by and between BRAC EPL Investment Limited and the undersigned student of BRAC University, Nishat Afnan Mim, Student ID: 18304057 of the BBS Department.

## **Acknowledgement:**

I would like to express my gratitude to my supervisor, co-supervisor, and field supervisors at my place of employment for their unwavering support in helping me complete this report.

My supervisor, Mohammad Mujibul Haque, provided assistance and guidance whenever I needed to ensure that the report was accurate. Also, during my internship, I received excellent guidance, collaboration, and supervision from the company's supervisor, Taskin Sadman, who provided essential materials and valuable insights that helped me to write the report. I express my sincere gratitude to both of these individuals for their contributions.

I am thankful for the opportunity to complete an internship at BRAC EPL Investment Limited, one of Bangladesh's top investment banks. Furthermore, I would also like to extend my appreciation to Anup Datta, the Head of Investment Banking department, Shah Rakib Khan, the senior assistant vice president of Investment Banking department and all my colleagues in other departments at BEIL who generously spared their time to teach us about their respective operations. Their invaluable contributions are highly appreciated, and I am sincerely grateful for their support.

Lastly, I want to express my gratitude to my intern colleague, Adnan Bin Mohib at for his assistance during my internship period.

## **Executive Summary**

I structured this report to reflect the knowledge and experience I gained during a four-month internship at BRAC EPL Investment Limited.

The report highlights my practical experience in investment banking activities, which I gained through active participation in my team's daily operations. Through this hands-on experience, I have gained a comprehensive understanding of the industry and have been able to apply the theoretical knowledge gained in my classes to real-life situations.

In addition to offering insight into the company's daily activities, the report also provides a comprehensive evaluation of BRAC EPL Investment Limited. This includes analyzing the company's strengths, weaknesses, and future outlook. By conducting this analysis, I gained a better understanding of the company's position in the market and its potential for growth.

The report features a thorough evaluation process for mergers and acquisitions involving BRAC EPL Investment Limited. This section illustrates how investment banks assess the value of a target company when it is being pursued for acquisition by another company. By understanding this process, I gained a deeper understanding of the role of investment banks in mergers and acquisitions and the skills required to succeed in this field.

Overall, this report highlights the valuable insights and experience gained during my internship at BRAC EPL Investment Limited. Through my involvement in daily activities and the evaluation process for mergers and acquisitions, I gained a deeper understanding of the investment banking industry and the skills required to succeed in this field.

**Key Words:** BRAC EPL Investment Limited, mergers and acquisitions, target company, evaluation process.

# Table of Contents

Declaration .....	2
Letter of Transmittal .....	3
Non-Disclosure Agreement .....	4
Acknowledgement: .....	5
Executive Summary .....	6
List of Tables .....	11
List of Figures .....	12
List of Acronyms .....	13
Chapter 1 .....	15
Student Information.....	15
1.2. Internship Information.....	15
1.2.1. Period, Company Name, Department/Division, Address.....	15
1.2.2. Internship Company Supervisor’s Information .....	15
1.2.3. Job Scope.....	15
1.2.4. Regular Responsibilities .....	16
1.3. Internship Outcome .....	16
1.3.1. Student’s Contribution to the Company .....	16
1.3.2. Benefit of the Student .....	16
1.3.3. Problems/Difficulties Faced During the Internship Period .....	17

1.3.4. Recommendation to the Company on Future Internship.....	17
Chapter 2.....	19
2.1. Introduction:.....	19
2.1.1 Objective:.....	19
2.1.2. Scope .....	19
2.1.3. Methodology:.....	19
2.1.4. Limitations:.....	20
2.1.5. Significance: .....	20
2.2. Overview:.....	20
2.3. Management Practices.....	21
2.3.1. Organogram of BEIL.....	22
2.3.2. Leadership Style:.....	22
2.3.3. Human Resource Planning Process: .....	23
2.4 Marketing Practices:.....	24
2.4.1 Products and Services:.....	24
2.4.2. Price: .....	26
2.4.3 Place: .....	26
2.4.4 Promotion: .....	26
2.5. Financial performance and Accounting Practices.....	27
2.5.1. Financial Performance:.....	27



2.5.2. Financial Risk Analysis: .....	33
2.5.3. Accounting Practices: .....	35
2.6. Operations Management and Information System Practices .....	36
2.6.1. Operations Management.....	36
2.6.2. Information System Practices:.....	36
2.7. Industry and Competitive Analysis .....	36
2.7.1 SWOT Analysis .....	37
2.7.2. Porter’s Five forces Analysis:.....	40
2.8. Summary and Conclusion: .....	41
2.9 Recommendation:.....	41
Chapter 3 .....	43
Project Part .....	43
3.1. Introduction: .....	43
3.1.1. Background Information .....	44
3.1.2. Objectives.....	45
3.1.3. Significance .....	46
3.2. Methodology .....	46
3.3. Findings and Analysis .....	51
3.3.1. Asset Based Approach .....	51
3.3.2. Market Value Approach.....	52

3.3.3. Discounted Cash Flow (DCF)/Income Approach .....	53
3.4. Summary and Conclusion: .....	57
3.5. Recommendation:.....	59
References .....	61
Appendix:.....	61

## List of Tables

Table 1: DuPont Analysis .....	32
Table 2: credit risk .....	33
Table 3: Liquidity Risk .....	34
Table 4: Market Risk .....	35
Table 5: Asset Value Approach .....	51
Table 6: EPS & Sales/share of ABC limited .....	52
Table 7: Equity Value per share- Market Value Approach .....	52
Table 8: Fair Market Value .....	53
Table 9: Cost of Equity .....	55
Table 10: Weighted Average Cost of Capital (WACC) .....	55
Table 11: Discount rate .....	55
Table 12: Free Cash Flow to Firm Valuation .....	56
Table 13: Fair Value of ABC Limited .....	57
Table 14: Sensitivity Analysis: Market Value Approach .....	58
Table 15: Sensitivity Analysis: DCF/ Income approach .....	58

## List of Figures

Figure 1: Organogram of BEIL.....	22
Figure 2: Profitability Ratios .....	28
Figure 3: Leverage Ratios.....	29
Figure 4: Operating Efficiency Ratio.....	30
Figure 5: Liquidity Ratios.....	30
Figure 6:Market Ratio.....	31

## List of Acronyms

BAS	Bangladesh Accounting Standards
BEIL	BRAC EPL Investments Limited
BFRS	Bangladesh Financial Reporting Standards
BGTB	Bangladesh Government Treasury Bond
BO	Beneficial owner
BSEC	Bangladesh Securities and Exchange Commission
CAPM	Capital Asset Pricing Model
CEO	Chief Executive Officer
CFn	Cash Flow from Operations
DSE	Dhaka Stock Exchange
EBIT	Earnings Before Interest and Taxes
EBT	Earnings Before Taxes
EPL	English Premier League
FCFF	Free Cash Flow to Firm
FMCG	Fast-Moving Consumer Goods
HR	Human Resources
ID	Identification

IPO	Initial Public Offering
IT	Information Technology
MANCOM	Management Committee
NWC	Net Working Capital
PV	Present Value
TFCFF	Total Free Cash Flow to Firm
DCF	Discounted Cash Flow
EPS	Earnings per Share
FCF	Free Cash Flow
MIS	Monthly Investment Scheme
NAV	Net Asset Value
ROE	Return on equity
TV	Terminal Value
WACC	Weighted Average Cost of Capital

# **Chapter 1**

## **Overview of Internship**

### **Student Information**

I am Nishat Afnan Mim, currently pursuing a Bachelor of Business Administration (BBA) degree at BRAC Business School (BBS), BRAC University. My student ID is 18304057, and I commenced my undergraduate studies in the Summer of 2018. My academic focus has been on Finance as my major and Economics as my minor.

### **1.2. Internship Information**

#### **1.2.1. Period, Company Name, Department/Division, Address**

I have been given the opportunity to work as an intern at BRAC EPL Investments Limited for four months, beginning on September 15, 2022 and ending on January 15, 2023. The department that I worked in was Investment Banking. The headquarter of BRAC EPL Investments Limited is located at Medona Tower, Level-04, Mohakhali C/A, Dhaka-1213.

#### **1.2.2. Internship Company Supervisor's Information**

As a Finance intern at BRAC EPL Investments Limited, I worked under the direct supervision of Mr. Taskin Sadman, who is currently working as a Senior Executive and reported to Mr. Anup Datta who is the head of Investment Banking Department.

#### **1.2.3. Job Scope**

At BRAC EPL Investments Limited, I had a set work schedule of eight hours per day from Sunday through Thursday. The office time was 9a.m to 5p.m. During my internship period, I gained valuable hands-on experience by applying finance theories and formulas to real- work situations.

In my four months internship period, I got chance to learn from the mentors who are highly experienced and knowledgeable in investment banking field. Our mentor provided us with valuable guidance on tasks such as creating pitch decks, writing equity notes, using various company valuation methods, and conducting research by analyzing annual reports etc. Moreover, I got to learn how to effectively communicate with team members and clients. Overall, the internship at BRAC EPL Investments Limited allowed me to learn skills and practical knowledges needed to work in a corporate sector.

#### **1.2.4. Regular Responsibilities**

During my internship period at BEIL, my daily job was to complete the specific tasks assigned by my mentors such as collecting data, making PowerPoint slides, preparing pitch decks or equity notes etc. Along with these tasks, I assisted my mentors and other members of my department whenever they needed assistance.

### **1.3. Internship Outcome**

#### **1.3.1. Student's Contribution to the Company**

During my internship, I was assigned to many tasks which had a great importance. By providing assistance with tasks such as- data analysis, research, making pitch decks, preparing equity notes, making tombstones for BEIL's website, making list of all potential clients etc., I was able to contribute to the investment banking department's team. Additionally, I provided extra support to my mentors during busy hours which made the tasks done properly on time.

#### **1.3.2. Benefit of the Student**

Being an intern in the investment banking department of BEIL was an extremely valuable experience for me, as it allowed me to gain practical, hands-on experience in a professional work



environment, which enhanced my understanding of the industry's operations. Through my internship, I also learned about the various roles and responsibilities within the company. The internship period allowed me to develop and refine important skills, including critical thinking, problem-solving, communication, and time management skills, among others. Furthermore, I was exposed to financial modeling, valuation, and analysis techniques, as well as various investment vehicles and financial instruments, which helped broaden my knowledge of finance.

### **1.3.3. Problems/Difficulties Faced During the Internship Period**

My internship at BEIL was incredibly valuable and provided me with numerous opportunities for learning, however, I encountered a few challenges as well.

During my internship at BEIL, I was the only female employee in the department for which was initially it was a little intimidating for me to navigate my way around the department and work with a group of all male colleagues. However, I quickly adapted to the work environment and was able to effectively communicate and collaborate with my team members. Another challenge I faced during my internship was the difficulty in applying my theoretical knowledge gained from university to the practical work environment. The real-world application of financial concepts and theories was quite different from what I had learned in the classroom.

### **1.3.4. Recommendation**

Internship is a crucial learning experience for recent graduates or soon-to-be graduates as it provides them with practical work experience. Therefore, it is advisable for BEIL to improve the company of the internship program to enable interns to maximize their learning. To my knowledge, it would be beneficial to assign interns tasks from multiple departments and allow them to rotate through them to gain expertise in different areas and broaden their skill set. Additionally,

conducting sessions or seminars on different topics or subjects for interns would be beneficial as it would help them learn and understand the activities better.

## **Chapter 2**

### **Organization Part**

#### **2.1. Introduction:**

##### **2.1.1 Objective:**

The aim of this chapter is to gain an understanding of BRAC EPL Investments Limited, including its different departments, range of products and services, its strengths and weaknesses. Additionally, this chapter aims to perform a financial assessment to analyze the company's financial performance from 2016 to 2021.

##### **2.1.2. Scope**

As a member of the investment banking department during my internship at BRAC EPL Investments Limited, I gained knowledge of the department's various operations. I was able to observe the interdepartmental collaboration and the company's business practices. This report shows the company's financial performance from 2016 to 2021, including ratio analysis and its financial instruments' risk assessment. Also, I evaluated the company's strengths and weaknesses, and added a few suggestions for future progress.

##### **2.1.3. Methodology:**

The primary data used in this report includes conducting interviews with various departmental heads of BEIL to gather specific information and insights. Additionally, my four-month internship at BEIL, during which I observed the company's procedures and operations and procedures, provided me with firsthand knowledge and insights. As for Secondary data, Annual reports of BEIL and DSE website's data were used.

#### **2.1.4. Limitations:**

As an intern, I faced several limitations that affected the quality and scope of my report. Firstly, my access to information was limited, particularly when it came to confidential data.

Additionally, I had a restricted timeframe to gather and analyze data, which further impacted the report's comprehensiveness. Lastly, the scope of my report was also limited to evaluate the company's financial performance from 2016 to 2021, which may not provide a complete picture of BEIL's overall performance.

#### **2.1.5. Significance:**

This report offers a thorough analysis of BEIL, covering a comprehensive evaluation of its financial performance from 2016 to 2021, as well as detailed information about the products and services offered by BEIL and the activities of each department within the company. Moreover, this report assesses BEIL's strengths and weaknesses, and highlights potential challenges the company may face as an investment bank. Finally, it provides recommendations to help BEIL improve its operations and financial performance. Overall, this report provides valuable insights into BEIL, which can be beneficial to anyone seeking a better understanding of the company.

## **2.2. Overview:**

BRAC EPL Investments Limited (BEIL) is a merchant bank which provides comprehensive investment bank and portfolio management services in Bangladesh. It is a public limited company which was established on April 19, 2000, having a merchant banking license from the Bangladesh Securities and Exchange Commission (BSEC). BEIL has built a strong reputation as a reliable transaction advisor in the market. It has executed many challenging deals and has arranged many debt and equity facilities for its clients. BEIL offers customized and effective solutions to meet the financial needs as well as expectations of its clients. The commitment to ethics and integrity is a

cornerstone of BEIL's operations. The company prioritizes maintaining strong relationships with regulators and other external stakeholders based on trust and transparency. This approach has enabled them to build longstanding partnerships and a solid track record of successful transactions. In 2019, BRAC Bank acquired a 99.95% shareholding of BEIL, further strengthening their position in the fast-growing capital markets of Bangladesh. With their full range of investment banking services, portfolio management, and a strong commitment to ethical practices, BEIL is well-positioned to continue supporting the financial needs of local and foreign clients. The company is focused on optimizing its business growth and profitability in the future by minimizing costs, increasing fee-based income, and improving performance to maintain profitability in the long.

### **2.3. Management Practices**

BEIL operates several departments including portfolio, investment banking, HR, marketing, admin, and IT. Each department is led by a departmental head and is instructed by the CEO, who is accountable to the Board of Directors. The directors of BEIL hold meetings and discuss the overall improvements of the bank. The management team's goal is to maximize long-term profitability for the bank, which has been achieved through the dedication to good governance standards and the significant roles of the Board of Directors, top leadership, and professional employees.

### 2.3.1. Organogram of BEIL

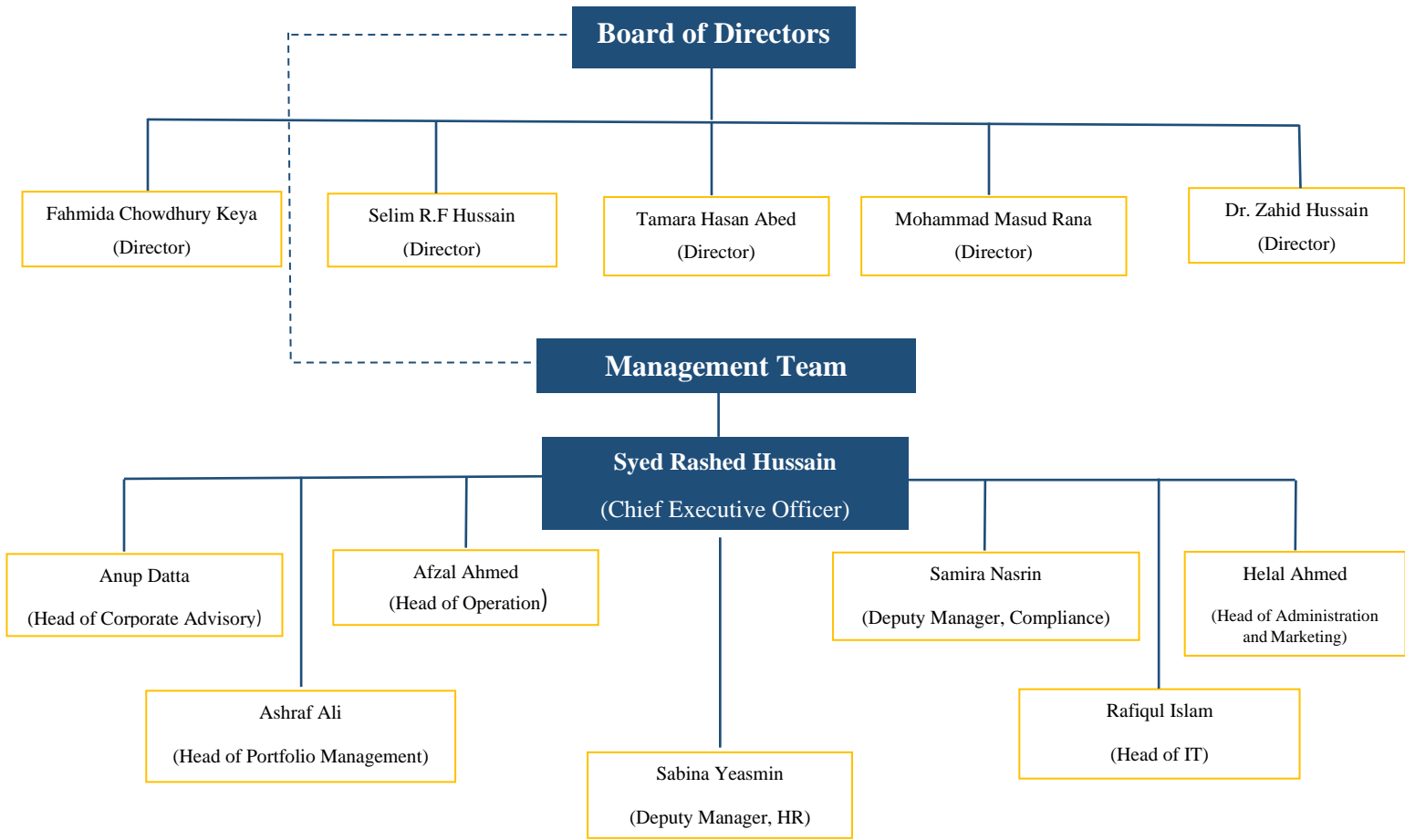


Figure 1: Organogram of BEIL

### 2.3.2. Leadership Style:

As for leadership style, The CEO of BEIL uses both autocratic and participative leadership where the CEO plays an autocratic role to set yearly targets while also encouraging employee feedback to achieve the targets. Also, the CEO, departmental heads and employees discuss and set future targets for the betterment of BEIL.

### **2.3.3. Human Resource Planning Process:**

BEIL recognizes that a company's success depends greatly on its workforce's abilities to fulfill its goals and achieve its long-term vision. As such, selecting the right candidates is a critical aspect of human resource management, which is supported by BEIL's dedicated HR division. BEIL recruits the most skilled candidates who can serve as valuable assets, utilize motivational theories to manage staff, organize and supervise tasks and relationships within the clients.

#### **2.3.3.1 Recruitment and Selection Process:**

BEIL follows a set of guidelines similar to other banks or companies to complete the recruitment process. First, The MANCOM determines and analyzes the necessity of recruiting new employee or employees after discussing with different department heads. The decision also depends on the projected budget of that year. This process is called requisition. After requisition, they conduct Talent sourcing, Preliminary Screening/Interview, Final Interview respectively.

#### **2.3.3.2. Compensation System:**

BEIL follows a fair, competitive and rewarding compensation policy. Along with remuneration (Basic Salary, Home Rent, Medical and Conveyance Allowance, festival bonus) all confirmed employees are eligible for performance bonus. The Board of Directors declares a certain percentage of the pre-tax profit as performance bonus based on the BEIL's profit.

#### **2.3.3.3. Training and Development Initiatives:**

According to BEIL, training is not an expense but an investment. It offers both Practical training and Academic training. The training program includes: 1. Induction Training, 2. On-Site Training, 3. Job Specific Training, 4. Need Based Training and 7. Mentoring program by supervisors.

## **2.4 Marketing Practices:**

The 4 Ps which refer to the marketing mix is a framework used to create a comprehensive and effective marketing strategy. The 4 Ps of BEIL are:

### **2.4.1 Products and Services:**

As a merchant bank, BEIL delivers all the services that a traditional merchant bank offers. It has a wide range of investment banking services. Along with that, BEIL is serving more than 4600 clients' portfolios from seven locations across the country.

Products and Services Provided by BRAC EPL Investments Limited are discussed below:

#### **Portfolio Management Department**

BEIL offers two types of portfolio management services: Investor Discretionary Portfolio Management and Manager Discretionary Portfolio Management. They are discussed below:

##### **1. Investor Discretionary Portfolio Management:**

Investor Discretionary Account resembles a BO (Beneficial Owner) Account. In this regard, BEIL provides two products- Cap Edge and Cap Cash. (BRAC Bank Annual Report , 2021)

##### **2. Manager Discretionary Portfolio Management:**

Under Manager Discretionary Account, BEIL offers Managed Cap Edge product, whereby the authority to take all pertinent decisions regarding most aspects of portfolio management vests with the portfolio manager (BRAC Bank Annual Report , 2021)

#### **Investment Banking Department**

In 2021, BEIL's Investment Banking Department expanded its offerings to provide a complete suite of investment banking solutions. Investment Banking Services are as follows:



▪ Initial Public Offering	▪ Private Equity
▪ Arrangement of Debt Securities	▪ Direct Listing Services
▪ Repeat Public Offering	▪ Underwriting Services
▪ Arrangement of Quasi-debt Securities	▪ Mergers & Acquisitions
▪ Rights Issue	▪ Corporate Advisory
▪ Syndicated Loan Arrangement	▪ Capital Raising

(BRAC Bank Annual Report , 2021)

### **Wealth Management Department**

Wealth management department offers the investment strategies that aims to maximize clients' wealth while balancing risk and return by diversifying their investment portfolio across different asset classes. Some of the products that BEIL Wealth Department offers are:

#### 1.The Monthly Investment Scheme (MIS):

The Monthly Investment Scheme (MIS) is an investment strategy that involves disciplined investing in strong equities by wealth managers, without concern for market volatility or timing. Clients can invest money on monthly or quarterly basis. The MIS strategy is focused on equities, and experienced wealth managers invest clients' funds in blue-chip stocks, growth stocks, and stocks with high dividend yields.

#### 2.The Cap Guarantee Edge:

The Cap Guarantee Edge is a specialized fund managed by the investment manager to protect the principal of investors from any losses. Any losses incurred in the client's investment will be absorbed by the BEIL. This strategy is debt-driven, and the analyst team of BEIL invests client

funds in government securities, AA-rated debt instruments, blue-chip stocks, and depository products.

#### **2.4.2. Price:**

Investment Banks prices are commissions, fees and interest rate that they charge for their services and products. For IPO related services such as- underwriting, advisory, and other related services, BEIL usually charges a fee of up to 1% of the total issue size. In the portfolio management department, there is typically a management fee charged by the investment manager, which can be around 1.5% of the assets under management. Furthermore, there is typically a settlement fee for each transaction made when buying or selling securities, which is often around 0.4% per 100tk of trade value. Additionally, if investors take a margin loan to invest in securities, they are charged an interest rate on the amount borrowed by the company which is as per the industry standards.

#### **2.4.3 Place:**

BEIL has seven offices, including a corporate head office located in Mohakhali and six branches located at Gulshan in Dhaka, Chittagong, Sylhet, Chowmuhani, and Comilla.

#### **2.4.4 Promotion:**

BRAC EPL Investment Limited utilizes digital marketing platforms such as Facebook, LinkedIn, and Instagram to promote their services. They use various media outlets to publish press releases and news related to their activities, achievements, and services. They also personally reach out to their active clients via calls, emails, or in-person meetings to inform them about their products and services. Occasionally, BEIL sends gift items to potential clients as a marketing tool and to maintain good relationships. BEIL also participates in investment fairs, seminars, and workshops to attract potential clients. Furthermore, their website serves as a platform where clients can find

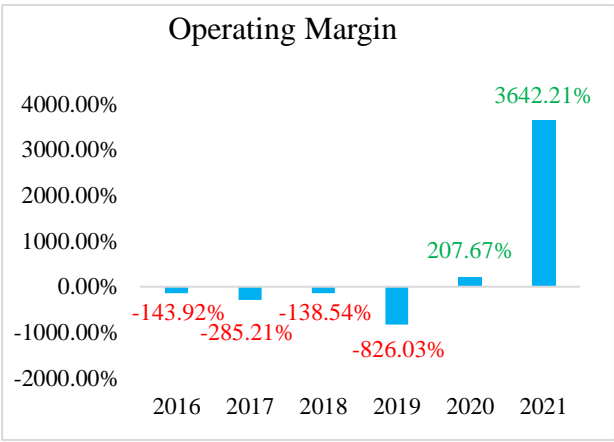
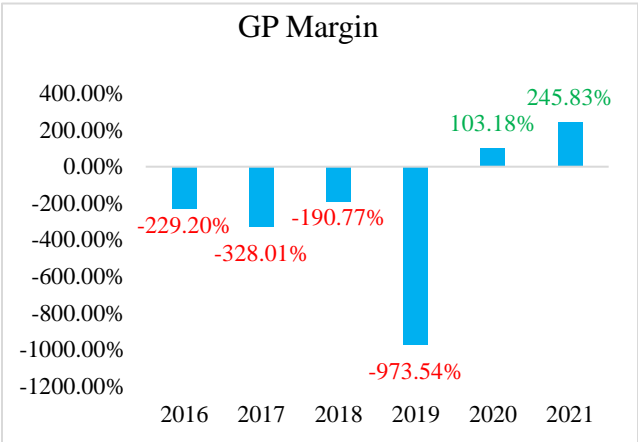
detailed information about their services, products, and corporate activities. Clients also have access to a client portal on the website, where they can view their portfolio details, account statements, and other relevant information. BEIL publishes annual reports and financial statements to keep stakeholders informed about the company's financial status and performance.

## 2.5. Financial performance and Accounting Practices

### 2.5.1. Financial Performance:

#### Profitability Ratios

profitability analysis or ratio are among the financial metrics used to evaluate a company's performance when generating profits in relation to their revenue, balance sheets, operating costs, and investor's equity during a specific accounting time in the business. It shows investors how efficient the company is in utilizing its assets to generate an income. (Cabrera, January 3, 2022) Some commonly used profitability ratios include gross profit margin, net profit margin, return on assets, return on equity, and operating profit margin. BEIL's profitability ratios are calculated considering year 2016 to 2021.



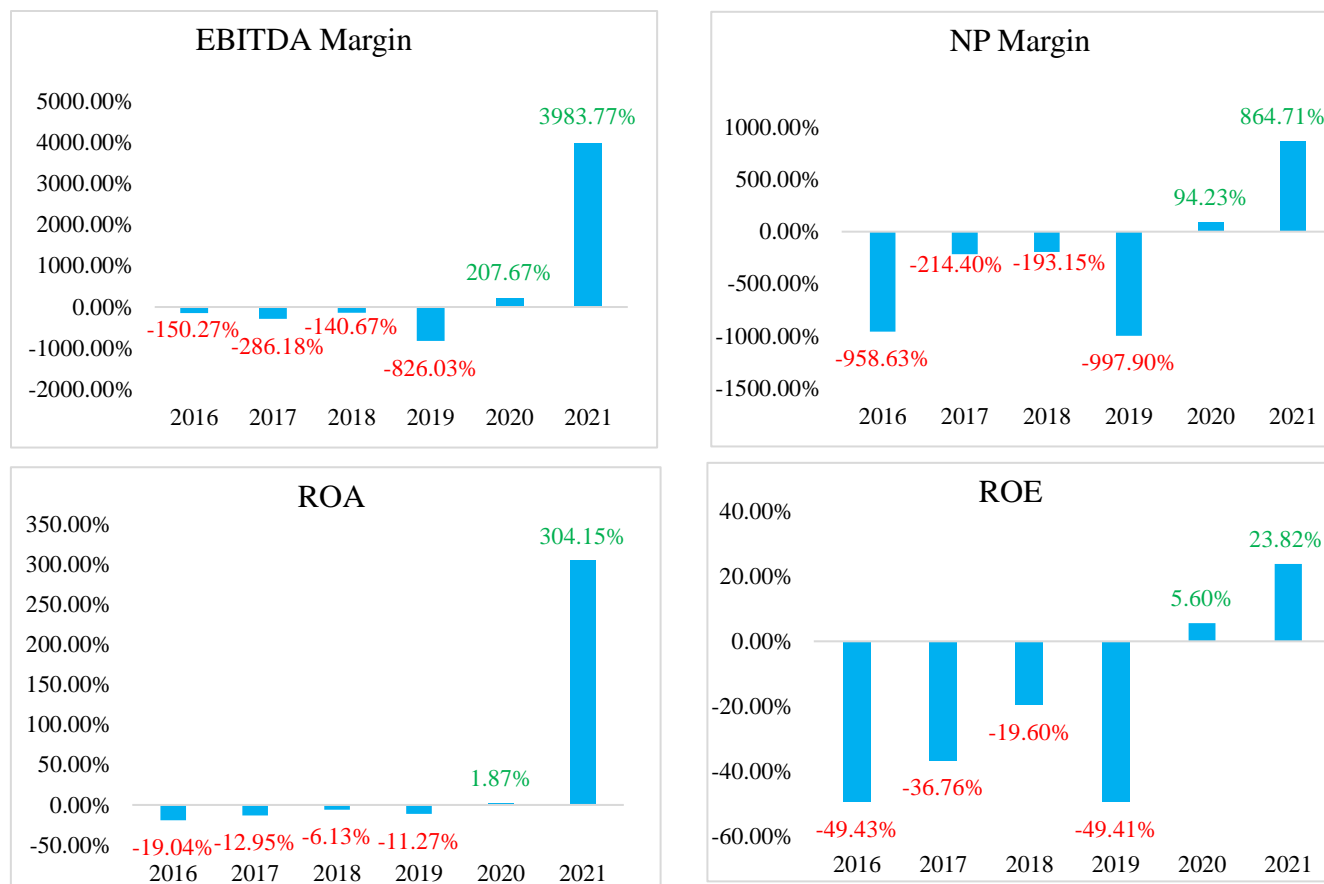


Figure 2: Profitability Ratios

According to the graphs presented above, BEIL experienced losses from 2016 to 2019. However, in 2020, the company was able to generate some profit, although the margin was relatively small. Nevertheless, the company's profit margin has increased beyond that of 2020, which suggests that the company has made a successful recovery.

### Leverage Ratios

A leverage ratio is any one of several financial measurements that look at how much capital comes in the form of debt (loans) or assesses the ability of a company to meet its financial obligations. (Hayes, Leverage Ratio: What It Is, What It Tells You, How To Calculate, April 30, 2020).

Examining BEIL's Debt to Asset and Debt to Equity ratios from 2016 to 2019, its financial risk over the past few years has been assessed.

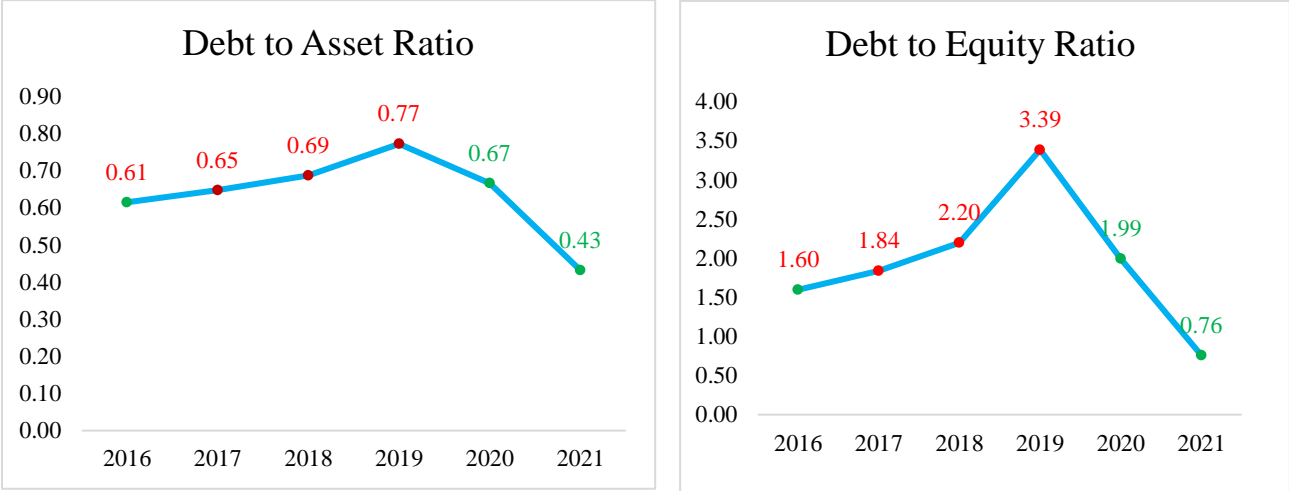


Figure 3: Leverage Ratios

Between 2017 and 2019, BEIL's Debt-to-Equity ratio increased, indicating that the company was financing its operations with more debt than equity. However, since 2020, this ratio has been declining and dropped significantly from 3.39 in 2019 to 0.76 in 2021. This suggests that BEIL has reduced its reliance on debt financing over time. Similarly, the company's Debt-to-Asset ratio has also been declining since 2020, indicating that its debt levels have decreased while its total assets have increased.

### Operating Efficiency Ratio

The Total Asset Turnover ratio is a valuable tool for assessing a company's operational efficiency. It is a financial metric that indicates a company's ability to generate revenue from its assets. For BEIL, I have calculated the Total Asset Turnover ratio from 2016 to 2021 to get an insight into its efficiency in operating its business.



Figure 4: Operating Efficiency Ratio

Despite BEIL's ratio being lower than the industry average, it has been increasing since 2020 which implies that the company is using its assets more efficiently to generate revenue than in previous years.

### Liquidity Ratios

Liquidity ratios measure a company's ability to pay debt obligations and its margin of safety through the calculation of metrics including the current ratio, quick ratio, and operating cash flow ratio (Hayes, March 19, 2023). Here, BEIL's current and quick ratio has been calculated to assess its ability to meet financial obligations.

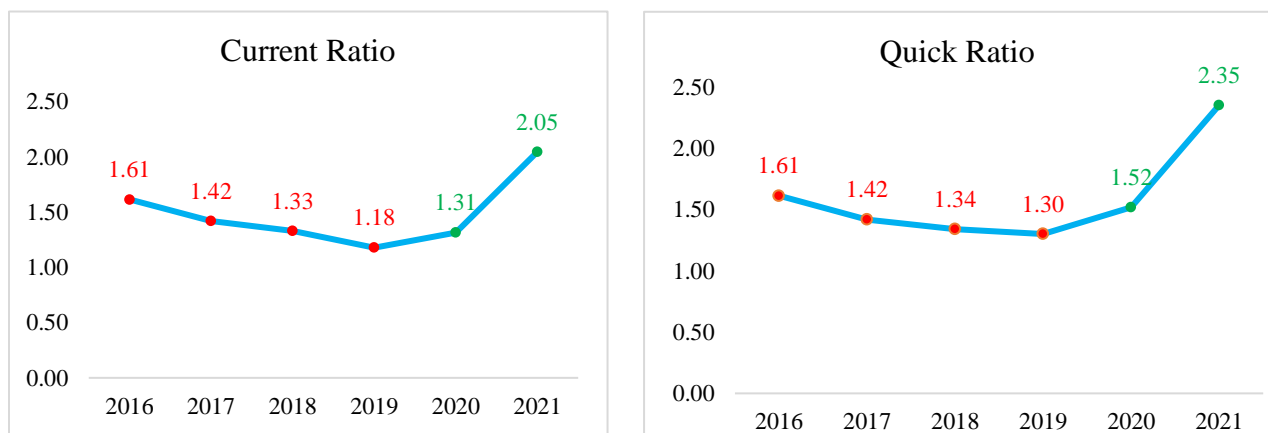


Figure 5: Liquidity Ratios

For BEIL, the current ratio and quick ratio were consistently above 1 from 2016 to 2021, which indicates that the company had enough current assets to cover its current liabilities during that time period. However, they declined during 2017 to 2019 but from the graphs we can see that the ratios are increasing gradually from 2020 which can be considered as a positive indication.

## Market Ratio

Market ratios are financial metrics that measure a company's valuation in the stock market relative to its earnings, assets, or equity. Here, I have calculated BEIL's Earning per share from year 2017 to 2021 to get an insight how much profit BEIL is generating for each share of its stock.

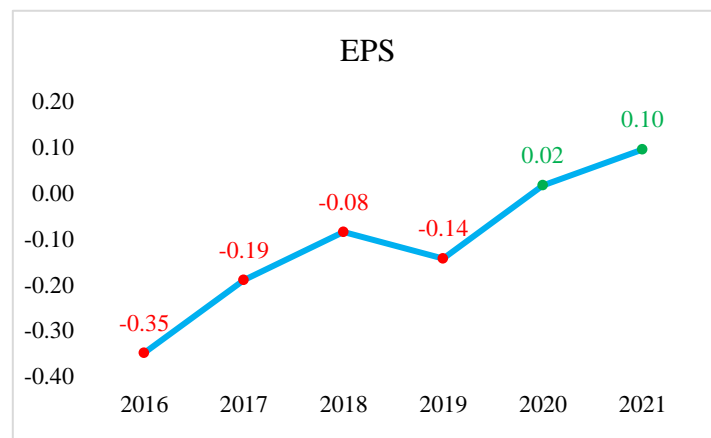


Figure 6: Market Ratio

We can see that BEIL has experienced losses from 2017 to 2019, resulting in a decrease in EPS from -1.9 to -1.43 during that time period. However, over the next two years, BEIL made a strong comeback and was able to generate profits, resulting in a significant increase in EPS from 0.17 to 0.96 from 2020 to 2021.

## DuPont Analysis:

DuPont analysis is a useful technique used to decompose the different drivers of return on equity (ROE) (Hargrave, February 28, 2022) The decomposition of ROE allows investors to focus on the

key metrics of financial performance individually to identify strengths and weaknesses (Hargrave, February 28, 2022) Here, BEIL's DuPont analysis shows the main factors that contribute to the company's profitability.

Particulars	2016	2017	2018	2019	2020	2021
Net income	(900,763,037)	(489,862,076)	(218,339,130)	(368,458,312)	44,221,787	246,950,880
Revenue	93,963,494	228,485,295	113,043,936	36,923,451	46,928,976	641,475,831
Profit margin	-958.63%	-214.40%	-193.15%	-997.90%	94.23%	38.50%
Revenue	93,963,494	228,485,295	113,043,936	36,923,451	46,928,976	641,475,831
Ave. Assets	4,731,010,562	3,781,871,540	3,561,757,301	3,270,419,251	2,363,606,896	1,823,761,154
Asset Turnover	1.99%	6.04%	3.17%	1.13%	1.99%	35.17%
Ave. Assets	4,731,010,562	3,781,871,540	3,561,757,301	3,270,419,251	2,363,606,896	1,823,761,154
Ave. Equity	1,822,374,393	1,332,512,317	1,114,173,187	745,714,876	789,936,666	1,036,887,546
Financial Leverage	259.61%	283.82%	319.68%	438.56%	299.21%	175.89%
ROE	-49.43%	-36.76%	-19.60%	-49.41%	5.60%	23.82%

Table 1: DuPont Analysis

According to the Dupont analysis, BEIL's return on equity (ROE) has been weak, but there has been some improvement since 2020, despite the fact that the company's financial leverage ratio remains high in 2021. However, the increase in ROE is largely due to improvements in the company's profit margin and asset turnover ratio, which have turned positive after previously being negative. While BEIL is still facing a debt risk, it appears to be managing its operations more effectively than in the past four years.



## 2.5.2. Financial Risk Analysis:

Financial risk refers to the probability of suffering financial losses due to changes in market conditions, economic policies, or external factors that can affect the value of financial assets or investments. In this analysis, I have evaluated three categories of financial risks, namely credit risk, market risk, and liquidity risk, that BEIL faced in the year 2021.

### Credit Risk

Credit risk is the risk of a financial loss to the company if a customer or counterparty to a financial instrument fails to meet its contractual obligations (Peterdy, February 14, 2023).

Below are the figures representing the maximum exposure to credit risk that BEIL's financial assets faced in 2021.

<b>Particulars</b>	<b>Amount</b>
Account receivables	28,764,319
Investments securities	1,018,842,981
Loans and advances to customers	289,309,374
Cash and cash equivalents	215,983,749
<b>Total Assets exposed to credit risk</b>	<b>1,552,900,423</b>
<b>Total assets</b>	<b>1,823,761,154</b>
<b>% of Assets exposed to credit risk</b>	<b>85.15%</b>

*Table 2: credit risk*

It is evident that BEIL is highly exposed to credit risk, with 85.15% of its assets being susceptible to such risks. This could potentially result in significant financial losses for the company. However, BEIL has several options to manage its credit risk, including employing credit analysis, setting credit risk limits, collateralizing assets, utilizing credit derivatives, monitoring credit closely, and obtaining credit insurance. By utilizing these strategies, BEIL can minimize its credit risk exposure and protect its financial health.

### Liquidity risk

Liquidity risk is the risk that a company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset (Kenton, May 12, 2021).

<b>Particulars</b>	<b>Amount</b>
Customer deposits	154,173,011
Bank overdrafts	590,713,887
Account payables	6,698,571
Other liabilities	31,401,658
Lease liabilities	3,886,481
<b>Total Exposure to liquidity risk</b>	<b>786,873,608</b>
<b>Total Liquid Assets</b>	<b>1,263,858,488</b>

*Table 3: Liquidity Risk*

Here, we can see that even though BEIL is exposed to a notable amount of liquidity risk, it appears to have sufficient liquid assets to cover its potential short-term liquidity needs. However, the amount that is exposed to liquidity risk is around 62.26% of total liquid assets. Hence, to ensure greater efficiency, BEIL should adopt appropriate measures to manage its liquidity risk, such as conducting stress tests, diversifying funding sources, optimizing cash management etc. In addition to meeting regulatory requirements regarding minimum liquidity ratios, implementing these strategies can help BEIL manage its liquidity risk effectively, ensuring that it has adequate funds to meet its obligations and avoid financial instability.

### Market risk

Market risk is the risk that any change in market prices, such as foreign exchange rates and interest rates will affect a company's income or the value of its holdings of financial instruments.

BEIL's interest-bearing assets and liabilities exposes it to market risk (Hayes, March 09, 2023)

Particulars	Amount
<b>Fixed rate instruments</b>	
<i>Financial liabilities</i>	
Bank overdrafts	590,713,887
<b>Variable rate instruments</b>	
<i>Financial assets</i>	
Cash at banks	215,983,749
<i>Financial liabilities</i>	
Lease liabilities	-3,886,480
<b>Total market risk</b>	<b>802,811,156</b>

*Table 4:Market Risk*

BEIL has both fixed rate and variable rate financial instruments which exposes it to a significant market risk. BEIL should analyze and measure market risk using sophisticated tools, conduct stress tests to assess portfolio performance under adverse market conditions, and set position limits to prevent overexposure to any one asset or market. By utilizing risk management strategies such as- diversifying investments across different asset classes and industries, BEIL can minimize potential losses and protect its investments from unexpected market movements.

### **2.5.3. Accounting Practices:**

BEIL's account practices aim to provide accurate and reliable financial information that promotes transparency and can help investors make informed decisions. The company follows the accounting cycle from 1 January to 31 December and employs accrual basis accounting to record revenue and expenses. Under this method, revenue is recognized when earned, regardless of whether it has been received or not, while expenses are recognized when incurred, rather than when paid. To prepare its financial statements, BEIL complies with the Bangladesh Financial Reporting Standards (BFRS), Bangladesh Accounting Standards (BAS), and the Companies Act 1994. The company uses a straight-line depreciation policy for its Property, Plant and Equipment,

which is systematically spread over its useful life. The determination of taxable profits is made by the local tax authorities in Bangladesh, and in general, taxes are imposed on the company's operating revenues after deducting its expenses.

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

### **2.6.1. Operations Management**

BEIL's operations management is closely linked with the Portfolio Management Department and the trading hours of the securities exchange. When an investor engages in a transaction, such as buying or selling securities in the open or block market, they receive a portfolio file that shows their profit or loss, as well as the price of the security at which the transaction was conducted. This file is provided to the investor after trading hours have ended. To keep existing customers updated on their portfolios, BEIL uses a software called mBank.

### **2.6.2. Information System Practices:**

BEIL has a strong Information System Practices in place that supports the smooth operation of its daily business activities. The company's IT department is responsible for ensuring that all BEIL users have access to the necessary connectivity. The IT division is also responsible for resolving any networking or software-related issues that may arise. Additionally, the department maintains a comprehensive database of all BEIL employees.; The corporate branch of the company is located in Mohakhali, and if any problems arise in other branches, the IT department in the Mohakhali branch will strive to provide a solution.

## **2.7. Industry and Competitive Analysis**

With 67 merchant banks currently operating in Bangladesh, the investment management industry has become increasingly competitive, requiring significant efforts and strategies to compete and

thrive. Among these numerous competitors, some of the top rivals of BRAC EPL Investments Limited include UCB Investment Limited, IDLC Investments Ltd., City Bank Capital Resources Ltd., LankaBangla Investments Ltd., Prime Bank Investment Ltd., EBL Investments Limited, AB Bank Investment Limited, MTB Capital Limited, and Trust Bank Investment Limited.

Comparing to these investment banks, BEIL'S SWOT analysis is done below:

### **2.7.1 SWOT Analysis**

SWOT analysis is used to analyze a company's position. The term SWOT stands for Strengths, Weaknesses, Opportunities, and Threats. The company's strengths and weaknesses are internal measurements, while opportunities and threats are external factors that can have either a positive or negative impact on the company.

SWOT analysis of BRAC EPL Investment Limited given below:

#### Strengths:

##### **a. Providing Wide Range of Finance-Oriented Solutions:**

BEIL is catering the needs of a broad range of clients by offering a wide range of finance-oriented solutions from individuals to large corporations. Thus, the company has established itself as a reliable and comprehensive source for financial services. BEIL has also diversified their revenue streams and reduced their reliance on traditional business lines through this.

##### **b. Brand Equity:**

BEIL has a strong brand reputation in the merchant bank industry. The company is the first investment bank in Bangladesh to issue a public offering using the book building method since the beginning of its commercial operations. Also, it has been issue manager for several prestigious companies, such as Marico, Bank Asia, Unique Hotel and Resorts, Union Bank, among others.

**c. Committed Leadership:**

BEIL has talented and dedicated employees who are committed to provide high-quality services and solutions to the clients. BEIL employees stay up-to-date with the latest industry trends and attends ongoing training and development programs which make them better equipped to provide innovative solutions to their clients. The committed leadership and dedicated employees are one of the key factors in BEIL's success and has helped to establish the company as a leader in the merchant banking industry.

Weaknesses:

**a. Limited Labor:**

BEIL is a small company that operates with a limited number of employees. As a result, staff members are often overloaded with tasks and may have to stay beyond their regular working hours to fulfill their duties. This workload burden could potentially lead to an increase in employee turnover.

**b. Limited Promotion:**

Unfortunately, due to the company's insufficient investment in advertising and marketing strategies, it is failing to effectively reach potential customers across all regions. This passive approach is impeding its growth and profitability.

**c. Financial setbacks:**

In past few years, BEIL's financial performance has been disappointing due to mismanagement, leading the company into crisis. Nevertheless, BEIL is presently striving to overcome this setback and improve its financial situation.

## Opportunities

### **a. Growing Applications for Mergers and Acquisition Activities**

M&A is becoming more popular as companies seek strategic advantages, such as entering new markets, acquiring new technologies, or diversifying their business portfolios. Growing applications for mergers and acquisition activities can create new opportunities for investment banks to earn advisory and financing fees, as well as cross-sell other services to their clients.

### **b. Rise in Demand for Debt Capital Underwriting**

Debt capital underwriting refers to the process of guaranteeing the sale of new bonds or other debt securities issued by a company or other entity. A rise in demand for debt capital underwriting can be a positive development for investment banks, providing an opportunity to earn fee income, build relationships with clients, diversify revenue streams, gain market share, and demonstrate expertise in risk management.

## Threats

### **a. Increasing Complexity of Regulation and Higher Capital Charges**

The increasing complexity of regulation and higher capital charges are significantly impacting investment banks in several ways, such as increased compliance costs, changes in business models, reduced profitability of certain activities etc. Investment banks like BEIL needs to adapt to the trends to maintain their profitability and competitiveness.

### **b. Competitive Rivalry**

There are 67 investment banks currently actively operating in Bangladesh. As more and more players enter the field, the profitability margins for each bank are getting squeezed which is making

it harder for the investment banks to maintain financial stability and growth. Merchant banks like BEIL are still finding ways to succeed and thrive in this dynamic and rapidly evolving industry.

### **2.7.2. Porter's Five forces Analysis:**

Porter's Five Forces Analysis is a model used to evaluate the competitive environment of an industry. It examines five competitive forces that impact the industry's profitability and attractiveness. Porter's Five forces Analysis for BEIL is given below:

#### **a. Threat of New Entrants:**

The threat of new entrants is low in the investment banking industry due to the high barriers to entry. These barriers include high startup costs, strict regulatory requirements, and the need for specialized skills and knowledge.

#### **b. Bargaining Power of Suppliers:**

The bargaining power of suppliers is low, as investment banks typically have a wide range of suppliers to choose from and can easily switch suppliers if necessary.

#### **c. Bargaining Power of Buyers:**

The bargaining power of buyers in the investment banking industry is high, as there are typically a limited number of buyers for investment banking services, such as corporations seeking to raise capital, and these buyers can easily switch to another investment bank if they are dissatisfied with the services they receive.



**d. Threat of Substitutes:**

The threat of substitutes is moderate, as there are many investment banks operating in the market and there are alternative sources of capital available, such as private equity firms and venture capitalists.

**e. Competitive Rivalry:**

The competitive rivalry in the investment banking industry is high, as there are many established players in the market, each striving to secure a portion of the market share.

**2.8. Summary and Conclusion:**

BEIL has been in operation since 2000 and held the top position among investment banks in Bangladesh until 2014. When analyzing the period of fiscal year 2016 to 2021, it is seen that BEIL faced challenges and did not perform well during those years. However, there has been an improvement in fiscal year 2020 and 2021 in BEIL's performance and it is getting positive outcomes once again. Therefore, despite some setbacks, it is expected that BEIL will perform well in the future, considering the excellent management team and employees.

**2.9 Recommendation:**

As an intern at BEIL, based on my observations and analysis conducted here, I would like to suggest a few recommendations for the company's future success. These suggestions are intended to contribute to the company's growth and prosperity in the long run, and to help ensure that it remains competitive in its market.

- BEIL has recently turning around from its financial difficulties and has started making profits so, the company should hire more young employees who can give fresh perspectives and reduce excessive workloads on existing employees.
- BEIL should arrange some fun activities like gaming instruments in the office so that employees, if felt monotonous, can take a little break and refresh themselves. this will help to increase employees' productivity.
- BEIL should promote themselves in more effect ways.

## Chapter 3

### Project Part

#### 3.1. Introduction:

Mergers and acquisitions (M&A) continue to be an essential part of the business landscape in the present world. With increasing competition and the need for companies to adapt to changing market conditions, M&A provide a way to achieve growth and gain a competitive advantage.

##### Mergers and acquisitions

Mergers and acquisitions are two common business terms that are often used interchangeably. However, there are technical differences between the two. A merger refers to the combination of two entities to create a new legal entity under one corporate name. In a merger, both companies maintain their organizational structures, and there is a dilution of power between the two. The newly formed entity typically retains the identities of both companies involved in the merger.

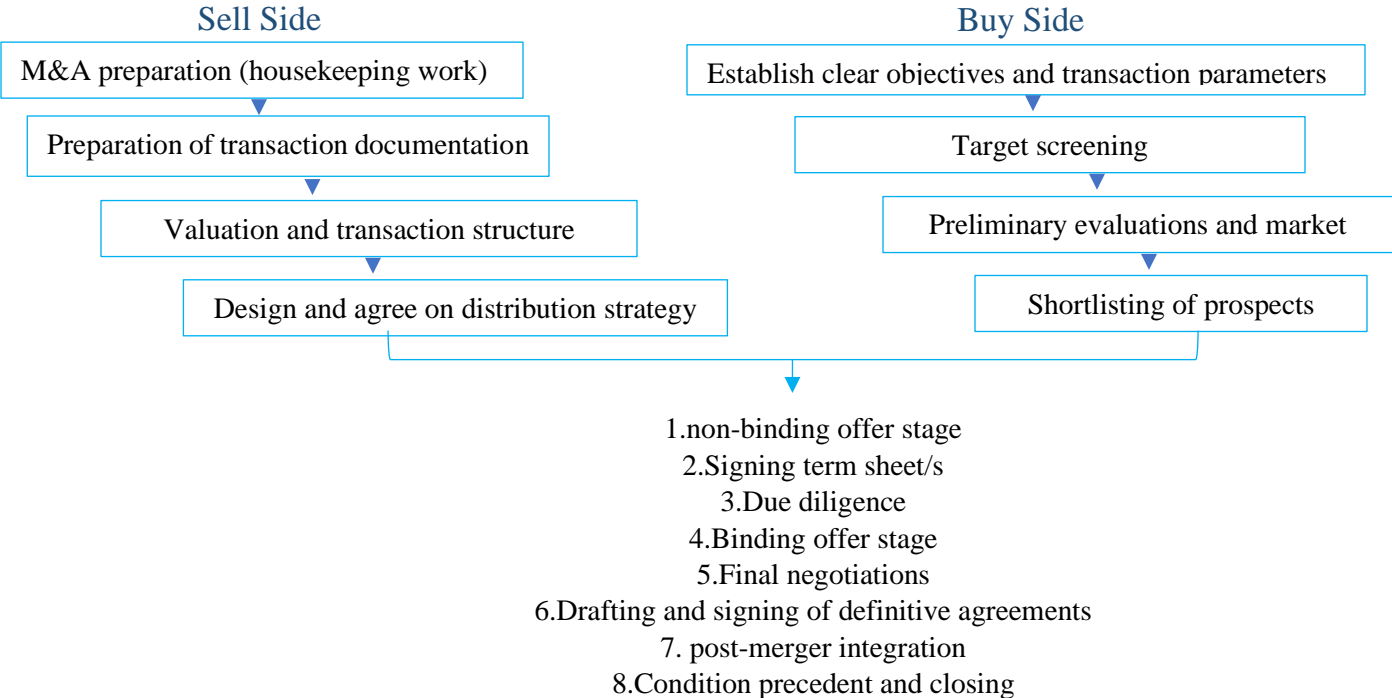
On the other hand, an acquisition is when one company purchases another company outright. In a straightforward acquisition, the acquiring company gains the majority stake in the acquired firm, allowing it to exert absolute power over the acquired company. This can involve the consolidation of operations, elimination of redundancies, and a shift in power dynamics.

##### The Need for M&A Activity

The choice to engage in mergers and acquisitions (M&A) can arise from different factors, depending on whether a company is the buyer or the seller in the transaction. On the buy side, the primary goal is often to create value by leveraging potential synergies with the target company. This can involve various strategies, such as stimulating growth, gaining competitive advantages, increasing market share, or influencing supply chains.

On the sell side, there are several common motivations for M&A activity. Portfolio rationalization is one driver, where companies may seek to exit non-core segments or sectors that lack management focus. Improving liquidity or shoring up capital is another reason, which may involve meeting regulatory capital requirements (especially in the banking sector), reallocating capital for new projects, or generating liquidity to settle debts. Finally, M&A can be a way of addressing succession planning issues by institutionalizing a business to continue beyond its founders or addressing difficulties in making generational transitions.

The M&A Process



**3.1.1. Background Information**

Mergers and acquisitions (M&A) are a complex and high-risk endeavors for companies looking to grow and expand their business. The process involves a wide range of activities, including identifying potential targets, conducting due diligence, negotiating terms, and securing financing.

Investment banks specialize in providing these services and are essential in facilitating successful M&A deals. By leveraging their knowledge and experience, investment banks help companies in identifying potential targets, valuation, financing, strategic advice, due diligence, and regulatory guidance. They also help mitigate risks and maximize value for both parties, making them an essential partner in the M&A process.

BRAC EPL Investments Limited is a well-known merchant bank in Bangladesh that provides investment banking solutions and independent advisory services to emerging market corporates. With 62 merchant banks currently operating in Bangladesh, BRAC EPL Investments Limited was established in 2000 and has since gained a strong reputation. Recently, XUV limited, a foreign company has approached BRAC EPL Investments Ltd. to assist in the acquisition of a Bangladeshi FMCG company, ABC limited. The company has been serving the Bangladeshi consumers since 1999 with its variety of products. Over the years, the company has extended its business functionalities in different industry sectors with its several sister concerns contributing to the country's overall socio-economic development. This report will focus on the buy-side procedure of the acquisition, showing the role of a merchant bank in such transactions.

### **3.1.2. Objectives**

#### Broad Objective:

The objective is to demonstrate the advisory service provided by BRAC EPL Investments limited, an investment bank in Bangladesh in a M&A deal.

#### Specific objectives:

- Conduct a comprehensive financial analysis of the selected target Company.
- Forecast financial performance of the selected target company for 5 years
- Finding out the fair value of the target company to complete the M&A deal

### **3.1.3. Significance**

As M&A is not a very popular idea in Bangladesh yet. Most people do not know how the deals of M&As are conducted. Through this report, the entire valuation process from the buy side of M&A is shown which can be useful for Business studies' students, particularly who have Finance as major and for those who are interested in understanding how M&A deals are conducted.

## **3.2. Methodology**

### **Data Collection**

The report was prepared using both primary and secondary data sources. Primary data was directly collected from the target company, covering the period from 2021 to 2022. Forecasting for the period from 2023 to 2028 has also been conducted for the purpose of valuation. Whereas, secondary data sources include annual reports of peer company, data from the DSE website and different relevant websites.

### **Valuation Approach**

There are several commonly used and accepted methods for determining the fair value of a company, which have been considered in the present case to conclude the fair value.

#### Asset Based Approach:

Asset-based valuation is an approach that determines the value of a company or investment fund by evaluating the worth of its assets. As an example of this method, I have employed the calculation of Net Asset Value (NAV), which is a widely used technique for estimating the value of investment funds, including private equity funds.

NAV is calculated as the total value of a fund's assets minus its liabilities, divided by the number of outstanding shares. The formula for calculating NAV is:

$$\text{NAV} = (\text{Total Value of Assets} - \text{Total Value of Liabilities}) / \text{Number of Outstanding Shares}$$

The total value of assets includes all of the fund's investments, cash, and other assets. The total value of liabilities includes all of the fund's outstanding debt, expenses, and other obligations.

Limitations of Asset Based Approach:

The asset-based approach doesn't consider the future growth potential of the company, assumes the value of assets in financial statements is accurate, is influenced by depreciation and inflation, and doesn't account for intangible assets like brand value and intellectual property.

Market Value Approach:

The market value approach is a method used to determine the value of an asset or business by analyzing market prices of similar assets or businesses. This approach assumes that the value of an asset or business is equivalent to what it could be sold for in the open market.

This valuation method uses the stock market prices of similar companies to determine the fair value of a company. It assumes that market prices already take into account all the important factors affecting the company's value. To do this, certain ratios or multiples are used, which need to be chosen carefully to get an accurate valuation.

Here, I have used Price to Sales (P/S) and Price to Earnings (P/E) ratio to get the fair value of ABC limited company. The formula for the Price-to-Sales (P/S) ratio is:

$$\text{P/S ratio} = \text{Market Capitalization} / \text{Annual Sales}$$

where Market Capitalization is the total value of all the outstanding shares of a company, and Annual Sales is the total revenue generated by the company over a given period of time (usually a year).

The formula for the Price-to-Earnings (P/E) ratio is:

$$\text{P/E ratio} = \text{Market Price per Share} / \text{Earnings per Share}$$

where Market Price per Share is the current market price of one share of the company's stock, and Earnings per

Limitations of Market Value Approach:

The market value approach assumes an efficient market, comparable companies, and the use of ratios and multiples, which can lead to inaccurate valuations. It also doesn't consider management, competitive advantages, and growth prospects, which can significantly impact a company's value.

Discounted Cash Flow (DCF)/Income Approach:

Income approach is primarily driven by three key inputs: Free Cash Flow (FCF), Terminal Value and

Discount rate.

➤ Free Cash Flow (FCF)

The formula for the Free Cash Flow (FCF) method is as follows:

$$\text{FCF} = \{ \text{EBIT} * (1 - \text{Tax Rate}) + \text{depreciation and amortization} - \text{Capex} - \text{Changes in NWC} \}$$

where:

EBIT = Earnings Before Interest and Taxes



Tax rate = the tax rate of the company

Depreciation and amortization = non-cash expenses that are added back to EBIT

Capital expenditures = the amount of money spent on capital assets during the year

Changes in working capital = the change in the amount of money tied up in current assets and liabilities during the year.

➤ Discount Rate Determination

According to the rules, the discount rate had to be calculated using a method called Weighted Average Cost of Capital (WACC) based on the latest audited financial statements or the yield rate on a 20-year Bangladesh Government Treasury Bond (BGTB), whichever rate is higher.

Formula for WACC =  $(E/V * Re) + [D/V * Rd * (1 - Tc)]$ .

Where:

E = market value of the company's equity

V = total market value of the company (debt + equity)

D = market value of the company's debt

Re = cost of equity

Rd = cost of debt

Tc = corporate tax rate

Here, the cost of equity was calculated using a method called CAPM. The cost of equity was used to calculate the Weighted Average Cost of Capital (WACC)

The formula of Cost of Equity ( $R_e$ ) =  $R_f + \beta \times (R_m - R_f)$

Where:

$R_f$  = risk-free rate of return, such as the yield on a government bond

$\beta$  = beta, which measures the volatility or risk of the stock relative to the market

$R_m$  = expected return on the market, such as the return on a stock market index

➤ Terminal value determination

The Terminal Value (TV) of a company represents the total value of all future cash flows beyond the forecast period. To calculate the terminal value of ABC company Perpetuity Growth Model has been used.

The formula for the Perpetuity Growth Model is as follows:

$$TV = CF_n \times (1+g) / (r-g)$$

where:

$CF_n$  = The expected cash flow in the last year of the forecast period

$g$  = The long-term growth rate assumed for the company

$r$  = The discount rate.

Limitations of DCF Method:

The DCF method also has limitations. It is highly dependent on future projections, which are uncertain and subject to change. The method assumes that future cash flows can be predicted with accuracy, and the discount rate used to calculate the present value is subjective and can

significantly impact the valuation. Additionally, the DCF method doesn't consider non-cash items like depreciation and amortization, which can impact a company's value. Finally, the method is highly sensitive to assumptions made about growth rates and discount rates, which can lead to significant errors in valuation.

While each valuation method has its limitations, all three methods have been used to obtain the most accurate value of the target company.

### 3.3. Findings and Analysis

#### 3.3.1. Asset Based Approach

The Net Asset Value (NAV) of ABC Limited is calculated using the most recent audited financial statements as of June 30, 2022. The calculation takes into account the assets and liabilities of the company as of that reporting date. Finally, the resulting NAV is divided by the number of outstanding shares also as of the reporting date, in order to arrive at the NAV per share of ABC Limited.

There was no adjustment made to any parts of the financial statement while computing the NAV of ABC Limited. The key figures considered and the valuation derived is presented below:

<b>Details</b>	<b>Unit</b>	<b>Value</b>
Total Assets as of 30 June 2022	BDT	213,674,569
Total Liabilities as of 30 June 2022	BDT	245,422,551
Net Asset Value as of 30 June 2022	BDT	(31,747,982)
Paid-up Capital as of 30 June 2022	BDT	650,000,000
Face Value Per Share	BDT	100
Total Number of Shares as of 30 June 2022	No. of Shares	6,500,000
<b>NAV Per Share as of 30 June 2022</b>	<b>BDT</b>	<b>(4.88)</b>

*Table 5: Asset Value Approach*

Under this method, the net asset value of ABC Limited is BDT (4.88) per share as per the financial information of 30th June 2022.

### 3.3.2. Market Value Approach

In order to value ABC limited company, I have used the Price to Sales (P/S) and Price to Earnings (P/E) ratios of comparable listed companies. For this purpose, I selected XYZ Beverage company Limited because it matches ABC's operations effectively. To calculate the P/S multiple value, I found the one-year month end average P/S multiple value of XYZ company for the period of July 2021 to June 2022, which was **0.34**. However, I could not find the P/E multiple value for the previous two years due to pandemic-related losses, so I took the fiscal performance for the two years preceding the fiscal year of 2020 and fiscal year 2022 to get an average P/E multiple value of **41.42**.

To determine the fair value of ABC company limited using this method, I used the market multiples of the Average Sales Per Share and Average Earnings per Share (EPS) of ABC for the three years from 2020 to 2022.

Details (in BDT)	2020	2021	2022
Revenue	616861355	615417039.00	486292533
Net Profit after Tax	-40770641	-8047814	-8536963.9
Number of Shares	5,800,000	6,500,000	6,500,000
Sales Per Share in BDT	106	95	75
EPS in BDT	-7.029420862	-1.238125231	-1.313379062
<b>Average Sales Per Share in BDT</b>	91.95		
<b>Average EPS in BDT</b>	-3.19		

Table 6: EPS & Sales/share of ABC limited

Metric	Peer company's	Target company's	Discount on Multiple	Weight	Equity Value Per Share
Price/Sales	0.34	91.95	0.25	100%	23.46
Price/Earnings	41.42	-3.19	0.25	0%	(99.21)

Table 7: Equity Value per share- Market Value Approach

Since ABC is a private limited company and has been underperforming for the last 5 years. Thus, a discount multiple of 25% has been allocated to each multiple value to account for investor risk appropriately. Also, a negative EPS value for the company makes it unapplicable for any weight to be placed on the P/E multiple value for the estimation of the fair market value per share of ABC company limited.

<b>Fair Market Value Per Share</b>	23.46
Number of Shares	6,500,000
<b>Total Equity Value</b>	152517620.4

*Table 8: Fair Market Value*

The value of ABC Ltd. under this method is BDT 23.46 per share according to the industry price multiples as of June, 2022 and the 03 (three) years Average Sales Per Share and Average Earnings per Share (EPS) of ABC limited from 2020 to 2022.

### **3.3.3. Discounted Cash Flow (DCF)/Income Approach**

To determine the fair value of ABC company under this method, all the information was checked properly and made sure that it was reasonable. Also, to predict how the company will perform in the next five years, industry trends, opinions from industry experts and ABC's management's forecasting has been taken into account. It is assumed that the company will perform better than it did in the past, mainly due to consistent growth in sales, improved gross margins, and lower costs.

Some of the key considerations are as follows:

1. Revenue growth for ABC company is predicted to be higher in 2024 due to the recovery of the industry after the pandemic. After that, a conservative growth rate of 4-5% per year is expected, which is consistent with industry growth outlook and ABC's historical market share.

2.The Management expects to become more efficient over the next years, so the cost of goods sold margin has been conservatively reduced by 2% each year.

3.The company's Operating Expenses have been separated into two parts: Selling and Distribution Expenses, and Administrative Expenses. The Selling and Distribution Expenses have increased significantly over the forecasted years to cover the costs of promoting the business and competing in the market after the pandemic. The Administrative Expenses have also grown consistently every year to keep up with inflation and the growth of the company.

4.Income tax assumptions are in line with current tax structure of Bangladesh. The tax will be imposed based on whichever (minimum Income tax provision or general income tax on EBT) yields a higher amount of tax expenses for the Company.

5.The Management team of the company has made assumptions about how much money they will spend on capital expenditures. These assumptions are based on both discretionary (meaning optional or up to their own decision) and regulatory (meaning required by law or government) requirements.

#### Discount Rate Determination

Here, yield rate on a 20-year Bangladesh Government Treasury Bond (BGTB) has been taken into account which is 8.756%. Also, a liquidity risk premium was incorporated to account for the fact that private equity investments can be harder to sell quickly.

Cost of Equity - CAPM Method	
Risk Free Rate	8.76%
1 Year Market Return (Bangladesh) as of June 30,2022	18.72%
Peer Company Beta	0.56
Liquidity Risk Premium	0.53%
Cost of Equity	14.87%

Table 9: Cost of Equity

The cost of equity was used to calculate the Weighted Average Cost of Capital (WACC).

WACC Calculation	
Cost of Equity	14.87%
Cost of Debt	8.00%
Target Debt-Equity Ratio (D/E) -XYZ Company (Peer)	55%
E/V, Equity Portion in Target Capital Structure	64.6%
D/V, Debt Portion in Target Capital Structure	35.40%
Tc, Corporate Tax Rate	30%
WACC	11.59%

Table 10: Weighted Average Cost of Capital (WACC)

The following inputs are then used to arrive to the final discount rate as shown below with the value of 11.59% as shown below-

Yield Rate 20 Years BGTB (A)	8.76%
WACC (B)	11.59%
Discount Rate (Higher among A & B)	11.59%

Table 11: Discount rate

### Terminal Growth Rate

The terminal growth rate for the company has been considered to be around 5%. This is taken as an average value of the revenue growth expected for the company in the last forecasted year of 2028 and the country's normal inflation rate.

Here, it is assumed that the last recorded free cash flow of the forecasted financial statements to be the terminal perpetual cash flow for future. The FCF has arrived by taking forecasted cash flow from projections minus the forecasted capital expenditure and forecasted debt adjustments. Then,

all the necessary inputs have been incorporated to come at the final enterprise value as shown below:

Free Cash Flow to Firm							
Details	2022	2023	2024	2025	2026	2027	2028
EBIT*(1-TaxRate)	6,460,196	(14,614,763)	(4,029,687)	6,356,641	32,413,906	37,973,158	43,802,525
Depreciation & Amortization	4,139,211	5,621,532	8,875,000	11,979,054	10,196,823	8,720,401	7,551,871
<b>Less:</b>							
Capex	12,176,677	1,189,000	45,000,000	2,500,000	2,500,000	2,500,000	2,500,000
Change in NWC	(26,940,458)	(57,746,252)	35,504,995	12,014,589	7,031,939	4,855,789	4,565,111
<b>FCFF</b>	25,363,188	47,564,021	(75,659,682)	3,821,106	33,078,789	39,337,769	44,289,284
<b>Terminal Growth Rate</b>	5.00%						
Discount Rate	11.59%						
Add: Terminal Value							706,133,841
<b>TFCFF</b>	25,363,188	47,564,021	(75,659,682)	3,821,106	33,078,789	39,337,769	750,423,125
<b>Period</b>		0	1	2	3	4	5
<b>Discount Factor</b>	1.00	1.00	1.12	1.25	1.39	1.55	1.73
PV of TFCFF	25,363,188	47,564,021	(84,425,374)	4,757,798	45,959,475	60,987,898	1,298,220,980
<b>Enterprise Value</b>	<b>418,220,291</b>						
Less: Net Debt	166,311,241.37						
Less : Provision for Taxes	26770620						
Add: Surplus Assets (Advance Income Tax)	27,807,568						
<b>Equity Value</b>	<b>252,945,998</b>						
Total Number of Shares as of 30 June 2022	6500000						
<b>Fair Value Per Share</b>	<b>38.91</b>						

Table 12: Free Cash Flow to Firm Valuation

The value of ABC limited under this method is BDT 38.91 per share according to the forecasted information of ABC company for 2022 to 2028 and all other relevant inputs.



Note: The assessment of a company's worth and its assets is inherently uncertain and influenced by factors that are difficult to predict and outside of control. To perform this valuation, industry performance, general business and economic conditions are considered, and reasonable benchmarks are used. However, changes in industry benchmarks, financial factors, and other influences affecting the company's worth can result in fluctuations in its valuation.

### 3.4. Summary and Conclusion:

From the three valuation methods described earlier, a conclusion can be made regarding the valuation of ABC Ltd. Under Asset Based Valuation method, the net asset value of ABC Limited is BDT (4.88) per share. Again, the value of ABC Ltd. under Market Value method is BDT 23.46 per share. Lastly, the value of ABC limited under Discounted Cash Flow method is BDT 38.91 per share. Here, the Asset Based Approach is not applicable as it results in a negative NAV value for the company. Since the Asset Based Approach yields a negative NAV value for the company makes it unapplicable for any weight to be placed on its corresponding valuation for the estimation of the fair market value per share of ABC Ltd. As a result, the company should be valued using the average of the Market Value Approach and the Discounted Cash Flow (DCF)/Income Approach valuation methods.

The Fair value of ABC limited is:

Metric	Value Per Share	Weight	Equity Value
Asset Based Approach (Net Asset Value)	(4.88)	0%	0.00
Market Value Approach (Sales to P/S, Earnings to P/E)	23.46	50%	11.73
Income Approach (Free Cash Flow to Firm)	38.91	50%	19.46
Target Equity Valuation Per Share			31.56
Number of Shares			6,500,000
Target Equity Valuation			205,166,595

Table 13: Fair Value of ABC Limited

From this we can conclude that the estimated fair value of ABC limited is BDT 205,166,595 or BDT 31.56 per share.

Sensitivity analysis has been conducted to confirm the accuracy of the fair value obtained earlier.

Sensitivity Analysis of Market Value Approach:

Private Equity Discount on Multiple	0.15	0.2	0.25	0.3	0.35
Fair Market Value Per Share (in BDT)	26.59	25.03	23.46	21.90	20.34

Table 14: Sensitivity Analysis: Market Value Approach

Based on the analysis, it can be determined that a discount multiple of 25% is the most appropriate to mitigate investor risk. If the discount rate is lower than 25%, the risk of the investment increases. Conversely, if the discount rate is higher than 25%, the fair value of the company decreases. As a 4% growth rate of the target company has been assumed considering the market growth rate, a higher discount rate would result in an unfairly low intrinsic share price for ABC company.

Sensitivity Analysis of Discounted Cash Flow (DCF)/Income Approach:

DCF/Income Approach							
Intrinsic Share Price		Terminal growth rate					
38.91		4.50%	5%	5.50%	6%	6.50%	7.00%
Discount rate	10.59%	47.14	53.83	61.83	71.58	83.71	99.23
	11.59%	34.16	38.91	44.33	50.79	58.51	67.91
	12.59%	24.44	27.90	31.84	36.37	41.66	47.88
	13.59%	16.91	19.54	22.48	25.81	29.62	34.00

Table 15: Sensitivity Analysis: DCF/ Income approach

Here, reducing the discount rate or WACC (while keeping the growth rate constant) results in a substantial increase in the share price, from 38.91 to 67.91. This would lead to an overvalued share price relative to the current performance of ABC company. On the other hand, an increase in the discount rate or WACC (while keeping the growth rate constant) would drastically decrease the share price from 38.91 to 19.54, which would also be an unfair value for ABC given its future

growth prospects. Again, increasing the terminal growth rate (while holding the discount rate constant) increase the intrinsic share price to 67.91. However, a terminal growth rate of 5% is a reasonable assumption as it aligns with the average revenue growth rate expected for the company in the last forecasted year of 2028 and the country's typical inflation rate. Hence, this value can be considered appropriate.

Thus, we conclude that the Fair Value determined using a discount rate of 11.59% and the terminal value of 5% considered through the Discounted Cash Flow method reflects a fair intrinsic value for ABC's share.

### **3.5. Recommendation:**

1. Here, in the Asset based approach Net asset value is used where Net Working Capital has not been considered. This might not provide an appropriate value of the target company. Net working Capital (NWC) shows how much of a company's capital is tied up in its daily operations which includes assets such as cash, accounts receivable and inventories deducting the current liabilities like- accounts payables, accrued expenses. Hence, including net working capital (NWC) in an asset-based approach provides a more accurate picture of the company's current financial position. So, it is recommended to incorporate NWC in valuing the company while using asset-based approach.

2. As in the market value approach, the fair value of the target company highly depends on the peer company's data. Hence, it is better to take at least three to five companies' data to get the most accurate value. If similar companies are not available in Bangladesh, comparable companies can be taken from India which can serve the purpose as there is not much difference in the organizational structures in two country's companies.

3. Even though it is found that the fair value should be 38.91 as it is the most reasonable one, however, a price range of ABC limited has been found from the sensitivity analysis of the Discounted Cash Flow method.

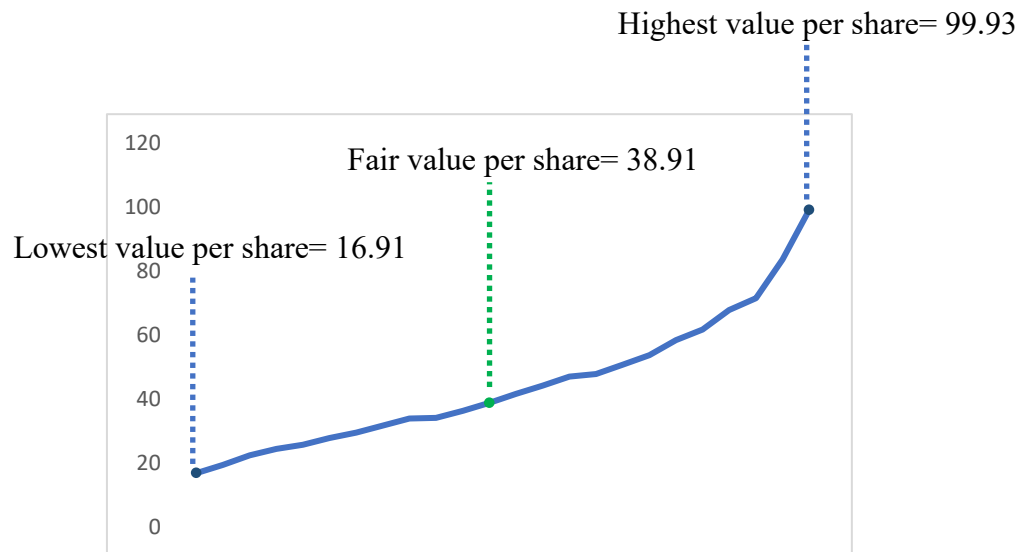


Figure 7: Price range of the target company

Here, by changing both discount rate and terminal growth in the discounted cash flow method, we get the value of ABC Limited's per share starting from 16.91 and highest of 99.93. So, the recommended price range of the target company's per share can be 16.91 to 99.93.

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## Appendix:

[Data Analysis of BRAC EPL Investments Limited.](#)

[Data Analysis and Valuation of the project part.](#)