

Report On
Understanding Seasonal Sectoral Performance and
Liquidity Trends in Bangladesh

By

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21204161

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
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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:

Tawhidul Islam
21204161

Supervisor's Full Name & Signature:

RUBEL SAHA
Senior Lecturer, BRAC Business School
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Letter of Transmittal

RUBEL SAHA
Senior Lecturer,
BRAC Business School
BRAC University
Level: 5, Room: 5A36, Kha-224, Merul Badda, Dhaka 1212. Bangladesh

Subject: Internship Report Submission

Dear Sir,

This is my pleasure to provide you with the details for my entry level position as a research intern for BRAC EPL Investment Limited.

Throughout the preparation of the report I have tried my best at ensure all essential data available was used in the analysis and based on those recommendation was provided regarding the issues face. I trust that the report will meet the desires

Sincerely yours,

Tawhidul Islam
21204161
BRAC Business School
BRAC University
Date: January 5th, 2026

Non-Disclosure Agreement

[This page is for Non-Disclosure Agreement between the Company and The Student]

This agreement is made and entered into by and between [Name of Company] and the undersigned student at Brac University.....

Executive Summary

This report summarizes the three-month internship undertaken at BRAC EPL Investments Limited (BEIL) as a Research Intern in the Investment & Strategy Department from November 2025 to February 2026. The internship aimed to bridge academic knowledge with practical exposure to Bangladesh's capital market operations. Key responsibilities included preparing Daily Morning News, updating market insights, maintaining marginable securities lists, and assisting in equity research and valuation exercises. These tasks required extensive data analysis, financial ratio computation, and the application of analytical frameworks using Microsoft Excel. The internship provided hands-on experience in market monitoring, regulatory compliance, and investment research, while enhancing technical proficiency and professional discipline. Despite initial challenges in adapting to a fast-paced, accuracy-driven environment, continuous guidance from supervisors facilitated skill development and confidence building. Overall, the internship proved to be a valuable learning experience, contributing significantly to both professional growth and practical understanding of investment banking operations in Bangladesh.

Abstract

This internship report presents the professional experience and research work conducted during my internship period at BRAC EPL Investment Limited (BEIL), as part of the completion of the Bachelor of Business Administration Program at BRAC University. My internship period was between November 2025 and February 2026 in the Investment & Strategy Department. The key responsibilities included preparing the morning daily news, updating the market insight, and maintaining marginable securities lists. The report will also contain more in-depth details about the specific organization, BEIL.

The report also includes a project with the research titled “*Understanding Seasonal Sectoral Performance and Liquidity Trends in Bangladesh.*” The research tries to analyze whether there is any evidence of seasonal trends in the DSE. For this research, instead of using a return-based metric, which was a frequent occurrence in past studies, I used market capitalization as the metric for seasonality, which enabled me to further break down the market into seasonality, enabling me to find the seasonality of not just the whole market but on a sectoral level.

Overall, the internship enhanced analytical, technical, and professional skills while providing valuable insights into investment banking operations and market behavior in Bangladesh

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List of Acronyms

BEIL	BRAC EPL Investments Limited
DSE	Dhaka Stock Exchange
EMH	Efficient Market Hypothesis
IBD	Investment Banking Department
CSE	Chittagong Stock Exchange
BSEC	Bangladesh Security and Exchange Commission

Chapter 1

Overview of Internship at BRAC EPL Investments Limited

The first chapter outlined my personal experience as an intern with BRAC EPL Investments Limited (BEIL). It describes what I did as a Research Intern, my main responsibilities within the Investment & Strategy Department, and what professional and personal lessons this time have given me by the end of my working period.

1.1 Student Information

Student Name: Tawhidul Islam

Student ID: 21204161

Program: Bachelor of Business Administration (BBA)

Department: BRAC Business School

Major: Accounting and Finance

1.2 Internship Information

This report is submitted in partial fulfillment of the requirements for the Bachelor of Business Administration (BBA) degree. It records the findings and experiences I had during a three-month internship, designed to combine the academic knowledge gained in my coursework with practical applications to the financial services of the real world. As a Research Intern at BRAC EPL Investments Limited (BEIL), which is one of the major investment banks in Bangladesh, I have the honor and privilege to hold this position where I got the opportunity to learn from experienced professionals.

1.2.1 Internship Period and Organization Details

The internship is for a period of three months. I joined as a research intern starting November 11, 2025, and the internship will conclude on February 12, 2026. I was recruited as a research intern at BRAC EPL Investments Limited, one of the leading names in Bangladesh's investment banking industry.

BRAC EPL investment provides an extension range of financial services, this includes equity market, debt market, portfolio management, wealth maximization and corporate advisory. BEIL is an excellent place for an introduction to the capital market, allowing me to earn the skills and experience required for the capital market.

1.2.2 Internship Supervisor Information

For my internship, I reported directly to the head of strategy and Investment, Md. Abdullah Abu Syad. My supervisor has been an extremely crucial figure throughout my internship period, helping me understand how to conduct the task assigned. He guided me through any

problem that I faced throughout my internship period, allowing my growth. He has given me several tasks related to company analysis, and he monitored my work and progress, while providing me with guidance along with constructive feedback and criticism as he deemed necessary. His feedback allowed me to complete my tasks faster, along with providing more quality and fulfilling work.

1.2.3 Job Scope

As I was part of the research team of the “research and investment department”, my job scope was designed to allow me to have a holistic view of both investment and strategic functions of the company. My job was assigned in a manner that required both data management skills as well as analytical skills.

Daily Morning News: This was one of my primary responsibilities as an intern. I produced and delivered relevant new information to the organization's needs before the start of the trading period. For producing the Daily Morning news, I had to scan through multiple news sources, and from there, I had to identify information regarding the macroeconomic developments and the capital market. While scanning the news sources, I had to filter noise and pick quality news that is relevant in decision making, ensuring everyone was informed of the latest news and latest regulatory changes.

Updating Daily Market insights: One of the other daily responsibilities was to update the market insight at the end of the day. This involved tracking key commodities prices, sector performance, market performance, weekly market performance, and turnover data, along with several other pieces of information the team required immediately. The updating of the daily market insight allowed the firm to monitor real-time market health at a glance.

Maintenance of Marginable Securities list: As an investment bank, margin loans are an important part of the services provided by the company. A crucial change was brought after the introduction of a new margin loan regulation, which had strict and more complex rules regarding which companies can get margin loans. To avoid legal consequences, an everyday list needed to be maintained. I was responsible for collecting data about the companies, checking if the data was correct, and based on the criteria, I needed to identify which stocks were marginable and which were non-marginable. Finally, I had to provide a report listing all the marginable stocks and any new changes from the last list and send it to the relevant departments.

Assistance in Equity Research and Notes: I was occasionally given tasks that required me to produce equity research notes. Here, we had to collect the financial information for the last 5 years along with any quarterly reports available; later, based on that data, relevant ratios were

calculated along with several important comparative data. Finally, based on our findings, we provided a company-specific analysis in the form of an investment thesis. The compilation, production, and analytical aspects of the research note gave me more insight into several companies, meanwhile fostering my analytical skills. Besides equity notes, some valuations were also conducted.

During my work as a research intern, I mainly used Microsoft Excel for compiling and analyzing data. Using the spreadsheet, I was able to learn advanced-level Excel skills, which allowed me to analyze and compile data faster and more efficiently, a skill that is extremely valuable in the capital market.

1.3 Internship Outcomes

During the internship, my exposure to complicated tasks had a significant impact on my professional and personal growth, offering benefits not just to the company but to me as well.

1.3.1 My Contribution to the Company

During my internship period, my focus was to execute all tasks assigned to me precisely and on time. By completing my task diligently, such as compiling data for, preparing initial reports, and maintaining key internal documents like marginable lists and daily market insight, I allowed the analysts and managers to devote more of their time to high-level investment strategy and client advice. Therefore, my contribution to the company has helped my department to be more efficient, with precise strategic moves and timely research outputs.

1.3.2 Benefits of the Student

The internship period was an extremely beneficial experience for me. Through exposure to real-life activities, I was able to significantly improve my technical skills, particularly my skill in using Microsoft Excel. Throughout my work, I got to learn how to use more complex Excel functions and make several functions of Excel functions work all together. This, in turn, allowed me to become a better user of Excel, moving past my basic skills of Excel.

Besides my technical improvement, the internship was a bank of knowledge for me. Here, I learn about the operational reality of how a real investment Bank works, how real investment decisions are made. This internship provided me with real-life experience that allowed me to match my academic learning with real-life implications. I also gained first-hand experience from a leading investment bank in the process of creating quality research on a company. Starting from gathering, to processing the data, and finally producing a qualitative insight, all of which are going to be extremely valuable for a career in the capital market.

1.3.3 Difficulties Faced During the Internship Period

The transition from an academic environment to a professional environment was one of the first hurdles faced. At the very beginning, getting used to working in a routine schedule was a bit hard, but with time, it became easier and more manageable. Moreover, the nature of the tasks required error-free and precise data, which was extremely stressful for me at the beginning of working as an intern.

However, with the assistance of my advisors and a little bit of time, I was able to adjust to all the difficulties faced in the internship easily. And once I got used to this handle, I was able to conduct all my tasks without any struggle.

1.3.4 Recommendations

Based on the time I spend with the company, the internship program at BRAC EPL investment limited is well organized, as it is designed to allow novice in the fields to acquire practical experience in the field. Here we get the opportunity to learn a lot about the capital market as, I have been able to understand more and more as I got more exposure into the market. Here at BRAC EPL Investments the tasks and research assignment were relevant and helpful in getting a better idea of what metrics are important in the capital, which is a key skill that could help me get an upper hand for my career in the future.

Also, from the start of the internship responsibilities were handed over incrementally. This approach helped me to not feel overwhelmed and allowed me to learn every task efficiently which had a strong effect on boosting both my skills and my confidence to complete my tasks flawlessly. Not to mention, I received ample guidance and assistance from my Boss which played a crucial factor in building my confidence.

Although, for better and more effective learning experience, specialized content regarding how to do a certain analytic task according to how to company wants could be for great help. An specialist lecture on topics such as, how to conduct valuation, how to technically analyze a stock at a glance, also specialized on specific metrics that are more or less important in a certain sector. Such contents could further clear up misunderstanding and allow interns to gain a lot of knowledge about what the tasks demand from the very beginning, which could eventually streamline the whole task.

Overall, BRAC EPL Investment is conducting an excellent internship program that allow both parties to be benefited.

Chapter 2

Organization Part: Overview, Operations, and a Strategic Audit

2.1 Introduction

BELI have a unique and important position in the Bangladeshi investment banking environment. This chapter provides a comprehensive study done on BEIL. The primary objective of this chapter is to provide a in depth knowledge regarding the background, organizational structure, management policies and other operational mechanisms.

The analysis will mainly focus on the management style and strategy that is developed and used in the operation of the investment bank. The purpose is to connect the theoretical learning of the BBA curriculum with the practical experience that was acquired during the internship period.

2.1.1 Study Objectives

The main objective of this chapter is as follows:

- ✓ To provide a detailed overview of BRAC EPL INVESTMENT LIMITED, which includes its history and its core business function.
- ✓ To conduct a thorough analysis on the management philosophy, which includes the human resource practices and marketing strategies that are developed and used by the firm.
- ✓ An analysis on the financial performance and accounting practices that are used by the company.
- ✓ A study of the firm's competitive position using frameworks like the SWOT and Porter's Five Forces.
- ✓ To conduct a analysis and provide some constructive feedback that could be helpful for the company.

2.1. Scope of the Study

The primary study of BRAC EPL Investments limited, is confined with just this organization and more specifically the Strategy and Investment department. Therefore, as an intern I have a limited exposure to the task of the whole organization. As such the report shell does not contain inner dynamics concerning the management system framework, which includes things such as the process of financial budgeting, the marketing strategy implementation mechanisms. Moreover, due to the constrains we cannot have any absolute comparison with how other companies operates. Therefore, this interpretation is based primarily on the state of the organization observed during the internship period and on written regulations in effect during my internship period.

2.1.3 Methodology

Using a mixed method design, the research utilized both primary sources and secondary data.

Primary data: This data was collected through observation. The acquisition of this data came naturally, through interaction as I participated in a day to day operations as well as social interaction.

Secondary Data: this data is the primary medium used in the analysis of the company's health. This included the company's annual reports. The data was collected from three annual report that provided the medium for the analysis of the company along this quarterly report to analyze the latest health of the company.

Analytical tools: the analysis was mainly done on Microsoft Excel, and to conduct the analysis ratios were calculated and studied upon, and outside of that we had used framework like SWOT and porters five forces.

2.1.4 Significance of the Study

The research of this organization could be significant and helpful for a number of parties. First of all, it meets the requirement for the BBA program, which provides the financial demonstration and theoretical aspects learned through the academic life. Therefore, for an academic researcher, the research could give an insight as to how an investment banking normally operates in Bangladesh. Moreover, it also could serve as a valuable source of information for the future interns, as they will be able to get an idea of what kind of environment to expect when working as a research intern in the strategy and investment department. Also, the report could also be helpful for the organization for understanding the perspective of an intern, which could allow them to make changes that allow for better mitigation of issues currently existing withing the organization. Furthermore, it could be useful to researchers who want to study how different firms operates in the capital market of Bangladesh.

2.1.5 Limitations

Certain constraints were faced during the creation of this report. The financial statements that were used were only based on those that were publicly available information, and any internal documents which could be used for better analysis were restricted. Also, while producing this report confidentiality was an important factor which was in action. Therefore, the primary analysis was done based on observation, and estimates, rather that up to date and exact data. Although one thing to keep in mind is that this limitation, doesn't deviate from the academical worth that the research will provide.

2.2 Overview of the Company

2.2.1 History

BRAC EPL Investments Limited is one of the best investment banks in Bangladesh, operating in the country's capital market. Since the firm's establishment, it has come to acquired a reputation as a first-class financial intermediary, providing various investment banking and advisory services. The organization is supported by a sound institution that commands power, the world's largest non-governmental organization: BRAC. Being ethical in its operations, it contributes importantly to openness and efficiency in financial markets.

Incorporated on 18th April 2000 as a private limited company, the company's original name was Equity Partners Limited. Later, BRAC Bank Limited acquired the company, and it was renamed as BRAC EPL Investments Limited on 4th October 2009. BRAC Bank Limited acquired 51% of the equity in August 2009, and another 25% in May 2011. According to the most recent data, BRAC Bank PLC owns 99.95% of BRAC EPL Investments Limited's shares, making it the actual controlling shareholder. The company shifted from being a private to a public limited company on 4th November 2012.

2.2.2 Mission

The mission of BRAC EPL Investments Limited is to provide value for clients, to strictly follow regulations, and make contributions to the sustainability of capital markets. The mission has both the intention to provide value to the economy by providing financial stability in Bangladesh, as well as provide commercial success through a diverse portfolio and quality services.

2.2.3 Vision

The vision of BEIL is be become Bangladesh's best investment Bank, which is trusted by investors for its quality services for financial solutions. The two main characteristics, "trustworthiness" and "responsibility," distinguish BEIL in a market that lacks transparency.

2.2.4 Values

Basic values that guide all company behavior include:

- ✓ Integrity: Adhering to high ethical standards.
- ✓ Professionalism: Keeping service quality up to expert-level. Analytic
- ✓ Excellence: All decisions are based on rigorous data analysis.
- ✓ Client Centricity: Ensuring that the client's needs and financial objectives come first.

2.2.5 Products and Services

BRAC EPL Investments Limited offers an all-embracing range of financial services to be able to meet the needs of each institutional and corporate client.

Equity Capital Market (ECM): BEIL brokers equity finance for companies by public offering, private placement, and quasiequity solutions, arranging successful, standards-compliant fund-raising.

Debt Capital Market (DCM): It provides debt financing solutions to its customers, including loans syndication, club financing, corporate bonds, and regulatory capital arrangements to help clients structure optimal debt strategies.

Portfolio Management: BEIL manages diversified investment portfolios through services such as Cap Edge, Managed Cap Edge, and Cap Cash, designed to meet different risk-return profiles for investors.

Wealth Management: Wealth management solutions at BEIL include investments in government securities, Progoti SIP, Shurokkha Secured Investment, and Shomriddhi, offering structured avenues for wealth growth and capital protection.

Corporate Advisory: BEIL provides strategic advisory services including mergers and acquisitions, advisory for distressed companies, and asset-backed securitization, enabling corporate clients to optimize financial decisions and unlock value.

Through these services, BEIL positions itself as a full-spectrum investment bank, delivering innovative financial solutions while supporting the growth and stability of Bangladesh's capital markets.

2.3 Management

This section examines the internal management framework of BEIL, covering its leadership style and its approach to managing its most critical asset: human capital.

2.3.1 Leadership Style

The leadership style of BRAC EPL Investment Limited's management style cannot be classified into any one type, as they use a hybrid style. The best way to describe BRAC EPL Investment Limited is that it is autocratic, while it also encourages participative leadership. The main strategic decisions are made by the top management. Although the final decision is made by the top management, they encourage other employees to take part in the decision-making as well, especially the mid-level managers and analysts. In this environment, the leaders don't just tell what to do; they also seek input, ideas, and feedback, which creates an environment where everyone feels empowered and thinks for the betterment of the organization

2.3.2 The Human Resource Planning Process

BEIL's employees are handled in a manner that supports the broader company goal overall. HR needs to be forward-thinking while making the best decisions for the company. The company believes in merit-based hiring, where they hire based on the candidate's skills and abilities to handle the task, not in terms of favoritism, which is evident with employees from a diverse group of people working for the company.

Potential candidates need to pass through several rounds where their technical capabilities and organizational fit are tested. Once a candidate has been selected for the work, they are allowed to learn directly by completing the task. This hands-on work with guidance from senior colleagues is extremely valuable, as this allows them to become more adaptive, and the practical aspects of the work help them become more confident in handling the task. Finally, to keep employees motivated to do their best competitive salary with a bonus based on performance is provided. Furthermore, strict steps are taken to ensure maximum productivity, like restricting access to social media and carefully planning the desks of the employees, to maximize productivity.

2.3.3 Recruitment and Selection

The recruitment and selection process is systematic and merit based. It generally includes:

- 1 **CV Screening:** To filter for academic excellence and relevant experience required by a job.
- 2 **Written Assessments:** These are used to assess the knowledge and analytical skills of the applicant.
- 3 **Technical and Behavioral Interviews:** These are used to check if the applicant possesses the skills required for the job's requirements. Moreover, it provides an idea of the applicant's behavior and ethical standards, which helps assess cultural fit.

Overall, throughout this recruitment and selection process, they make sure that they can find not only someone competent to get the work done, but also someone who is a cultural fit and trustworthy.

2.3.4 Compensation System

The compensation system is competitive, with employees receiving both fixed salaries and performance-related incentives or a bonus. This is an organizational incentive model, with the individual success of executives being seen as linked to their business unit's success. In Investment Banking, bonuses are often linked with milestones completed.

2.3.5 Training and Development

Training and development are primarily conducted through on-the-job learning, mentoring, and exposure to real projects. Employees and interns gain continuous learning opportunities through hands-on assignments, feedback sessions, and performance reviews. This "apprenticeship model" is standard in high finance, where practical application often outweighs theoretical classroom training.

2.3.6 Performance Appraisal

Performance appraisal is done through supervisor evaluation and Key Performance Indicators (KPIs). This kind of appraisal system is a support to employee development; it highlights needs for training and ensures alignment with organizational objectives.

2.4 Marketing Practices

The marketing practices of BEIL differ from how other conventional companies market their product. Therefore, their marketing strategy is not like traditional product marketing. This section focuses on analyzing BEIL's marketing strategy they use to build trust and reputation, meanwhile demonstrating expertise.

2.4.1 Marketing Strategy, Targeting, and Positioning

BEIL's marketing strategy is not based on mass advertising but on establishing itself as a thought leader through the dissemination of high-quality, research-driven content.

Target Customers: The firm's primary target segments are Institutional Investors, Corporate Clients seeking advisory services, and High-Net-Worth Individuals (HNWIs).

Positioning: BEIL positions itself as a trustworthy financial advisor and solution provider with a wide range of financial services available. BEIL's position is backed by the highly respected reputation of the BRAC brand.

2.4.2 Marketing Channels

The primary marketing channels of BEIL utilize relationship-driven and knowledge-driven marketing towards their target audience, which is often the primary marketing channel for most financial services operating in Bangladesh.

Dissemination of proprietary research publications: One of the key channels is through sharing proprietary research publications. Through this proprietary research, they share in-depth analysis of the market, economic outlooks, and investment insights, which create curiosity for investment as they learn about powerful consequences. Moreover, through this research, the firm demonstrates its analytical capabilities, which help it establish trustworthiness among its target clients.

Direct client meetings: BEIL places a strong emphasis on direct meetings with its clients. Direct client meetings allow BEIL to add a personal touch to a sector that is often very similar to each other. Additionally, such face-to-face engagement helps them personize and understand the client's objective better, an essential component in building trust. Through this interaction, BEIL can provide financial solutions that are client-specific and help build long-term relationships with clients.

Roadshows, Corporate Events, and Seminars: BEIL further engages its stakeholders through participation in roadshows, corporate events, and seminars. Through this, they can improve their visibility meanwhile strengthening their relationship with the capital market.

Official Website Updates: BEIL's official website is also an important marketing channel. Keeping the website updated on time with the latest updates on services provided, research publications, and corporate announcements is essential, as it acts as the central hub for information channel for clients and other stakeholders.

Social media: BEIL also utilizes social media platforms such as Facebook and LinkedIn, where they share content that provides short insights that could encourage investment. This platform helps them to reach a broader audience than would be possible otherwise.

Overall, all the marketing channels are centered on relationship building and knowledge sharing, which are the fundamentals for marketing of a financial service provider, for whom trust is an essential part of the services provided.

2.4.4 Branding Activities

Branding Initiatives are primarily focused on building trust and credibility, which is done through examples of a strong professional reputation rather than aggressive promotion. BEIL follows a call-and-response approach; they engage through social media while leveraging the strong reputation of BRAC.

2.4.5 Advertising & Promotion Strategies

BEIL utilizes targeted promotion strategies. They use seminars and corporate advisory events to contact and connect with clients and other stakeholders, instead of investing in non-specific advertising media like billboards. Moreover, they provide daily updates through daily market insights and the Daily Morning news, which acts as a daily interaction between stakeholders who are invested in the capital market, the potential clients of BEIL.

2.4.6 Critical Marketing Issues & Gaps

The problems to resolve comprise vicious competition, market volatility, and insufficient education for retail investors. The most important thing unmet is the extensive use of digital

marketing and investor education, which can generate market coverage among the new middle-class investor group.

2.5 Financial Performance and Accounting Practices

This section provides a detailed analysis of the financial performance of BRAC EPL investments Limited. For the analysis of the financial performance of the company public data from 2022 to Q3 2025 was used.

2.5.1 Liquidity

For the interpretation of the liquidity condition of the BEIL current ratio and Cash ratio were calculated:

Year	Current Assets (BDT)	Current Liabilities (BDT)	Current Ratio	Cash Ratio
2022	2,025,953,204	1,339,668,954	1.51	0.11
2023	1,825,939,419	1,191,184,582	1.53	0.11
2024	1,294,517,168	928,117,095	1.39	0.17
2025 (Q3)	1,255,725,329	962,458,354	1.3	0.19

The current ratio of BEIL shows a grim picture for the liquidity status of the company. Over the period, their current ratio kept deteriorating. While the ratio was above 1.5 till 2023, the ratio started to deteriorate, and by Q3 2025, it fell to 1.30. Although it remains within the comfortable standard of 1:1, which shows that liquidity-wise they are facing issues, it still shows that they are not yet facing any existential crisis, as they can still pay their day-to-day expenses.

Now, to get a further understanding of the liquidity, we need to check the cash ratio. The ratio shows improvement. During 2022 and 2023, the ratio remained steady at 0.11, but from 2024 to 2025 it showed improvement. However, this is not all good news, as the reason behind the improvement is not operational efficiency rather than it is caused by a significant reduction in liabilities along with the liquidation of investment securities.

2.5.2 Capital Structure

Next, to look at the capital structure of the company, we will need to look at the solvency of the company, and for that, we will be using the debt-to-equity ratio.

Year	Total Equity (BDT)	Debt-to-Equity Ratio
2022	1,302,350,935	1.03
2023	1,293,414,099	0.95
2024	716,088,201	1.34
2025 (Q3)	549,580,691	1.8

Based on the data of the company from the financials, we see improvements in the debt-to-equity ratio. During the year 2023, the ratio dropped below 1, which meant their dependency on debt was extremely low. However, in 2024, it increased to 1.34; this improvement showed that their capital structure was becoming more mixed and their reliance on debt was increasing. It further increased to 1.8 by Q3 2025. However, this improvement in 2025 was not caused by more borrowing; rather, it happened because of the two consecutive losses, which had led to the erosion of the equity.

Bank overdraft:

- 2022: BDT 1.12 Bn
- 2023: BDT 1.04 Bn
- 2024: BDT 749 Mn
- Q3 2025: BDT 707 Mn

Over the period, BEIL has made considerable progress in reducing its loans in the form of Bank Overdraft, although its reliance on Bank overdraft remains quite heavy. From 2022 to Q3 2025, their overdraft decreased from BDT 1.12 billion to 707 million, which is a positive trend for the company, as this shows their short-term leverage is falling, which could lower BEIL's financial burden. However, even though the Bank overdraft is falling, it remains responsible for a significant portion of the current liabilities.

2.5.3 Profitability

Year	Revenue (BDT)	Gross Profit/(Loss) (BDT)	Net Profit/(Loss) (BDT)
2022	164,685,180	47,456,389	265,463,389
2023	129,873,921	2,705,787	(8,936,836)
2024	115,612,682	3,499,831	(577,325,898)
2025 (Q3)	53,761,849	(9,850,294)	(166,507,510)

For the analysis of the profitability of the company, comparisons have been made regarding the revenue growth, Profit, and net profit of the company.

In terms of revenue, BEIL is not in a good position; it has been shrinking year after year, and eventually, if we annualize the revenue of 2025, we will get an approximate figure of 71 million, which is not even half of the revenue earned during the year 2022. This suggests that due to the condition of the market, their core services are greatly affected.

The gross profit margin has also shrunk considerably. For 47.5 million in 2022 to 2.7 and 3.5 million in 2022 and 2023, respectively, and during the current year, they are in an even worse situation, where they have sustained a loss of 9 million at the gross level. This shows

that the operations of BEIL are failing to cover the direct costs incurred in providing their core services.

Finally, the last time they reported a profit was in the year 2022, and after that, they started to incur consecutive losses, with the biggest loss incurred during the year 2024 of 577 million against revenue earned of just 115 million.

Overall, profitability-wise, the company is performing horribly, which is understandable considering that all its services offered are highly market-dependent, and the current condition of the market is not in BEIL's favor, leading to such a massive drop in performance since the year 2022. However, this performance is a serious threat as the losses are massive, and as such, they need to make a quick decision to manage their operational cost. Meanwhile, a business model restructuring and revenue diversification to a type of product that is not so market-dependent is necessary.

2.5.5 Accounting System

Based on audit reports, BEIL is in compliance with International Financial Reporting Standards (IFRSs).

Basis of Preparation: Financial statements of the company are prepared on the basis of accrual, and they conform to the historical cost convention.

Revenue Recognition: Revenue is recognized when obligations are satisfied. E.g., under IFRS 15, fee income is recognized on an earned basis while interest income from margin loans is paid daily.

Sequential Instruments: Listed securities are classified as Fair Value Through Profit or Loss (FVTPL). If the market value of the securities changes (either up or down), any increases or decreases in gains are recognized immediately in the profit and loss statement. This is why the "income from investment in securities" line-item is so volatile (e.g., loss of 83M in 2022 vs. gain of 26M in 2023).

Operating Leases: The company adopts IFRS 16 and recognizes both Right-of-Use assets and liabilities of operating leases for its office space.

Deferred Taxation: The company has an accounting policy of recognizing large Deferred Tax Assets (644 million BDT for 2023) arising from carry forward of business losses. This is consistent with International Accounting Standard No.12, but the realization of such an asset hinges upon future taxable profits. In view of persistent losses in 2025, there is a risk that such an asset may be impaired.

2.6 Operations Management and Information Systems

2.6.1 Operations Management

The processes at BRAC EPL Investments are characterized by structured workflow control mechanisms to ensure rigorous efficiency and compliance. Alongside rigorous task allocation and quality reviewing mechanisms, we have adopted daily reporting techniques for operation. Allocation of resources and scheduling are departmental priorities based and deadlines.

A critical team in an investment bank is the operations team, which is responsible for the back-office activities related to trade settlement, client onboarding, and custodial services. They are also responsible for ensuring that BEIL's activities comply with BSEC regulations, which avoid future legal lawsuits. Their services also need to be prompt and efficient, otherwise it fails to adhere to the value of being "Customer-Focused Focused"

2.6 Information System

Modern information and communication technology (ICT) is a crucial part for any organization as it help them collect, store, organize and share data more efficiently and effectively. While the Microsoft suit is heavily used within the organization, only the use of excel is not enough. MS Excel is a common tool used for the analysis purpose, and there is a high dependency of this tool in a workplace for getting reports that assists the decision making, this tool lack scalability and security, unlike the other more sophisticated cloud services.

BEIL's audit report shows that their spending on expenses related to it and cloud expense services are increasing which is a indicator that BEIL is scaling up as they shift towards a more reliable and secure systems. This modern data management system will improve security and allow better data management as it allows those that need the data to access it without the confusion of find out who has the last updated data file. Also, it is a right step towards risk management for a company for whom data is a very important commodity.

For the communication medium a mix of WhatsApp and MS teams is used. The primary mailing app within the organization is Outlook. To ensure strict confidentiality, the IT provide designated computers to work with.

2.7 Industry and Competitive Analysis

2.7.1 SWOT Analysis

Strengths

- Brand Equity: BELI is a part of the highly reputed BRAC group, this gives investors immediate confidence on the credibility of the company making trust building an easy task.

- **Ethical Standards:** They stick with a high ethical standards adhering to compliance and professional management Practices. This strong standard distinguish them from other organizations that might not hold ethical standards to such high regards.
- **Diversity Portfolio:** BEIL has a strong line of diversified financial services, making it easier for them to provide the best possible service required by the clients.

Weaknesses:

- **Reliance on market volatility:** Revenue for BEIL is strongly linked with the condition of the market. As such when the market is at distress regardless of what the company does, their turnover is affected. This could be witness in this financial performance as we see their revenue had contracted significantly as the market contracted.
- **Financial Health:** Due to the market condition the company is currently at a massive loss. The prolonged weak market conditions had led to a massive accumulated loss which had deteriorated their equity value, as in Q3 2025 their retained profit had a deficit of 2.47 billion.
- **High Leverage:** Due to the financial condition of BEIL they are relying heavily on bank overdraft, which is making it harder for them

Opportunities

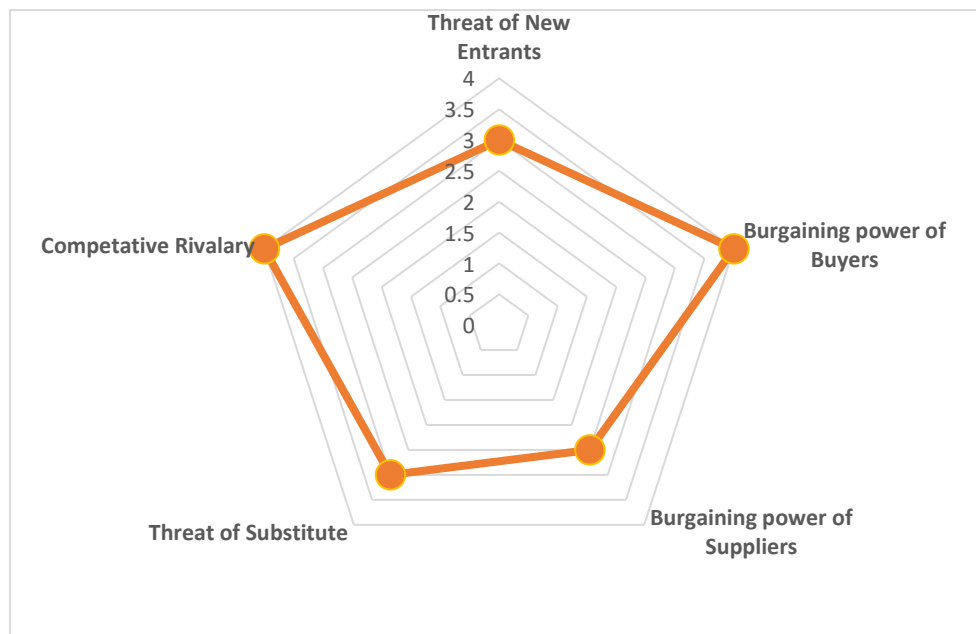
- **Market Growth:** Bangladesh is still an emerging economy, and the capital market still has significant scope for expansion if the government takes initiatives that encourage more participation in the capital market.
- **Digital Transformation:** Currently, social media has become an extremely important marketing platform. Therefore, with proper utilization of this tool at their disposal, BEIL could reach a wider audience and even be able to attract and welcome young enthusiasts into the capital market.
- **Advisor Service:** The corporate advisory business could be expanded, which is often not linked to the market, providing a stream of revenue that is not tied to the market.

Threats

- **Market Condition:** Currently, in the economy of Bangladesh, there is a looming threat of recession or the economy slowing down, which is bad news for BEIL, as they have already been suffering from it for quite some time. Moreover, political instability is also making the market extremely volatile.

- Frequent regulatory Changes: The BSEC is constantly implementing new rules and regulations, which are becoming stricter over time. Compliance with this new regulation is slowly increasing the operational cost.

2.7.2 Porter's 5 Forces:



You will now be able to find information on the structural dynamics of this market from Porter's Five Forces. Analysis of the competitive landscape using Porter's Five Forces supplies some understanding of the structural dynamics in Bangladesh's investment banking industry.

Threat of New Entrants (Moderate): High barriers to entry, significant regulatory capital requirements, the need for a license from the Bangladesh Securities and Exchange Commission (BSEC), and the difficulty in establishing a reputable brand; all these shifting sands make it hard for newcomers to enter this market. However, with potentially large financial groups or well-endowed commercial banks with capital entering the market, the threat level is moderate.

Buying Power: Buyers (High): Buyers, particularly sophisticated customers like institutional investors and high net-worth individuals, hold a lot of power. Because switching costs between investment banks are relatively low, these customers can demand high levels of service, superior research and prices that are extremely competitive. As a result firms such as BEIL must continuously prove to their customers the value their service offers in order to keep these same customers satisfied.

Bargaining Power of Suppliers (Low to Moderate): Capital suppliers and market information providers have little bargaining power. However, the most important "supplier" in

investment banking is human capital. Highly skilled analysts, corporate advisers, and relationship managers are in strong demand and can command handsome compensation, giving this key group of talents a moderate level of bargaining power.

Threat of Substitute Products or Services (Medium): Investors have other products offered by investment banks to but substitute for them. Real estate property directly invested in, certificates of government savings societies and mutual fund products of the financial management companies are all examples. Although these substitutes compete with investment banks for the same investment capital, they do not offer the unique advisory services, or straight financing and placement power core to investment banking itself.

Competitive Rivalry (High): Industry is often highly competitive with a high degree of rivalry that exists among a few established entities. Within the industry, firms have to compete fiercely for major corporate deals such as IPOS, Mergers & acquisitions deals, institutional clients and acquiring and retaining clients. This intense pressure puts immense pressure to maintain similar or lower the fees, which doesn't allow for much room to charge a premium for the quality services.

2.7.3 Summary and Conclusion

BRAC EPL Investments Limited is a well-established company operating since 2009 and has built up competency within the Bangladesh Capital market. It is well known for upholding strong ethical standards, with strong corporate governance and a management culture that encourages participation and has the backing of a strong and credible reputation of the BRAC brand.

However, the financial analysis highlights a contrast between the image of quality and efficient operational success of BEIL with the actual financial condition of BEIL. The financial health of the company had greatly deteriorated between the fiscal year 2022 and the Q3 2025. The revenue, if annualized, shows a grim picture with no scope for a turnaround this year as well. Negative net profit and gross profit with revenue less than half of the revenue earned in the previous year show a serious risk that needs to be addressed urgently. As a result of this substantial loss compounding over the year, the value of equity had sharply reduced and will continue to decrease if drastic steps are not taken to fix their financial condition.

Moreover, the company's current cash position is also troubled, as we see extreme dependency on bank overdraft. Although they are putting effort into diminishing this overdraft, it remains a significant portion of the debt. This reliance on short-term debt for an extended period is further affecting the company's profit-making capability and increasing the firm's risk related to solvency and liquidity.

Overall, the company is currently in a very critical position. They are continuing to operate based on borrowed funds, and they are surviving due to the support supported by the parent company and their reputation. Although their brand value and the competency built over the year still exist within the company, the serious financial condition is a mammoth that overshadows all positives of the company.

2.8 Recommendations

In this section, there are some recommendations for BEIL

Capital Infusion: the company requires a fresh new equity injection from the parent company (BRAC Bank PLC). This will help the company recover and ease the huge burden of loan the company is currently facing.

Strategic Cost Cutting: After the revenue level rests at a lower line, the company must undertake a thorough review of its cost structure. As of this writing, it is making no money on its direct and indirect expenses; this is clearly unsalable. A strict audit of operation costs is in order to get them in line with the new re flow realities.

Diversify Revenue Sources: The company should reduce its dependence on brokerage fees replenished in accordance with market volumes. There has to be a strategic shift towards fee-based income from the "Investment Banking Department" (IBD), such as Debt Arrangement and Corporate Advisory. The department showed resilience in the Q3 2025 report and is capable of higher margins.

Digital Marketing: The company should exploit its advantage in digital channels to tap the untapped market of small retail investors. A broad and tech-enabled customer acquisition strategy would help move the customer base away from its highly competitive institutional segment.

Asset Quality Evaluation: The company has a large amount of "Deferred Tax Assets" sitting on its balance sheet. With the trend of continuous loss, the future realizes these assets is doubtful. A reasonable financial idea mean reassessing these assets and present a more savagely true picture of the company's financial condition to shareholders.

In conclusion, given the company's operational DNA as a market leader, immediate and decisive financial restructuring will be the only way forward for BRAC EPL Investments Limited.

Chapter 3

Project Part: Understanding Seasonal Sectoral Performance and Liquidity Trends in Bangladesh

3.1 Introduction:

The analysis of market seasonality and liquidity within the DSE is a component which could provide us a deeper understanding about the mechanic of the Dhaka Stock Exchange (DSE). Seasonality is defined as a phenomenon where the movement of the stocks could be predicted through various time frame, which in term challenges the notion of market randomness. The primary focus of this report is to use the daily movement of the Market Capitalization to predict seasonality on a sectoral level, which could allow investors to predict the liquidity situation of a particular sector according to the month of the year. For the research we are primarily using the market capitalization on a sectoral level as a proxy to get an indication of liquidity, along with an actual scale of market activity.

The theoretical foundation of this study is challenging the theory of Efficient Market Hypothesis (EMH), which was proposed by Fama (1970). The theory assumes that in an efficient financial market, stock prices will always reflect all available information within the market. Therefore, according to this theory this is not possible for any investors to take advantage of abnormal profit for a significant time, as Fama theorizes that stocks will always follow a random movement and is therefore unpredictable. However, later this theory of EMH was challenged through behavioral finance, where they proposed an alternative perspective where the stock price is sometimes influenced by several factors like psychological factors, investor sentiment, other irrational behaviors like herding behavior. Therefore, this behavioral factor could lead to the stock following a predictable pattern, this predictable pattern is which are often referred to as market anomalies, which clearly indicates that the market deviates from the full market efficiency. This sort of market anomalies is especially prevalent within emerging market, where the market is plagued with asymmetric information. Therefore, leading to the theory of seasonality existing within the Bangladeshi stock market.

Several studies have been conducted in different market to find out market abnormality. Existing empirical studies have identified several patterns within the stock market that directly challenges the assumption of a fully efficient market. This market anomalies, are commonly known as calendar anomalies, suggesting the performance of stocks are not completely random rather it could be influenced by factors such as the day in the calendar or months. Amongst all the anomalies one of the most commonly know anomaly is the Day of the week effect, the performance of the stock tends to be low during the start of the week and higher during the end of the week. The reasons of such pattern is often attributed to investor sentiment, and behavioral reaction following the weekends. Another well know anomaly is the month of the year effect, especially the January effect, where stock performs exceptionally better without the need of

any price sensitive news regarding the stock. This effect is mainly attributed to the factors such as tax loss selling, portfolio rebalancing by institutional investors and renewed market optimism at the beginning of the new financial year. In addition, seasonal variations could also be identified in external factors such as the weather conditions, religious and cultural events, and fiscal year end effect. The findings of market anomalies from the past studies supports the view that market behavior contradicts EMH, and often investors psychology and timing could be a primary factor in the performance of a stock. Therefore, as Bangladesh is a emerging market, it provides an incentive as to why we should do an analysis on the observation of seasonality within the Dhaka Stock Exchange (DSE).

There is a clear gap that exists based on the past paper that researched seasonality, in the Bangladeshi stock market. The primary gap that exists is the fact that most of the existing studies are outdated and this by nature limits its coverage in the contemporary economy. Moreover, most of the research uses stock return as the primary measure of performance. The issue being that although stock return does show a return as a percentage which can be compared and easily understood, they do not reflect actual scale of the market activity, which in turn disregard the concept of liquidity within the market. For example, assuming that “Stock A” priced at BDT 4 had increased in price to BDT 5, meanwhile “Stock B”, priced at BDT 100 increased to price BDT 105, here you will witness that stock A, in terms of return is actually provide higher percentage compared to stock B although its quite evident that the money flow if way more with Stock B. Therefore, focusing on market return fails to capture the scale of the market and any sector level liquidity and investment intensity. Therefore, the lack of updated information lead to a lack of reliability on the data of past studies that investors could rely upon to sometimes take proactive investment decision. Moreover, all research focuses on the entire markets return rather than putting any focus as to divide sectoral trends between sectors. Consequently, there is a need for a research that incorporates measures reflecting both market scale and on a sectoral level to better understand seasonal patterns in the Bangladesh stock market.

To address the existing gap, this research will not be focused on any individual stock, rather the research will be conducted on a broader scale which is a sector level analysis of the Dhaka Stock Exchange (DSE). For this research we are trying to interpret market liquidity and seasonality based on changes in the market capitalization across 20 different sectors. This movements allow us to identify whether trading activity is increasing or decreasing withing sector, which allows us to make an initial assumption as to whether the market liquidity is improving or deteriorating. Moreover, as the data is divided amongst sector, we can get

information that is both more relevant to investors for portfolio diversification and also it helps limit the chance of outliers heavily impacting the database. Moreover, as we use the market capitalization, we can get a more proper indication of the market movement in term of money flow. Furthermore, to make this seasonal pattern easier to interpret, a heatmap visualization will be used, with a percentile-based color grading, making it much easier to analyze the presence of seasonality and interpret months with the higher or lower liquidity along with highlighting the shifts in investors' attention. The results of this event clearly show that there is indeed seasonal pattern within the DSE, and this are phenomena that reveals repeatable patterns within the DSE. Initially it found that the weakest month for the year were during the month March, April, and October, meanwhile July and August were the most of recovery and strong performance for almost all the stocks in the market. Overall, the findings reveal information which could play a significant role in providing investors and analysts who are seeking to further understand the market behavior of the DSE on broader scale instead of just sectoral level.

This research could provide investors, analysts, and institutional decision makers with valuable insight into the market behavior of DSE. By using the information from this research investors will be able to make important decision regarding sector selection for portfolio diversification much more easily. Instead of viewing the entire market as a single unit this research will help show the behavior of different sectors within the stock market at different period of the year. Through this research we will also be able to figure out and identify which industries are more or less attractive to investors on a month by month basis. Moreover, through identification of performance on a seasonal basis investor could make strategic decision and plane ahead. Through the use of this information strategic decision on when would be the best time of the year to buy stock and when would be the best time of the year to sell stocks in holding to optimize the maximum profit of the portfolio. Overall, this study will offer a more in depth and deeper understanding of the market dynamic of the Bangladeshi stock market, where we can get an idea about the changing sector characteristics based on the month of the year along with the investors behavior, which will eventually allow for a much more informed participation within the stock market as investors can make decision of portfolio diversification more easily.

This report is structured to ensure a clear and logical understanding of the study and its outcomes. The report will begin with literature review related to the topic which will provide understanding of the past work conducted along with the establishment of the theoretical and relevant background of prior studies. Next, will be the Methodology section, this section will

explain how the research will be conducted, the data used in the research and the approach that will be used to identify the results of the research. Next is the Findings and Analysis section. This section will highlight all the key observations found within the research along with the implication of what this means in relation to the objective of the research. And finally, there is the summary and conclusion section that will highlight all the major findings and finally provide some recommendations as to how this result from the research could be used for future improvements.

3.2 Literature Review

While the EMH suggests that stock prices immediately and completely reflect all information available, thus, successful persistence of abnormal returns is not possible (Fama, 1970, quoted in Eduah et al., 2024; Akhter & Yong, 2021). Although a vast amount of empirical evidence opposes this assertion. In the past, many studies have documented predictable return patterns that are inconsistent with EMH. Such anomalies, referred to as calendar days or other market anomalies, reflect that returns can differ systematically from one day to another or from month to month, quarter to quarter, or season to season (e.g., Admati 1985; Blume and Stambaugh 1983); suggesting a lack of full efficiency.

3.2.1 Market Seasonality and Calendar Anomalies Explained

Market seasonality is described as a regular predictable alternation in stock returns within various time frames (Mills, 2007 in Ngene et al., 2020). Studies show that certain days or months, it in fact does better or worse than others, which raises the question of just how efficient markets really are. The Day-of-the-Week effect is one of such anomalies; returns are lower on Mondays and higher on Fridays have been the focus of much research (Handa & Ahuja, 2013; Ngene et al., 2020). Another popular anomaly contains the Month-of-the-Year anomaly, e.g. January effect, in which a large proportion of frequently generated superior returns is going to be observable in any strong market during January, because of tax-loss selling or portfolio revisions (Akhter & Yong, 2021).

Seasonality also may occur over longer periods, such as seasons, quarters, or holidays. For example, it can result in increased returns during late summer and early winter but reduced returns in spring (Ngene et al., 2020). This would mimic the investors sentiment which could imply market supply that impacts the movement of a stock in the market at a particular season.

3.2.2 Day-of-the-Week Effects

One of the most common anomalies known is the Day-of-the-Week effect. It is suggested that returns on Mondays are negative and those on Fridays are positive (Handa & Ahuja, 2013).

Ngene et al. (2020) find that the Monday weekly pattern remains alive even in different financial systems, and they suggest that differences between institutional trading cycles, timing of information releases, and investor behavior could potentially affect these weekly return patterns.

Such anomalies are more pronounced in emerging markets (due to relatively weaker regulatory regimes and higher non-informed trading and behavioral biases), where they last longer as well. Patterns where returns are predictable on a day-of-the-week basis are inconsistent with the EH as they indicate that short-term returns, at least to some extent, are not random.

3.2.3 Month-of-the-Year and Quarterly Effects

The January effect is still the most studied monthly anomaly, and stocks usually yield a higher return in January (Aaagh & Yong, 2021; Eduah et al., 2024). Reasons offered: Tax-loss selling, portfolio rebalancing, and a change in behavior at the dawn of a new year.

Quarterly effects are also found. Some quarters, usually the first and fourth, tend to beat expectations more than others because of things like earnings announcements, new investment cycles, or quarterly reporting behaviors. This is suggestive of the interplay between investors' behavior and macroeconomic cycles in generating an ongoing and predictable pattern in returns.

3.2.4 Seasonal and Holiday Effects

Cause for a calendar anomaly is that seasonal and festive effects are too helpful to the anomalies. After September, investors tend to become more bearish as investors are sobered by the low perceived risk (Ngene et al., 2020). Trading behavior can also be affected by natural ways of life, such as weather patterns, cultural events or seasonal consumption cycle. For example, the last months of the year in the sun January often produce good returns, while early spring months tend to get worse.

The impact of holidays can also result in abnormal volume patterns. Trading often fizzles out before long holidays, only to rebound after. These anomalies show how the coordinated actions of investors give rise to predictable deviations from normal return dynamics.

3.2.5 Implications for Market Efficiency

The existence of calendar anomalies is a challenge to EMH. Behavioral finance provides other non-mutually exclusive explanations for these anomalies, such as investor sentiment and cognitive biases. Evidence from developed and emerging markets indeed shows that anomalies, such as day-of-the-week and month-of-the-year effects, are still pervasive (Cakici et al., 2013;

Al-Khazali et al., 2017). Developing markets suffer stronger and more persistent seasonality due to less effective regulation and speculation.

In general, the evidence indicates that there has been a return to seasonality in financial markets. Markets might tend towards efficiency in the long run, but short term, and seasonal anomalies persistently violate the fundamental premise of the Efficient Market Hypothesis.

3.2.6 Overall Impact of seasonality

Overall, the past literature provides clear evidence that the stock market has seasonality and calendar-based anomalies that challenges the concept of EMH. Researches into the stock market within both developed and developing market had found consistent behavioral pattern such as the day of the week affect, month of the year effect and holiday related anomalies which indicates that returns can be predicted. This predictable behavior is often caused by several behavioral patterns such as behavioral biases, institutional trading practices, information release timing, tax loss selling, and structural market characteristics. This behavioral pattern seems to be more prevalent in emerging markets as there often seems to have a wider information gap in the market along with weaker regulatory framework. Despite evidence of seasonality existing in the stock market, most of the studies are focused on a broad market indication rather than any indication that tries to divide them based on a sector level. Next, in emerging countries like Bangladesh very little research have been conducted regarding seasonality in the DSE. Moreover, all researches conducted are extremely outdated and as such there is a need for more concurrent studies to be conducted in the stock market. Finally, the gap needs to be addressed to get a clearer understanding of the market efficiency, sectoral dynamics and investors behavior in an emerging market such as Bangladesh.

3.2.7 Hypothesis

H0: states that stock returns do not exhibit any systematic seasonal or calendar-based patterns.

H1: states that stock returns do exhibit systematic seasonal or calendar-based patterns.

3.4 Methodology

The methodology for this research is designed around the structure of the database of the 4-year stock price. Instead of using statistical models focused around the returns of a stock of the entire market, this research was conducted using daily data to compute monthly changes of the sectoral market capitalization, which allowed for the identification of market movement on a sectoral level. This method is the best for identifying seasonal sector pattern in the stock market

as return is unable to demonstrate the scale at which the market is operating allowing outliers to dominated and provide misinformation.

3.4.1 Analytical Approach

The research methodology and analytical approach were formulated in consultation with Mr. Aayman Farzand, Senior Quantitative Analyst of the Strategy and Investment Department at BRAC EPL Investments Limited.

The analysis is based on two simple yet effective components: Monthly sector market capitalization and Comparison of the market capitalization movement of the sector from month to month

By analyzing the movement of the market capitalization from month to month, we are able to identify patterns in the sector movement. This in turn give an idea of investors sentimental. And the recurrence of similar trend in the stock market is what leads to discovering whether seasonality exists or not. The approach used is both numeric as well as descriptive, thus the insights about found from observation of the finding rather than any absolute statistical modelling.

3.4.2 Sectoral Seasonality Identification Framework

At first all individual stocks are distributed in term of their respective sector. Later the market capitalization of the stocks is calculated using the close price. After that to get a more accurate market capitalization on a monthly basis the market capitalization for each individual month was calculated using average, this created the basis of comparison on a monthly basis. The analysis relies on an average movement of market cap month by month., because of using average the data is normalized and becomes a comparable basis for cross section evaluation for studying sectoral changes. The data used for the analysis of seasonality is from the past 4 years. Finally, to generalize the data we had calculated an average of all four years based on the month. After that a heat map was created to make the visual representation easier to understand. The heatmap was made based on percentiles, which allowed for easier analysis of relatively weak and strong sector based on their performance. Finally, based on the heatmap seasonality can be identified and from there we can try to analysis sectoral performance in the DSE as well as whether it aligns with any well-known theory found in pervious studies

3.4.3 Market Capitalization as the Key Variable

Two variables are the basis of all calculation:

- **Stock price**- used to calculate the change in the market capitalization used to compute sectoral market cap
- **Sectoral market capitalization**- it is the primary indicator used for the analysis of trends, performance and investor interest.

The observation of the behavior of sectoral market capitalization, is primarily used for analysis as it allows for cross sector comparison, and no return calculation is necessary for the observation.

3.4.4 Monthly Aggregation Method

The entire dataset was aggregated monthly, the analysis had strictly maintained a monthly grouping throughout the study and no weekly, or daily changes were individually used for the analysis purpose. All the seasonality were assessed on an monthly basis, which generalized and nullified any weekly or daily anomaly that might exist in the dataset. This structure allows us to look for evidence of existence of some common seasonal effects, like the June effect and the yearend effect without extreme values providing misinformation if analysis done on a weekly or do to day basis.

3.4.5 Rationale for Sector-Based Analysis

For the analysis of seasonality we are studying the change in market cap instead of individual stock because it helps up reflect the broader market movement more accurately, as individual stocks are highly effected by several more factor then just the economic events, which will infect nullify the distort the data and make it difficult to identify any evidence of seasonality. Through the aggregation of stocks within a sector we are able to generalize the data and eliminate changes in value related to firm specific news and as such the data set will be able to reflect a cleaner and more concise demonstration of market trends. Moreover, sector level analysis is often time more crucial in investment and portfolio diversification decision, therefor making a sectoral seasonality more useful to investment managers then the seasonality of each stocks.

3.4.6 Interpretation Strategy

To analyze monthly patterns, heatmaps were used to visualize the seasonality of the sectors. For the heat map a data base was constructed using a month to month comparisons of market capitalization of each sector. From this heat map we tried visualizing if there were any evidence of already documented seasonal anomalies which were reported in the existing literature.

Overall, the analytic approaches will follow a mix of both qualitative and quantitative analysis to identify existence of recurring sectoral trends over the annual cycle. Therefore, this strategy enables us to conduct a systematic assessment of seasonal behavior across different sectors.

3.4.7 Methodological Limitations

Within this analysis there are several limitations that are inherently present due to the data used in the analysis. First, no return-based data was used and therefore the study doesn't try to identify the profitability of the sector instead this analysis only provides information regarding sector performance and its relative performance month by month. Next, the market itself has been affected by the disruptive effect of the COVID era and this distortion has led to the actual usable data of seasonality to just two year, since there were also periods with floor prices which can't be used for analyzing seasonal pattern. Lastly, the change in market capitalization was used as the proxy that is used as an indication of trading activity, which unfortunately may not be accurate compared to other market metrics like volume or turnover. However, despite the limitations the methodology used is appropriate for the specific study of seasonal patterns within the Dhaka Stock Exchange.

3.5 Findings and Analysis

Sector	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bank	0%	1%	-1%	-3%	-2%	-1%	5%	5%	0%	-3%	-1%	-1%
Cement	-1%	0%	-3%	0%	-2%	-2%	5%	4%	1%	-7%	-2%	-1%
Ceramic	-3%	2%	-3%	-2%	-4%	1%	2%	-1%	0%	-8%	-1%	2%
Engineering	-2%	-3%	-3%	-2%	-4%	-2%	5%	2%	1%	-7%	-1%	0%
Financial Institutions	-5%	-5%	-6%	-4%	-3%	-2%	5%	5%	2%	-6%	0%	-1%
Food & Allied	0%	0%	-6%	-2%	-5%	-1%	2%	4%	0%	-5%	-1%	-1%
Fuel & Power	-2%	-3%	-4%	-2%	-2%	-1%	3%	2%	0%	-5%	0%	-1%
Insurance - General	1%	-1%	-5%	-3%	-3%	-1%	4%	1%	3%	-4%	1%	-2%
Insurance - Life	0%	-3%	-4%	-4%	-3%	2%	2%	2%	5%	-7%	0%	-1%
IT	2%	1%	-1%	-4%	-6%	-4%	3%	-1%	4%	-5%	0%	-3%
Jute	-2%	-2%	-1%	-1%	0%	-2%	7%	3%	7%	3%	0%	16%
Miscellaneous	4%	2%	-3%	-2%	-1%	-2%	-1%	2%	1%	-4%	0%	0%
Mutual Funds	-1%	-2%	-1%	1%	-1%	-3%	4%	0%	-3%	-4%	0%	0%
Paper & Printing	-1%	3%	0%	-4%	-6%	-4%	5%	3%	1%	-2%	-1%	-6%
Pharmaceuticals & Chemicals	0%	0%	-3%	-1%	-2%	-2%	3%	2%	1%	-3%	-1%	-1%
Services & Real Estate	-1%	3%	-4%	-2%	-2%	-4%	2%	2%	6%	-4%	0%	-2%
Tannery	-1%	-1%	-2%	-1%	-3%	-1%	1%	0%	-1%	-5%	-1%	0%
Telecommunication	1%	0%	-6%	-3%	-4%	-1%	4%	8%	0%	-2%	-1%	0%
Textile	-2%	1%	-2%	-4%	-2%	-1%	3%	5%	1%	-5%	-1%	0%
Travel & Leisure	1%	4%	0%	-1%	-5%	24%	1%	-2%	7%	-4%	0%	-8%

We begin this section by examining how activity in individual sectors varies from month to month of the DSE. The observed patterns exhibit distinct seasonal transitions in investor attention and market dynamics. Although the dataset is descriptive in nature, over the monthly horizons, we can observe patterns that correspond to familiar market anomalies like calendar-related issues, mood changes of investors or fiscal year ends.

The sectoral heatmap shows the monthly market cap percentage of different sectors. Through the use of percentile-based color gradients, it communicates which industries are good or weak in any given month visually. This helps us pin down seasonals, volatility, and patterns of performance that repeat throughout the year.”

3.5.1 Overall Market Seasonality

Through analysis we can see the evidence of seasonal cycle that can be repeated based on the month of the year, the months can be divided in quarter. In the first quarter, most of the sectors performs poorly, with most of the sectors market cap declining. Although, the ones who are the most effected are the stocks related to the sector financial institution, Fuel & power, insurance-life, engineering, and It.

The next quarter sees a similar characteristic in the second quarter, with the worst performance noticed during the month of April. Although most stocks remain to be on decline at the start of the second quarter they start to recover during May and June, although the all sectors don't have similar recovery.

The third quarter is the best season for investors. During the month of July and august most of the sectors witness strong positive movement, infect this period witnesses the strongest movement throughout the year. The highest gainers in this quarter are IT, cement, services & Real Estate, Telecoms, Textile, and financial institutes. This is the period with the highest and positive investors confidence.

For the final quarter, the sectoral chart show slow down in market activity, and there are evidence suggesting that October is one of the weaker months of the year. With December performing even more worse for some sectors, such as the Travel & Leisure, Pharmaceuticals, and financial institutions which often see a sharp decline. The reason behind this sharp decline could be tied to the end of the year effect where investors try to take as much profit as possible before the year end, in which more sell order might be in order and eventually as liquidity become tight due to reduced buy pressure, the overall market participation slowly declines. Eventually during this period, the market slumps. However, during this period the jute sector is one of the only sectors that has a positive impact on the market.

3.5.2 Sector-Specific Insights

All major sectors demonstrate different seasonal pattern. The Banking sector remains to be mostly neutral over the year, with slight negative performance over the first few months of the year, and it has a recovery during July and August. This effect could be a result of mid-year financial reporting, and the impact of the announcement of the new budgets.

Cement is very cyclical. It proliferates in July and August, when construction activity peaks and suddenly plummets in October, as a monsoon typically puts a halt to building. Ceramic and Engineering seem to be moving in tandem, weak at the early part of the year, followed by a revival in mid-year as industrial production gathers pace.

The Financials sector has one of the longest downturns, with steadily negative performance from January to June but a July–September recovery. But they decline anew late in the year, when balance sheets are adjusted and liquidity is squeezed.

The Food & Allied sector is relatively robust, experiencing small downturns in performance during April and May but a large revival when it becomes mid-year and demand for consumers increases. Contrast this lack of Speed with the other significant sector, Fuel & Power for most of 1H, which is weak at large as a result of global energy price volatility and home cost pressures.. It recovers slightly in the third quarter but falls again in October and November.

Insurance, both General and Life, is weak through the first two quarters. There is some recovery in General Insurance between July and September, while Life insurance coverage is yet more hectic. One of the most textbook seasonal candidates is IT, with a huge spike in performance around June-August - presumably simply because outsourcing cycles and tech demand generally then peak. Significant declines was sighted during the month of April and October.

In some highly volatile sectors like Miscellaneous, mutual funds, and paper & printing, the evidence of seasonality cannot be accurately assessed. Like the rest of the market, they seem to have a positive trend from July and August. Meanwhile, pharmaceuticals and chemical are mostly stable all over the year, although during April and July, they seem to have a downward trend, while during August and September. This is quite a strange behavior as it seems that for if there is a season that seems to benefit the whole maker its July, but it seems to not really be a fact for the pharmac industry. The Real Estate & Services cluster displays one of the strongest mid-year trends in July-September, but it deteriorates both at the beginning and the end of the year.

Communication is no exception, showing strong evidence that they do as well in August and September 3 months following second half months but very poorly at the guidance warning month April or October. Textile products show the sharpest blips but tend to boast the best performance in H1 corporate data - demonstrating the seasonality associated with export cycle. Travel & Leisure is the one that stands out most, with strong performance in July (I would assume peak tourism season) and a completely reverse trendline in December (most likely off-season).

3.5.3 Summary and Conclusions

In the market as a whole, some months tend to stand out. March, April, and October are found to be universally weak months, with April being the weakest month. On the contrary, July &

August are most markets' consistently performing months with bullish economic activity and market beliefs during those times.

Cyclical Sectors such as Mutual Funds, Telecommunications, and Travel & Leisure gain and lose big. They are more macroeconomic or regulatory, sensitive and unpredictable. On the contrary, relatively more stable sectors such as Food & Allied and Banking are less volatile and hence considered safer bets in uncertain markets.

Overall, the findings that can be inferred from the analysis show strong evidence for a monthly seasonal effect on the sectoral performance of DSE. The recurring trends you should be able to see through months include the contrarian patterns of weakness in March and April, strength in July and August, and October weakness. The differential effect of high volatility sectors (viz, Pharmaceuticals & Chemicals, Telecommunications, Travel & Leisure) relative to low volatility ones (Food & Allied and Banking) further emphasizes the existence of persistent seasonal effects. The results of this study are consistent with the expectation that seasonality at the sector level is a determinant of market return movements and investor activity, conveying that market returns are driven by repetitive behavior instead of being totally efficient or random.

3.5.2 My Contribution

Throughout my research, I was able to discover that seasonal patterns like the January effect exist in DSE. However, all past studies had always treated the whole market as a singular entity and tried to find seasonality based on returns; the issue is that return fails to reflect the scale within the market, which also fails to actually reflect the money flow or liquidity within the market. But in my study, I had tried to find seasonality of the DSE, but on a sectoral level, which provides a much more in-depth knowledge for necessary actions like portfolio rotations and portfolio distribution. Moreover, it creates a scope for further studies about seasonality, as this provides evidence that there is a seasonal pattern in DSE on a sectoral level, and therefore, there is scope to further study each sector.

3.6 Recommendations/Implications

3.6.1 Implications for Investment Strategy

The heatmap allows for the demonstration of the existence of seasonality in the stock market, particularly the Dhaka Stock Exchange (DSE). The seasonal pattern exists across the economy with downturns experienced in the 1st few months of the year, followed by a strong midyear recovery, and a slowdown afterwards. Sector specific volatility are reflecting as we can see different sectors are having different performance based by month to month. This insight offers valuable insight that the investors can use for short term investment planning, risk management

and strategic portfolio rotation. The following guide will summarize which sector has what kind of performance.

From the observation of the data provided using the heatmap, insight could be drawn to assist in important investment strategy. For most cases as it seems, investors could increase their exposure within the months starting from July to September. Since there is evidence that most of the sectors in this period are at their best performance and as such it is this period the investors will likely give a better period for earning returns. On the other hand, most of the investors will also find it riskier to invest in the stock market during the month of April and October. Therefore, using the information of seasonality better investments decision could be made.

The Cement, Engineering, and Real Estate sectors are sectors that an investor can use for strategic rotation this is because this sector are highly predictable. Meanwhile for defensive sector such as food and allied, Bank could be used to deliver a stable return even in volatile months and are used to allows for a source of stable return in the fund.

Finally, the difference in the performance of the different stock based on different month is a reminder of why it is such a important thing to make sure that you diversify your portfolio. As there are evidence of different sectors peaking during different month of the year, having a diversified portfolio can help mitigate the negative effect of weak while ensuring the portfolio is able to generate a more stable return over the period of time.

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Appendix A.

Sector	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bank	2022	687026057978.64	68296964207.90	661893105917.73	63190290068.82	60839232091.81	60638689371.82	595915681926.32	597817271891.50	600766238760.48	593041753147.53	589329189892.63	58902248673.33
Cement	2022	136493115031.82	13455143106.32	124141170641.82	133946888267.10	12479014524.71	120211287398.18	115795358355.79	120942996664.00	128242731250.48	116188939353.04	11257078114.74	111822660618.89
Ceramic	2022	34749449631.82	3940307638.84	30546027272.73	2952522764.71	3133031327.65	34849024549.09	33746454836.84	32962165356.00	3260378933.33	329391114318.09	32032786826.32	32641119917.65
Engineering	2022	533171054318.64	520932700696.98	516491967588.64	52574402236.32	520617422603.53	524498886866.82	504017984835.26	50724655385.50	500260989356.10	50121909005.27	495024531402.62	49370731921.54
Financial Institutions	2022	20619106701.38	19930168994.21	17352240900.45	174051613669.41	175141522445.81	17536703980.46	16760096943.68	169504631348.00	171213986321.91	16356624932.00	16176250284.74	161581415823.33
Food & Allied	2022	46747642817.73	37982783458.95	426061632448.64	419327925140.95	402928915528.41	404040802260.45	38720143464.74	385677133535.00	38869213605.24	381164255946.84	381364113710.00	383036113710.00
Fuel & Power	2022	51754897897.27	510029013662.63	489522348312.27	485051334074.71	47880854358.82	468466170342.73	474079663385.26	46429201043.00	47102812593.33	460999771641.00	459097125350.53	458062121778.04
Insurance - General	2022	129504891463.64	129593795973.16	114466013904.09	11047229683.94	9852523842.94	10283115268.34	92315614562.63	92001244680.50	91663659307.14	9056939956.85	91115512908.42	91016712946.96
Insurance - Life	2022	819585432009.09	78615057544.74	7353799258.18	7118989041.16	65299915297.06	6805525814.09	66158343560.53	67471697782.50	685588222050.00	66732692461.58	69541629047.37	69615855728.00
IT	2022	42683374409.49	41888319944.21	41634926590.00	3925234187.65	36136128748.67	34899169535.45	33612625280.00	3337358876.00	3594321496.67	37906745964.11	37486521312.11	4171366250.00
Jute	2022	199998930.91	138322383.16	1397026070.91	1378008284.71	130580771.76	1345386372.73	137883981.58	1411733682.00	1712073000.00	1872724280.00	1883145562.11	2252511771.11
Miscellaneous	2022	131330871.16.82	133893336055.79	12541171519.01	124471070920.00	123842738776.47	12441262909.09	12311589975.56	1271077304832.50	132038418554.76	1274761010032.50	124475222536.44	12265049049.36
Mutual Funds	2022	3574253877.27	3522668121.05	35182521690.51	35088439917.65	3414205682.35	3417824118.40	34178508584.21	34178508390.00	34734251566.67	3441672133.84	34402171330.84	3436144960.46
Paper & Printing	2022	41123182482.73	4311811055.26	43425750380.91	44355690434.12	40971807767.65	3932019457.27	41375979182.11	45218842316.00	4935393076.67	5885322142.63	5952386938.47	5048474342.78
Pharmaceuticals & Chemicals	2022	724469738351.82	738051179064.74	71638973230.91	727400989479.41	717817980031.18	71430453880.00	69727453241.95	71064103904.00	759848768319.48	767475653001.84	73453217081.05	723629396245.00
Services & Real Estate	2022	28058593649.55	29425504779.47	28027103594.76	26929851594.71	26101142058.82	26501211356.82	253797670264.74	27998123966.50	312627160217.14	32045804004.00	30145113491.58	27371601896.47
Tannery	2022	400854841220.91	4112250561.91	4075055874.00	40888490874.12	38974447307.06	37209188210.00	34505862968.32	34285424005.00	34254685215.24	3432181056.14	33729370520.00	33786968664.44
Textile	2022	721061826481.82	71895378484.21	662800654763.64	647325205552.94	61638995729.41	60464859672.73	60213868012.03	59322279071.00	587363682800.00	58507648200.00	58507648200.00	58507648200.00
Travel & Leisure	2022	16173440905.00	16656027237.37	165594496937.27	159883079326.47	156593159491.77	16033888350.45	16252245842.11	17334624236.00	17008530883.67	16582164671.96	162717488243.16	16205221480.16
Textile	2022	3018402683.64	27434915152.63	26840397677.27	2759874578.82	2873303588.82	2768683400.00	2621558371.58	27512789030.00	260211685.71	45095113300.00	439605113300.00	439605113300.00
Total	2022	4746477846434.55	471905329490.26	450218133968.82	4456246313496.91	432389504445.29	4302446677314.92	4219256680410.53	4246832601128.50	433461676668.95	429683262758.20	4244618138097.37	4215071195343.96

Fig:1A

Sector	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bank	2023	590169170165.22	59847583263.63	597674488173.50	599959984862.35	60404136844.31	60394325095.69	608463395932.73	60782131586.38	6048862715.00	604271567533.18	61456867833.77	615404478328.95
Cement	2023	118458424415.65	11075333751.58	11019736752.00	112119589802.35	122094781979.80	123208118583.64	123620158503.64	122670158520.00	12283050760.00	127293859179.68	120852088551.60	120903757294.74
Ceramic	2023	32204533962.87	32581909996.74	32070897705.96	3189513011.76	3183112011.76	3183112011.76	3204713205.56	3200260740.91	31532756245.45	31448118577.76	317465217127.27	3251294171.00
Engineering	2023	4921625447.00	49101555773.85	49032724649.50	490532228407.06	49322520599.44	495131406978.27	495658109962.89	493175451350.91	492090787663.63	492364638033.64	494103191532.27	497058919038.42
Financial Institutions	2023	16160642348.26	161398669459.47	161148944039.90	1611188882.16	161148944039.90	161148944039.90	1611386453681.82	161181271514.55	16111396355.56	161112596950.00	16115131386.36	16122441191.00
Food & Allied	2023	381183345370.71	385018917798.00	389050651033.00	396842285491.77	404034902477.78	404034902477.78	407461563538.84	405403209409.09	40507279861.11	403359210219.59	4097059642.37	397343909369.47
Fuel & Power	2023	456770486286.96	456569776940.00	456569776940.00	456569776940.00	456569776940.00	456569776940.00	456569776940.00	456569776940.00	456569776940.00	456569776940.00	456569776940.00	456569776940.00
Insurance - General	2023	935041843.91	9326062591.05	8848836687.50	8794404677.65	84107107089.40	86346576922.55	87573374002.23	89501031975.91	11070540665.00	1087973112.01	888368665.44	888368665.44
Insurance - Life	2023	73278242447.00	7175183094.74	7251026075.00	71388773976.47	74375857944.44	8886574216.01	81857367186.36	7322831263.64	75183570427.78	7317165027.78	7041484459.09	7068334394.74
IT	2023	42957122908.70	43053017179.55	44683429815.00	4543321187.65	44787835344.44	44174753209.09	4431524755.45	41935145104.55	41935145104.55	3937358876.67	38251347950.00	3876350621.00
Jute	2023	2212180183.74	2043265653.16	1963580896.00	20968461300.00	2407314037.44	244730086.67	2520246023.64	2539072150.91	2453717891.11	2412628500.00	269881807.27	3811808650.53
Miscellaneous	2023	12295150071.29	12472589676.32	123471244452.50	12400597376.47	1240598966.67	12816189827.55	12782614176.00	13002342400.00	13002342400.00	12889299719.51	1275852381.18	123965789005.26
Mutual Funds	2023	34362103088.03	3433836395.05	3433836395.05	341205526.00	3416051108.50	341205526.00	3415883825.00	3414514445.45	3414514445.45	3414514445.45	3410119149.91	3406115486.53
Paper & Printing	2023	50023512890.87	50023512890.87	4921815584.00	4841187435.88	5252525845.56	529340681.56	518933224898.18	5077675598.64	5021071011.67	47943714299.09	48724051532.27	4885868369.47
Pharmaceuticals & Chemicals	2023	721264898412.61	72051370151.75	70973726507.00	704588472783.53	70455118738.89	710429727267.61	711174399250.91	712920041372.73	71242890243.37	71072729961.36	7104671801.91	71401109981.05
Services & Real Estate	2023	28155737616.96	28254854791.05	28970180621.00	305158082.00	3010038369.44	31953754685.56	2832667092.27	2738498460.81	28347974405.56	27171317973.64	2717477902.73	27319999207.89
Tannery	2023	3317007706.09	3295398930.00	33403114574.00	3568414218.82	35696679920.00	37043847743.33	3714048846.36	37055624940.00	3605030925.56	35071607382.21	34246538346.62	3471273783.16
Textile	2023	58507648200.00	58507648200.00	58507648200.00	58507648200.00	58507648200.00	58507648200.00	58507648200.00	58507648200.00	58507648200.00	58507648200.00	58507648200.00	58507648200.00
Travel & Leisure	2023	15999497789.84	15709549652.34	15691258947.19	15761189457.59	160171607626.67	16074040721.01	16246838677.54	161627223616.36	160305776477.78	15877323062.12	158240431761.82	158885324856.84
Textile	2023	495442467.84	4921747573.85	5963028950.00	60480025211.76	6224233800.00	4973147922.02	5056799194.55	4545007399.91	44761735244.44	45973367390.91	45973367390.91	45973367390.91

Fig:2A

Sector	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bank	2024	6186114040.40	616301474.04	61567969063.16	59861794237.19	583662017464.71	59883969322.58	594108543496.33	678321351040.23	693679051433.81	662235747901.91	65210318561.01	6341985397.34
Cement	2024	124199877074.55	12806780873.68	12356877138.60	11500495149.43	10852914880.00	10385024266.67	11154467988.89	11695758477.37	11588906873.33	10919592254.63	9700181547.82	9408112124.11
Ceramic	2024	2986261201.30	29542955126.37	27571186615.79	26435067590.00	2593725690.00	103825133.33	2275191712.22	22270415989.47	1996813542.86	162135004.00	1630833064.21	1640684802.00
Engineering	2024	460781812023.33	408841821778.48	379535119366.63	30104354741.61	302125267115.50	32435474790.56	345454015960.53	33693421848.62	32947137963.63	27130378943.63	269884501605.97	26584502320.75
Financial Institutions	2024	148520578423.12	12940281722.63	11374075504.74	101684451512.42	101339017613.18	9214860427.22	10090610159.61	11404257145.97	11577847045.89	11577847045.89	111157160706.00	10965207271.47
Food & Allied	2024	39739996572.00	382593851583.33	34540061955.85	32430297864.87	3077126982.00	29877718950.00	29940990588.89	345708019414.04	331067419178.29	31306749108.55	304048723006.58	304048723006.58
Fuel & Power	2024	43376293185.63	38742659146.08	344937330564.44	324630385627.78	31051674088.00	29957478376.00	325777989127.50	338087629262.81	334712579552.41	33075790555.24	3268757932.58	3268757932.58
Insurance - General	2024	10329616535.00	6040014963.16	5915680724.62	8375249445.62	8862777038.68	702309971.92	9770716456.70	831234826.37	826580945.81	740290094.81	80520045.00	80520045.00
Insurance - Life	2024	7139714881.82	668478185.05	5982881015.93	543562651.76	557571853.75	520252907.24	542890426.67	5733877304.67	605005206.59	513823509.52	5165776697.89	496466110.90
Life	2024	39715589177.27	4239935205.26	398716265.00	399118260.00	270076058.33	146758661.67	3800252452.05	3800252452.05	3800252452.05	3800252452.05	3800252452.05	3800252452.05
Miscellaneous	2024	4406471056.06	1533766879.95	14597185328.07	13998150802.22	137668050.00	1280064350.19	1336310708.89	1294047550.99	1313734566.67	1291877500.00	129375227.11	1294048596.11
Mutual Funds	2024	343343435.00	238026150.00	3058088011.11	292628716.67	2873808016.67	263807771.22	268077115.12	340685175.33	278919891.42	248845398.71	258550255.53	258550255.53
Printing & Publishing	2024	4714560027.27	4713749807.02	4036682276.98	394304488.89	3480651970.00	3012922760.00	322038105.76	2651277873.68	240968642.67	289116000.00	2211620084.21	186111584.05
Textiles & Chemicals	2024	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45
Services & Real Estate	2024	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45	271444444.45
Tanning	2024	328423231.87	270877778.95	2987740426.24	2716735454.38	2651814257.00	252905493.53	2349027305.33	2349027305.33	2349027305.33	2349027305.33	2349027305.33	2349027305.33
Telecommunication	2024	56214000160.00	57488904232.60	5934537195.91	4810700554.44	4477792075.00	4477792075.00	4477792075.00	4477792075.00	4477792075.00	4477792075.00	4477792075.00	4477792075.00
Travel & Leisure	2024	3366661330.00	3366661330.00	3366661330.00	3366661330.00	3366661330.00	3366661330.00	3366661330.00	3366661330.00	3366661330.00	3366661330.00	3366661330.00	3366661330.00

Sector	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bank	2023	0.2%	0.1%	1.2%	0.4%	0.7%	-0.1%	0.9%	-0.1%	-0.5%	-0.1%	1.7%	0.1%
Cement	2023	-0.1%	-0.5%	-0.1%	1.1%	9.0%	-0.2%	1.4%	-0.9%	0.1%	-0.1%	-1.5%	0.0%
Ceramic	2023	-1.0%	1.2%	-1.9%	-0.8%	0.1%	0.7%	-0.1%	-1.5%	-0.3%	0.0%	1.0%	2.4%
Engineering	2023	-0.3%	-0.2%	-0.1%	0.0%	0.5%	0.4%	0.1%	-0.5%	-0.3%	0.1%	0.4%	0.6%
Financial Institutions	2023	0.0%	-0.2%	-0.2%	0.0%	0.1%	0.1%	0.0%	-0.1%	0.0%	0.0%	0.0%	0.1%
Food & Allied	2023	-0.5%	1.0%	1.0%	2.0%	1.8%	0.1%	0.7%	-0.5%	-0.1%	-0.4%	-0.8%	-0.7%
Fuel & Power	2023	-0.3%	0.0%	0.1%	0.1%	0.4%	0.2%	-0.2%	-0.1%	-0.1%	-0.1%	0.1%	-0.2%
Insurance - General	2023	3.2%	-2.8%	-3.0%	-1.3%	7.7%	2.4%	1.5%	1.8%	11.2%	-4.6%	-3.5%	-3.0%
Insurance - Life	2023	5.3%	-2.1%	1.1%	-1.6%	4.2%	15.5%	-4.7%	-10.5%	2.7%	-5.2%	-1.3%	0.4%
IT	2023	4.7%	0.2%	3.8%	1.7%	-1.4%	-1.4%	-1.8%	-4.5%	0.4%	-3.9%	-4.3%	1.3%
Jute	2023	-5.8%	-3.8%	-3.8%	6.8%	14.8%	1.7%	3.0%	0.7%	-4.1%	11.6%	-1.0%	41.7%
Miscellaneous	2023	1.1%	0.6%	-1.0%	0.5%	3.6%	-0.3%	-0.4%	2.4%	0.1%	-3.0%	0.5%	2.7%
Mutual Funds	2023	-0.1%	-0.1%	-0.5%	-0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%
Paper & Printing	2023	-0.9%	0.8%	-2.3%	0.4%	6.3%	0.8%	-1.9%	-2.3%	-1.0%	-4.5%	1.6%	0.3%
Pharmaceuticals & Chemicals	2023	-0.4%	-0.1%	-1.5%	-0.7%	0.5%	0.3%	0.1%	0.2%	-0.1%	-0.2%	0.0%	0.4%
Services & Real Estate	2023	2.9%	3.9%	-1.0%	5.3%	-1.4%	-3.9%	-2.0%	-3.6%	4.5%	-2.9%	-0.9%	-0.6%
Tannery	2023	-1.8%	-0.7%	1.4%	6.8%	0.0%	3.8%	0.2%	-0.2%	-2.7%	-2.7%	-0.7%	-0.3%
Telecommunication	2023	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Textile	2023	-1.5%	-1.6%	-0.1%	0.4%	1.6%	0.4%	1.1%	-0.7%	-0.6%	-1.0%	-0.3%	0.4%
Travel & Leisure	2023	18.4%	13.6%	6.0%	1.4%	-13.6%	-4.8%	1.7%	-10.1%	-1.5%	2.7%	-6.8%	-11.7%

Fig:6A

Sector	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bank	2024	0.5%	2.8%	-3.2%	-2.8%	-2.5%	-2.5%	4.4%	14.2%	2.3%	-4.5%	-1.5%	-2.7%
Cement	2024	2.7%	3.1%	-3.5%	-6.9%	-5.6%	-4.8%	7.9%	4.9%	-1.1%	-12.8%	-3.9%	-3.0%
Ceramic	2024	-8.1%	-1.1%	-6.7%	-4.1%	-9.3%	-9.0%	4.2%	-2.1%	-10.3%	-18.8%	0.5%	1.0%
Engineering	2024	-7.3%	-11.3%	-7.2%	-7.5%	-8.5%	-7.2%	11.9%	2.1%	-1.1%	-19.5%	-0.6%	-1.4%
Financial Institutions	2024	-7.9%	-12.9%	-12.1%	-10.6%	-0.3%	-8.1%	7.4%	13.9%	2.4%	-10.4%	6.4%	-1.5%
Food & Allied	2024	0.0%	0.6%	-12.6%	-7.1%	-7.4%	-4.2%	3.9%	15.6%	1.4%	-9.9%	-0.8%	-3.0%
Fuel & Power	2024	-5.2%	-10.7%	-11.0%	-5.9%	-4.3%	-3.5%	8.7%	3.8%	-0.9%	-12.4%	3.4%	-1.7%
Insurance - General	2024	4.5%	3.1%	-6.6%	-5.8%	-5.5%	-7.4%	10.7%	-1.8%	-3.2%	-14.2%	8.8%	-1.9%
Insurance - Life	2024	0.7%	-7.5%	-9.0%	-9.2%	2.5%	-4.0%	1.4%	5.7%	5.5%	-15.1%	0.3%	-3.7%
IT	2024	2.5%	6.7%	-7.0%	-4.0%	-5.1%	-10.7%	7.5%	-2.6%	-4.7%	-9.0%	-5.9%	-2.9%
Jute	2024	6.6%	5.6%	0.3%	-4.4%	2.4%	-15.6%	11.5%	-8.5%	6.3%	0.8%	-3.8%	-12.3%
Miscellaneous	2024	10.5%	6.0%	-4.8%	-4.1%	-2.7%	-6.0%	4.5%	-2.6%	1.0%	-5.9%	4.3%	-0.2%
Mutual Funds	2024	-0.9%	-4.5%	-6.5%	-4.6%	-3.0%	-7.3%	10.2%	5.0%	-8.4%	-10.9%	4.0%	-1.2%
Paper & Printing	2024	-2.3%	-1.2%	-7.8%	-8.7%	-12.2%	-13.6%	6.9%	-11.5%	-15.5%	-17.5%	-3.4%	-3.1%
Pharmaceuticals & Chemicals	2024	0.1%	-2.3%	-7.1%	-4.4%	-3.4%	-4.3%	6.5%	-0.1%	-2.2%	-7.5%	0.9%	-0.8%
Services & Real Estate	2024	-0.8%	-0.1%	-8.7%	-6.1%	3.4%	-8.9%	7.0%	-6.4%	-7.8%	-18.5%	5.1%	3.5%
Tannery	2024	-4.1%	-4.5%	-6.0%	-7.4%	-4.2%	-4.8%	2.6%	-3.0%	-3.9%	-10.8%	-0.8%	0.2%
Telecommunication	2024	-0.5%	-1.2%	-11.4%	-5.6%	-4.6%	-3.7%	9.1%	30.5%	1.4%	-5.8%	-1.5%	0.8%
Textile	2024	-7.6%	-4.8%	-5.1%	-4.7%	-1.9%	-7.1%	2.6%	3.4%	-1.4%	-9.8%	1.7%	0.8%
Travel & Leisure	2024	-11.0%	-1.5%	-4.7%	-4.9%	-1.6%	102.7%	-1.6%	-7.9%	-9.4%	-14.0%	-0.7%	-8.5%

Fig:7A

Sector	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bank	2025	0.5%	0.6%	-0.2%	-4.3%	-3.2%	-1.3%	14.9%	4.2%	-0.9%	-5.0%	-1.6%	0.0%
Cement	2025	-5.3%	-2.0%	-1.2%	-0.5%	-5.6%	1.1%	13.5%	7.5%	-1.2%	-5.5%	-0.2%	0.0%
Ceramic	2025	-1.6%	7.9%	5.7%	-0.4%	-11.3%	-0.3%	8.7%	2.4%	8.0%	-10.5%	-1.5%	0.0%
Engineering	2025	0.7%	-0.6%	-1.0%	-2.2%	-8.8%	-0.2%	9.8%	4.8%	3.4%	-7.5%	-2.2%	0.0%
Financial Institutions	2025	-11.1%	-4.3%	-1.0%	-4.2%	-9.1%	0.1%	13.8%	6.0%	4.3%	-8.4%	-5.4%	0.0%
Food & Allied	2025	0.2%	-1.2%	-3.7%	-2.2%	-9.1%	-0.6%	6.1%	1.7%	-1.5%	-7.2%	-2.1%	0.0%
Fuel & Power	2025	-3.9%	1.6%	-0.9%	-0.1%	-4.4%	0.7%	6.7%	4.6%	0.8%	-5.4%	-3.3%	0.0%
Insurance - General	2025	-2.9%	-3.1%	-1.1%	-1.1%	-4.9%	-1.8%	11.3%	5.6%	4.7%	3.3%	-2.9%	0.0%
Insurance - Life	2025	-6.8%	1.7%	0.1%	-2.8%	-8.5%	-2.5%	11.5%	11.1%	11.8%	-3.4%	-3.0%	0.0%
IT	2025	-0.2%	0.1%	-1.3%	-6.7%	-10.2%	0.0%	9.1%	4.1%	12.3%	-11.2%	-3.8%	0.0%
Jute	2025	-8.8%	-9.1%	-0.3%	-6.8%	-12.4%	2.7%	11.5%	16.3%	4.8%	-9.6%	3.4%	0.0%
Miscellaneous	2025	3.9%	-0.7%	-1.1%	-1.8%	-2.9%	-1.5%	-5.3%	3.7%	1.0%	-5.3%	-2.5%	0.0%
Mutual Funds	2025	-3.5%	-2.3%	2.0%	7.3%	1.1%	-4.6%	5.6%	-6.3%	-2.8%	-4.8%	-4.3%	0.0%
Paper & Printing	2025	-2.3%	6.5%	9.7%	-7.9%	-10.1%	0.0%	11.0%	15.9%	10.4%	-9.3%	-0.1%	0.0%
Pharmaceuticals & Chemicals	2025	-1.5%	-1.3%	1.1%	0.7%	-4.9%	-1.6%	7.7%	6.9%	0.0%	-5.2%	-0.7%	0.0%
Services & Real Estate	2025	-4.4%	5.0%	0.1%	-2.2%	-8.6%	-2.1%	7.0%	8.5%	13.5%	2.5%	1.3%	0.0%
Tannery	2025	1.0%	-1.9%	0.3%	-4.1%	-4.4%	1.9%	8.8%	4.3%	1.6%	-4.2%	-1.0%	0.0%
Telecommunication	2025	4.0%	2.2%	-4.7%	-3.1%	-7.6%	0.3%	5.6%	2.3%	0.6%	-3.2%	-2.5%	0.0%
Textile	2025	0.5%	5.4%	-0.8%	-8.6%	-5.3%	-0.7%	7.9%	9.1%	6.4%	-7.7%	-3.9%	0.0%
Travel & Leisure	2025	-4.5%	0.3%	2.2%	-4.6%	-8.9%	0.8%	10.0%	3.1%	6.0%	-15.1%	-0.1%	0.0%

Fig:8A