Report On

An Empirical Study on the Application of Stock Valuation Methods: Evidence from Pharmaceuticals, Automotive and Cement Industries in Bangladesh

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

Brac Business School
Brac University
Nov 2024

Declaration

It is hereby stated that

- The internship report submitted is my/our own original work while completing degree at Brac University.
- 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.
- The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
- I/We have acknowledged all main sources of help.

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Letter of Transmittal

Riyashad Ahmed

Assistant Professor of Finance & Director of
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Brac Business School
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224, Merul Badda, Dhaka 1212

Subject: Submission of internship Report on 'An Empirical Study on the Application of Stock Valuation Methods: Evidence from Pharmaceuticals, Automotive and Cement Industries in Bangladesh'

Dear Sir,

I am privileged to present my internship report as part of my Bachelor of Business Administration degree at Brac Business School. This report was prepared as a Country Management Unit Intern at the International Finance Corporation (IFC) after completing a three-month internship.

I endeavored to compile my report by acquiring the most optimal data from reliable sources, exerting my utmost diligence. Consequently, I am confident that the report will sufficiently fulfill all the requirements. I show my heartiest gratitude for your continuous support and guidance throughout the last three months of my internship period which enabled me to put this report together in the most effective manner.

Sincerely yours,

____
Samia Akhter
20104018
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University Date:
Nov 18, 2024

Non-Disclosure Agreement

This document comes as a testament to the assurance that the report on issue under consideration contains no data that is subject to confidentiality or is considered sensitive and/or crucial to the organization's operations. The agreement is entered into by and between International Finance Corporation and the undersigned student at Brac University, Samia Akhter, from Brac Business School.

Acknowledgement

I want to express my gratitude to International Finance Corporation Bangladesh and the Country Management team of the company. I am grateful to my on-site supervisor Noor Ahmed Naveed, Operation Analyst at IFC CMU, who has played a vital role during my internship experience and in completing this report. This report was walked through the necessary steps in completing its objectives with his assistance. Moreover, I would like to show gratitude to my academic supervisor, Riyashad Ahmed, who is currently serving as the Assistant Professor of Finance & Director of Programs (MBA & EMBA) of Brac Business School, and my academic co-supervisor, Saif Hossain, who is currently serving as an Assistant Professor & Director of BBA program at Brac Business School for their continuous support and technical advices that has made this report abundant. Lastly, I express my incredible gratitude for my family and friends caring for me as I remained on my academic path.

Executive Summary

This report aims at analyzing the application of stock valuation methods in the context of the Pharmaceutical, Automotive, and Cement industries of Bangladesh. Using the Price-to-Earnings (P/E) ratio, Comparable Company Analysis, and Asset Valuation to evaluate companies in these industries is the context undertaken in this study. The study was performed using data of well-acclaimed companies within each industry such as ACI Limited, Renata Pharmaceuticals, Beacon Pharmaceuticals, IFAD Autos, Aftab Automobiles, Runner Auto, Crown Cement, Premier Cement Mills, and Meghna Cement Mills, to identify potential areas of investment and market insights.

The first chapter of this report describes my internship at the International Finance Corporation (IFC), where I worked in the Country Management Unit (CMU). During my three-month internship, I was responsible for a variety of research activities, including developing firm profiles, analyzing market data across numerous sectors, and compiling reports on the capital market and political events in Bangladesh. The chapter also discusses the training and learning objectives I received from the internship, with an emphasis on research, analytical abilities, and understanding the practical applications of financial concepts.

In the second chapter, I present a thorough review of the International Finance Corporation (IFC), focusing on its operations in Bangladesh. The IFC's involvement in the country's private sector growth is examined, with a focus on its work in areas such as infrastructure, financial services, and manufacturing. The chapter also discusses the IFC's management techniques, financial performance, and how its strategic emphasis helps Bangladesh achieve its development goals. While financial data for IFC Bangladesh was not publicly available, I conducted a financial analysis using data from IFC globally and made recommendations for future improvements in the country's operations.

The third chapter of the research compares stock value in Bangladesh's pharmaceutical, automobile, and cement industries. I used the P/E ratio, Comparable Company Analysis, and Asset Valuation techniques to determine whether companies such as Beacon Pharmaceuticals, Renata Pharmaceuticals, ACI Limited, IFAD Autos, Aftab Automobiles, Runner Auto, Crown Cement, Premier Cement Mills, and Meghna Cement Mills are undervalued or overvalued based on market prices and financial data. The findings indicate that although some firms are undervalued, others, such as Beacon Pharmaceuticals and Meghna Cement Mills, are overvalued based on the P/E ratio and other valuation criteria. This chapter finishes with advice for potential investors and an analysis of the investment attractiveness of various industries.

Through this study, I was able to apply my academic expertise in financial analysis to real-world situations. This study not only contributed to my personal and academic development but also improved my awareness of the market dynamics of Bangladesh’s industries.

List of Acronyms

IFC	:	International Finance Corporation
CMU	:	Country Management Unit
MAS	:	Manufacturing, Agribusiness and Services
CDF	:	Disruptive Technologies and Funds
INFRA	:	Infrastructure
FIG	:	Financial Institutions Group
R&D	:	Research and Development

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Chapter 1

1.1 Student Information

Name: Samia Akhter

Student ID: 20104018

Program: Bachelor of Business Administration, BRAC Business School

Major/Specialization: Double Major in Finance and Marketing.

1.2 Internship Information

1.2.1 Company Information

Period: 21 July, 2024 - 30 Oct, 2024

Company: International Finance Corporation

Department: Country Management Unit

Address: Bay's Edgewater, NE (N) 12 North Avenue, Gulshan 2, Dhaka 1212

1.2.2 Internship Company Supervisor

Name: Noor Ahmed Naveed

Organisation: International Finance Corporation

Designation: Operation Analyst

Department: Country Management Unit

1.2.3 Job Responsibilities

In my role at the International Finance Corporation (IFC) I worked on a variety of research-based tasks to support the Country Management Unit. One of the main aspects of my job was to create company profiles to provide information regarding each company's overview, key personnel, their industry presence and any negative online or media coverage.

Secondly, I did industry analysis which included Pharmaceuticals, Automobiles and Cement. This research included market size and growth of each industry, industry structure, key players, production and supply chain and economic impact.

Additionally, I was also asked to generate reports regarding the evolving Bangladesh's landscape including updates on interim government changes, and weekly situational analysis. Furthermore, I prepared a capital market report that included the market structure, regional comparisons, performance trends, key factors driving the industry growth, the regulatory conditions, foreign direct investment, the challenges faced and the opportunities prevailing in the market.

1.3 Internship outcomes

1.3.1 Students Contribution Outcomes

At the International Finance Corporation (IFC), I assisted the Country Management Unit with my contributions to various research-based tasks that sought to add strategic insights. For one of my key tasks, I was tasked with constructing company profiles that consisted of rich detail about each organisation's leadership, how they positioned themselves in their sector and any negative media coverage. As they became a valuable resource for the team, these profiles provided a level of nuance about the company's reputation and integrity, but also risks and opportunity.

Apart from company profiles, I dig deep into the industry level within Pharmaceuticals, Automobiles and Cement among other industries. I also looked at the larger impact of these sectors on the economy and which players led. The Country Management Unit was able to approach each of the industries with an understanding of perspective, and these analyses facilitated this strategic decision making.

I also did reports on interim government change and weekly situational analysis. These reports were timely reports which gave insight into the political environment for anticipating impacts on market stability. Additionally, my capital market report work provided a detailed look at market structure, regional performance compared, key industry drivers and regulatory conditions. The team made use of this report as a means of gaining perspective of the Bangladesh capital market.

My research during the internship has helped the Country Management Unit to get deeper, data driven insights to inform decisions and the development of strategic plans in changing business environments. One of the most important experiences for me was finding out to conduct research and also understanding the complex industry landscape.

1.3.2 Benefits gained by the student

During my internship at the International Finance Corporation (IFC) I learned invaluable aspects, which helped me tremendously with professional development. I worked very closely with the Country Management Unit doing research-based tasks on industry analysis and corporate strategy, enabling me to gain more knowledge on the subject. As one of my core responsibilities, I developed detailed company profiles, giving me hands-on experience on how to do background web checks of companies. For me, this task was an important exploration of my research and analytical skills while learning how to acquire and interpret key information that informs strategic decision making.

My industry analysis across various sectors of Pharmaceuticals, Automobiles and Cement helped me to understand and broaden my knowledge around these sectors. Through market size, growth trend, supply chain, economic impact to each sector, I got a thorough understanding of the structural and economic forces related to these sectors. It served to refine my capability to analyse markets, and give me valuable insight into the problems of positioning in an industry.

Moreover, writing regular reports on political developments and capital market buzzword trends served to increment my analytical and reporting skills. Watching the political landscape shift and doing situational analysis helped me realise that market strategy is never as simple as deciding keys and maps. While reading through capital market reports as I compiled them focusing on regulatory conditions, foreign direct investment trends and comparisons, region to region, this helped me to understand complex financial and economic data.

My time at IFC not only prepared me with the tangible research skills but gave me the opportunity to develop that adaptability and resilience in a professional work environment. This experience helped me to understand the importance of networking in the workplace and motivated me to improve my communication skills as well.

1.3.3 Problems/Difficulties (faced during the internship period)

While at the International Finance Corporation (IFC) as an intern, I was pushed to grow professionally with challenges I faced. This required me to very quickly learn and improve my time management and organisational skills, whilst adapting to industry specific terminology and finding balance between sector analysis, situational updates and capital market reports. I tested my clarity and adaptability at communicating effectively with my team to align my work with IFC's Country Management Unit. These experiences helped me to become more resilient, to solve problems more effectively and to thrive in high stakes environments that change rapidly.

1.3.4 Recommendations to IFC on Future Internships

IFC is one of the best places to work in my opinion. People here are very friendly and helpful. However, in order to enhance the internship experience at International Finance Corporation, the organisation can introduce a structured orientation program for the interns at the beginning of the internship period. This will give the interns a clear understanding of all the departments of the company and how it actually works. Apart from this, I don't have anything severe to recommend and I think IFC has the best environment to learn and gain knowledge as an intern.

Chapter 2

2.1 Introduction

2.1.1 Objective

The objective of this section is to give an overall view of the activities of the International Finance Corporation (IFC) in Bangladesh. As a member of the World Bank Group, IFC is a key catalyst of private sector development in emerging markets. This thesis focuses on IFC's operations, resource management strategies and the role played in Bangladesh's economic landscape. This section will explore the impact of IFC's business model, challenge and profitability strategies on Bangladesh's development. The results will also include recommendations for how to improve IFC's effectiveness in the region.

2.1.2 Scope

This analysis involves a detailed study of IFC's activities in Bangladesh, especially through an accounting for management practices, company structure and financial performance. At a sector level, the paper discusses IFC's work in infrastructure, manufacturing, and financial services, and the organisation's contribution to sustainable development and economic growth. The analysis will also examine the interaction between IFC and local businesses, government agencies and other stakeholders in the Bangladeshi market and what challenges and opportunities were identified.

2.1.3 Methodology

The content in this section has been derived from both primary and secondary sources. Data from IFC’s official publications, press releases and reports from its website were obtained as secondary data. The financial performance and investment data was evaluated based on analysing financial performance and investment including the last few years.

2.1.4 Limitations

The analysis has some limitations such as the availability of up-to-date data or confidentiality constraints. There is a dynamic nature of the economic environment in which some information may have been changed since the original data collection. Further, the scope of the study may not be confined to all activities of IFC in Bangladesh and some strategic initiatives may not be documented.

2.2 Organization Overview

IFC | International Finance Corporation WORLD BANK GROUP

The International Finance Corporation (IFC) – a member of the World Bank Group – is the largest global development institution focused on promoting private sector development in developing and transitional countries. IFC brings capital, expertise, and influence to bear on the critical issues of sustainable markets and new opportunities across more than 100 countries with the aim of eliminating extreme poverty and driving economic prosperity. IFC started operations in Bangladesh in 1985 and has recognized that the country possesses great investment potential as the 8th most populous country in the world and a ~$440 billion economy. IFC works through a strategic focus on infrastructure, financial inclusion and competitiveness to invest over $8 billion in Bangladesh, supporting essential sectors and reinforcing economic resilience. IFC's strategy in Bangladesh targets three key pillars: to enhance competitiveness and diversification of industry and services, and increase financial inclusion and resilience, with special focus on climate solutions. IFC integrates these cross-cutting priorities like gender equity throughout its work, such that there are benefits for all.

2.2.1 Vision Statement

IFC envisions support in taking people out of poverty and improving their lives by encouraging sustainable economic growth within the private sector. This vision reflects IFC's strategic goal to fight poverty and promote shared prosperity by building out growth in emerging markets through private sector development.

2.2.2 Mission Statement

IFC's mission is to encourage sustainable private sector investment in developing countries; investment that contributes to reducing poverty and improving people's lives. This translates into an investment and advisory service for businesses and industries that help to drive economic development and create jobs in Bangladesh.

2.2.3 Core Values

IFC functions centred around a few core values that guide its actions and decisions:

- Impact
- Integrity
- Respect
- Teamwork
- Innovation

These values reflect IFC's focus on integrity, collaboration and learning from best practices to do its work of Advancing Sustainable Development.

2.2.4 Internal Functions:

IFC has several key departments that centre on specific sectors to promote private sector development in emerging markets. Four of its primary departments are:

Financial Institutions Group (FIG): This department concentrates on supporting financial systems, through investments and advice to banks, insurers, and other financial institutions. The FIG seeks to improve access to finance and thereby promote economic growth.

Manufacturing, Agribusiness, and Services (MAS): MAS supports the manufacturing, agribusiness, health, education, and tourism industries. MAS provides investment and advisory services to help companies increase productivity, sustainability, and competitiveness in these sectors.

Infrastructure (INFRA): This department helps in building essential infrastructure, energy, transportation, water and telecommunications. INFRA endeavours to promote basic services access, connectivity improvement, and sustainable urban development.

Disruptive Technologies and Funds (CDF): CDF focuses on driving innovation and investment in emerging technologies in developing countries. CDF partners with venture capital firms, seed funds, and accelerators to support startups across fintech, health tech, climate tech, and more. However, CDF does not currently operate in Bangladesh as their team operates in India.

2.2.5 Services:

IFC provides two kinds of services which are investment and advisory services.

Investment: Loans, equity investment, and guarantees to private companies.

Advisory Services: Providing knowledge to enhance business sustainability, access to finance, environmental and social sustainability.

These services are designed to address the diverse needs of businesses and industries in Bangladesh, promoting sustainable economic growth and development.

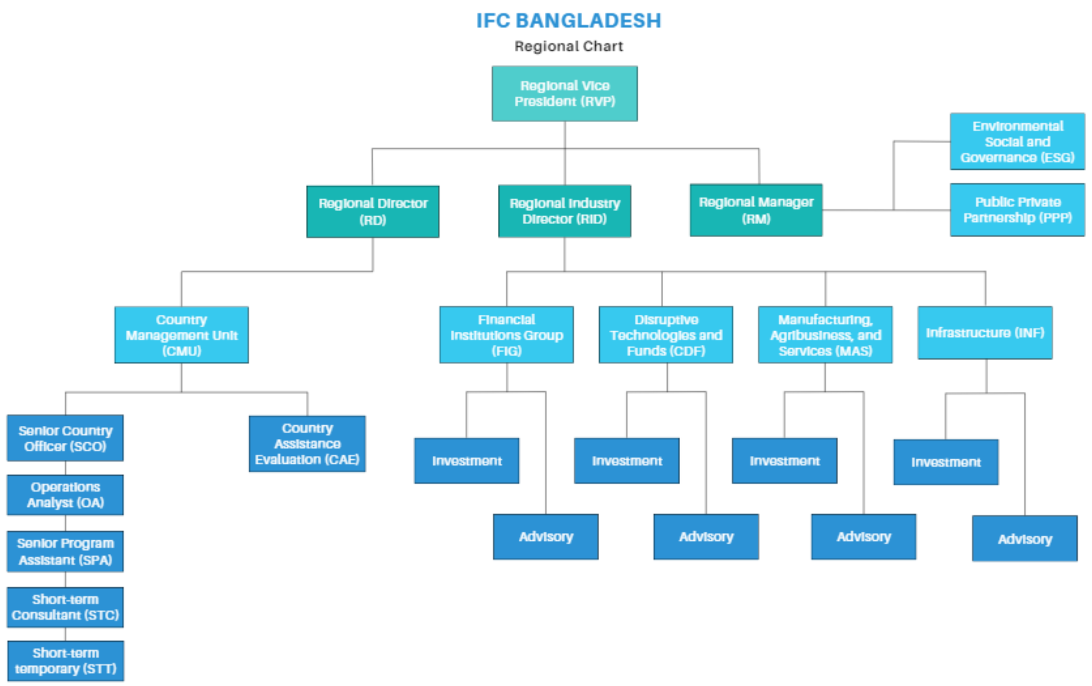
2.2.6 Key Initiatives in Bangladesh

IFC has been involved in several key initiatives in Bangladesh aimed at promoting sustainable development:

- Summit Group's 100MW Khulna Power station was IFC's first private sector investment in Bangladesh's energy sector in 1998.

- IFC’s equity investment in bKash in 2013 is enabling access to financial services for the unbanked people of Bangladesh and has been at the forefront of digital transformation in the country with more than 70 million registered users.
- In 2017, IFC launched a $50-million Banking on Women (BoW) program with BRAC Bank to improve access to finance for women-owned small businesses.
- Accelerate Offshore LNG Terminal, which began operation in 2018, has increased the country's gas supply by 20%. IFC committed 20% of the equity and provided long term debt and mobilised $126 million from other financial institutions.
- Since the beginning of the COVID-19 crisis, IFC has provided $310 million in working capital solutions to banks and liquidity support to companies to help keep operations going and people in jobs.
- In 2024, IFC achieved a significant expansion of our investment mandate by committing working capital financing lines in the real sector. This included support to Pran Group Limited ($30 million) and Renata Pharmaceuticals ($60 million) – our first investment in the pharmaceuticals sector.

2.2.7 The Regional Chart of IFC Bangladesh



2.3 Management Practices of International Finance Corporation (IFC) in Bangladesh

The focus of IFC's management practices is to collaborate with local and international stakeholders in delivering projects which improve access to finance, support small and medium enterprises (SMEs) and critical sectors like energy, infrastructure and agriculture. Furthermore, IFC is actively committed to maintaining environmental and social standards of its projects in order to make effective contribution to achieving Bangladesh's development goals while minimizing negative social and environmental impacts.

2.3.1 Country Management Team of IFC Bangladesh

IFC's management team in the country region is led by Country Manager Martin Holtmann who manages operations in Bangladesh, Bhutan and Nepal. Country Management Unit (CMU) at the International Finance Corporation (IFC) performs an intermediary role that facilitates rather than seals or completes overall investment deals. It ensures investment teams to run smoothly, without regulatory or operational bumps along the way. As the frontline for business development, the CMU manages a high volume of requests from potential clients. So, CMU performs an initial screening to identify viable projects before handing them over to the investment teams. Additionally, CMU ensures that the operation runs smoothly in the region. Apart from that, CMU also provides strategic direction to the industry teams on which theme to focus on. For instance, the CMU suggested going forward, there will be a demand for housing. So, IFC did projects on affordable housing which were successful.

2.3.2 Leadership Strategies and Influence on Goal Attainment

In Bangladesh, IFC's leadership strategy is based upon a collaboratively lead model, where teamwork makes a huge impact. Additionally, IFC does not hold hands and micromanage their employees which has a positive impact on the outcomes.

2.3.3 Training and Development Facilities

Professional development is an important part of IFC's commitment to professional growth, and IFC provides structured training programs to help its people build up the skills in finance, project management, and sustainability practices that are used on IFC projects. They also attend global and regional workshops as well as sector-specific training and leadership development programs.

2.3.4 Comment on Management Practices

Management practices in Bangladesh at IFC show how the firm can achieve a balance between operational efficiency, employee satisfaction and developmental impact. This is how IFC makes sure its operations remain robust and active to Bangladesh's requirements – by putting focus on collaboration, and continuous development. This allows IFC to carry out its mandate as a private sector catalyst for Bangladesh's path toward becoming a sustainable economy.

2.4 Financial Performance and Accounting Practices (Globally)

2.4.1 Financial Overview

IFC's financial performance analysis from 2020 to 2024 shows growth in both income and operational stability. Net income saw significant improvement, increasing from a net loss of $464 million in 2022 to a profit of $1.485 billion in 2024. This improvement was largely driven by higher income from loans and debt securities, coupled with successful management of operational costs. Overall, this period reflects IFC's resilience and ability to adapt to challenging global economic conditions.

2.4.2 Liquidity and Solvency

IFC maintained a high overall liquidity ratio of 81% in 2024, well above its minimum requirement of 45%. This ratio ensures IFC's ability to meet short-term obligations and indicates a strong cash position. Additionally, the debt-to-equity ratio remained steady at 1.7 in 2024, well within its policy limit of 4, highlighting prudent leverage management. This controlled leverage helps IFC maintain a stable capital structure and manage its long-term solvency.

2.4.3 Profitability Ratios

IFC's profitability has shown substantial growth. The return on equity (ROE) improved as net income increased. A breakdown using the DuPont analysis indicates that profitability growth is balanced across asset utilization, equity efficiency, and leverage. This structured approach to profitability reflects IFC's capacity to maintain financial resilience despite market challenges.

2.4.4 Efficiency Ratios

IFC's asset turnover ratio demonstrated an upward trend, signalling efficient use of its assets to generate revenue. In particular, the increase in revenue from core mobilizations and investments reflects IFC's commitment to effectively utilize available resources. An increase in the asset turnover ratio suggests operational efficiency gains, aligning with IFC's mission to drive economic development through private sector investment.

2.4.5 Financial Performance

The financial performance analysis of IFC spans from FY2021 to FY2024, evaluating liquidity, leverage, profitability, and efficiency. This analysis utilizes financial data to assess the organization's financial health and identify trends in critical ratios.

2.4.6 Financial Highlights

The table below outlines key financial metrics, presenting data on total assets, liabilities, equity, and net income over the four fiscal years.

Fiscal Year	Total Assets (USD billions)	Total Liabilities (USD billions)	Total Equity (USD billions)	Net Income (USD millions)
FY2021	101.6	82.1	19.5	672
FY2022	103.9	83.7	20.2	(464)
FY2023	110.5	85.0	35.0	672
FY2024	108.2	55.8	37.5	1,485

Interpretation: This data reflects a steady increase in assets and equity, with net income recovering substantially in FY2024 after a loss in FY2022.

2.4.7 Ratio Analysis

Leverage Ratios (FY2021 - FY2024)

Fiscal Year	Debt to Assets Ratio	Debt to Equity Ratio	Equity to Assets Ratio
FY2021	81%	4.2	19%
FY2022	80%	4.1	20%
FY2023	77%	1.6	32%
FY2024	52%	1.7	35%

Interpretation: IFC's leverage ratios reflect a significant shift toward a more equity-focused structure. The debt-to-equity ratio has declined, enhancing financial stability and reducing reliance on borrowed capital.

Profitability Ratios

Metric	FY2021	FY2022	FY2023	FY2024
Return on Assets (ROA)	4.14%	-0.45%	0.61%	1.37%
Return on Equity (ROE)	20.15%	-2.23%	1.92%	3.96%

Interpretation: ROA and ROE improved notably in FY2024, reflecting IFC's effective use of assets to generate income. The improvement in ROE indicates stronger returns on shareholder equity following a challenging FY2022.

Liquidity and Efficiency Ratios

Ratio Type	FY2021	FY2022	FY2023	FY2024
Current Ratio	1.26	1.24	1.25	1.23
Asset Turnover Ratio	0.11	0.10	0.11	0.12

Interpretation: The current ratio remained steady, showing IFC's ability to meet short-term obligations. The asset turnover ratio's gradual rise signifies improved efficiency in resource utilization.

2.4.8 Comments on Ratio Analysis

IFC's financial ratios have stable leverage and improving profitability. The debt-to-equity ratio declined significantly, showcasing a shift toward equity-based financing, and ROE rebounded strongly in FY2024, underscoring effective financial management. The steady current ratio indicates IFC's ongoing liquidity strength, while a gradual rise in asset turnover reflects operational efficiency gains over the period.

2.4.9 Accounting Practices

Accounting Standards and Basis

IFC follows U.S. Generally, accepted accounting principles (GAAP). Financial statements are prepared on an accrual basis. For instance, revenues and expenses are recognized as earned or incurred, respectively.

Depreciation Method

In the particular case of the organization, the straight-line method is applied to depreciate fixed assets in order to maintain consistency in the valuation of assets upon expiration of their useful life.

Disclosure and Transparency

All of IFC's financial statements exhibit comprehensive disclosures as (a) a means of complying with regulatory requirements and (b) to meet its transparency obligations to stakeholders.

2.4.10 Comment on Accounting Practices

IFC's commitment to U.S. GAAP and clear financial reporting, along with frequent updates to accounting practices confirm its good reputation for responsible financial management. Detailed disclosures and adjustments undertaken had been influenced by IFC's commitment to continually adapting to changing requirements, and at the same time keeping high standards of financial reporting for instilling confidence among all stakeholders in IFC's operational transparency.

2.5 Operations Management and Information System Practices of IFC

IFC relies on robust data management systems to help ensure that all employees and clients can maintain effective communication by having the ability to collect, store and share information with stakeholders. IFC's information and management systems are essential for IFC to perform its role in enabling quality performance as well as supporting IFC's global operations and resource allocation.

2.5.1 Information Systems

IFC uses secure data storage, processing and sharing. Using a cloud-based solution, employees can make use of efficient data management and enable collaborative work. Employees are be able to have access profiles customized by them to be able to upload and edit related information as securely as possible. Cross-functional collaboration is enabled through departmental permissions while, inter-organizational communication is through effective means such as Microsoft Teams, Outlook, and other specialized CRM systems.

Through the 'IFC' system IFC is also able to manage client relationships with transparency and accessibility of information, departments and external stakeholders.

2.5.2 Comment on Operations Management and Information Systems

Based on this, IFC's operations management and information systems help in the delivery of high-quality services in an efficient and effective manner. In practice, IFC has utilized technology and structured quality management practices for its mission.

2.6 Market Analysis

2.6.1 Porter's Five Forces Analysis for IFC Bangladesh:

- **Threat of New Entrants:**
  - **Low:** The finance sector is heavily regulated and specialized with entrenched capital in managing and investing funds into developmental projects for which they are often required. Additionally, IFC has a strong global brand and strong relations with local governments and businesses, making entry difficult.
- **Bargaining Power of Suppliers:**
  - **Moderate:** In other words, IFC's basic "supply" include providers of capital (e.g. governments and private investors and other traditional sources of financing). While IFC has a well-established name throughout the world and might be able to obtain good capital from liability providers, its position in an emerging market like Bangladesh may still be subject to higher demands for transparency, impact reporting and risk mitigation.
- **Bargaining Power of Buyers:**
  - **Moderate to High:** Typically, IFC's "clients" are local businesses, especially private sectors looking for funding and advisory services. IFC's unique development financing tends to depend upon a client generating demands, but alternative funding sources (e.g. other development finance institutions, private investors) lessen the client dependency by allowing them some leverage over terms of a loan or advisory fees.

- **Threat of Substitutes:**
    - **Moderate:** Sometimes, IFC's role can be filled by alternative financing options – or even traditional banks, private equity, or other development banks. While this threat exists, however, IFC's niche in sustainable development, high-impact projects, and deep advisory capabilities represent a unique value that mitigates this threat in part.
- **Competitive Rivalry:**
    - **High:** Although the interests of multilateral and bilateral agencies and NGOs in the financial and development support sector of Bangladesh are emerging, there still aren't adequate number of indigenous NGOs and activists. Asian Development Bank or private entities, all wants to pursue high impact projects. The competition lies in being able to provide low interest rates, more favorable terms and knowledge in sustainable development, pushing IFC to be innovative, and showing impact.

2.6.2 SWOT Analysis for IFC Bangladesh:

Strengths:

- **Global Reputation and Credibility:** With such recognition and credibility in the World Bank Group, IFC enjoys an easily developed partnership and trust around the world by governments and private sectors.
- **Extensive Expertise in Development Finance:** IFC has experience and expertise in providing financially solutions to meet the specific needs of emerging markets, to projects that boost sustainable economic growth.
- **Strong Network and Partnerships:** IFC has an ample base of local relationships with key stakeholders – government bodies, private sector and NGOs – that lead to quick project initiation and efficient utilization of funds.

Weaknesses:

- **Dependence on Regulatory Approval:** IFC projects, as a development finance institution, often need to get regulatory approvals that can take longer than expected or be adjusted to match local policies, slowing down project time lines.

- **Limited Direct Control Over Projects:** As a financial supporter (rather than direct operator), IFC's role in the project execution limits its control and hence the impact and sustainability of its initiatives.
- **High Compliance and Reporting Costs:** The regulatory and compliance requirements for development projects can add to the resource intensity of development projects, increasing operational costs and complexity of IFC.

Opportunities:

- **Rising Demand for Sustainable Finance:** Bangladesh is increasingly interested in financing sustainable projects such as renewable energy, infrastructure, and digital transformation, creating plenty of opportunity for IFC to add to its portfolio.
- **Expansion of Financial Inclusion Programs:** IFC opportunity for the push of Bangladesh towards financial inclusion, especially for SMEs and underserved communities, is to introduce innovative financial products and services.
- **Government Support for Developmental Projects:** IFC's mission aligns well with the Bangladeshi government's thrust on Sustainable Development Goals (SDGs) for infrastructure, agriculture and technology projects.

Threats:

- **Political and Economic Instability:** IFC's projects might be funded well, or not at all, with uncertainties that depend on economic cycles and political risks in Bangladesh.
- **Intensified Competition from Other Development Finance Institutions:** The competition for impactful projects and favorable terms is intensified by the presence of other global and regional development finance organizations like the ADB.
- **Environmental and Social Risks:** Because of the nature of IFC's developmental projects, risks to project success, such as environmental impact, social displacement or stakeholder opposition, can be very real.

2.6.3 Summary and Conclusion

Porter's Five Forces which is analyzed for IFC Bangla included a strong position in a competitive and dynamic financial market. There is little threat of new entrants, since the sector's regulations are strict and IFC is an already well-established organisation.

Nevertheless, the company has some moderate bargaining power from suppliers, for instance capital providers, who wants a greater transparency and risk mitigation, particularly in the emerging market Bangladesh. In addition to that, buyers' bargaining power is moderate to high as clients can be able to seek alternative sources of financing. The threat of substitutes is moderate due to availability of traditional banks and other development finance institutions, while competitive rivalry is high with many regional and international players all placed to win for high impact, sustainable project funding.

The SWOT analysis reveals that IFC Bangladesh's strengths lie in its global reputation, development finance expertise, and strong network of partnerships, which enable efficient project execution and resource mobilization. However, the organization faces significant weaknesses, such as dependence on regulatory approvals, limited direct control over project execution, and high compliance costs. Despite these challenges, there are promising opportunities in the rising demand for sustainable finance, expansion of financial inclusion programs, and government support for developmental initiatives. Yet, threats such as political and economic instability, intense competition, and environmental and social risks pose potential barriers to success.

In conclusion, IFC Bangladesh operates in a highly competitive and challenging environment but is well-positioned to leverage its strengths and capitalize on opportunities. By aligning its goals with sustainable development priorities, the organization can navigate regulatory and operational challenges, ensuring its continued impact on Bangladesh's development. However, addressing compliance costs, managing risks, and ensuring long-term sustainability of projects are crucial for maintaining its leadership and relevance in the market.

2.6.4 Recommendation

Mobile application can help launch a user-friendly IFC application that will provide access to the resources and increase the client's engagement to the service. IFC should adopt robust frameworks to address environmental and social risks to mitigate risks in achieving sustainable project outcomes. By adhering to these recommendations, IFC can enhance that operational efficiency while reinforcing its market position and continued ability to bring de frictional and sustainable financial solutions in Bangladesh.

Chapter 3

3.1 Introduction

3.1.1 Industry Context

In Bangladesh the industries of pharmaceutical, automobile and cement industries are some of the strategic industries for the economic growth. The local pharmaceutical industry is also growing rapidly by the enhance production facilities and supportive policy environment that catering 97.61% domestic demand in Bangladesh as pointed by Hossain and Islam in 2020. This growth is anchored by the sector's performance in churning out generic drugs. Bangladesh has carved a place for itself as cheap source of drugs to the growing markets of emerging economies. Legal issues which have a great impact on valuations of these industries include patent laws, government priced policy, and Research Development (RD) expenditure. Due to the trends in health care needs augmented with subsequent rise in expenditure on medical sector, the knowledge about the trends of valuation within the perspective of pharma industry aids investors and stakeholders to make intended guesses regarding the possible growth within this segment.

Automotive industry of Bangladesh is still in its developing stage. However, it is on the progression as the demand of personal and public transport rises with populaces becoming more urbanized. Second-hand vehicles' import, vehicles assembling within the country and auto-parts import from other nations, especially from two wheelers and commercial vehicles are parts of the sector. Nonetheless, current industry valuations are undermined by incremental dependency on imported materials, dynamic duties, and alterations in the customers' purchasing power (Ahmed et al., 2021). In addition, rising global trends of electric vehicles and the relatively new uncertainty of consumer demand shifts makes other valuation techniques concerning the future growth potential in Bangladesh more applicable to the situation.

Last but not the least, Bangladesh has a fast-growing cement industry which caters needs of reinforcement of infrastructure in the country with more demand arising from housing, a construction of roads and public utility. Nevertheless, there are specific valuation risks associated with cement manufacturing industry of Bangladesh that is associated with price of imported clinker, cost of energy and surroundings problems. Market competition is intense due to local rivals such as Heidelberg Cement and Lafarge Holcim which affect the ability to control price fluctuation and maintain profitability (Chowdhury, 2022). Valuation metrics applicable to firms within this industry assist users in assessing the state of the market and likely prospects for companies investing in efficiency and sustainability of production.

Valuation Approaches

Various financial valuation techniques discern systematic methods of estimating those industries. The three common methods of estimating corporate value are the use of Price-Earnings ratio, the Comparable Company Analyses, and the Asset Valuation. The P/E Ratio measures how much money you are willing to pay for $1 of a company's earnings – a popular measure of its growth expectations. In context of Bangladesh, whereby the market volatilities reflect realities of the regional economic changes as well as policy changes, the P/E ratios offer evidence of investors' perception of future profitability (Rahman & Hossain, 2020).

The Comparable Company Analysis (or "Comparable Approach") is based on assessment of the value of a company compared with similar firms within the same industry applying P/E, EV/EBITDA or EV/Revenue ratios. This approach is especially applicable in markets such as Bangladesh where the benchmarking against peer companies aids in identification of competitive advantage and probable mispricing (Ahmed, 2021). Lastly, the Asset Valuation approach using Net Asset Value (NAV) is applied to evaluate companies dependent on tangible structures and equipment which can be imposed to cement industries. The relative use of asset backed value in this method lets the investors evaluate the risk situations where market price varies with the actual asset value (Haque, 2019).

Previous Studies

The studies in the valuation theory, covering emerging markets such as Bangladesh, have bolstering the argument that the conventional financial analysis needs to consider both the intrinsic and the market characteristics. As explained by Hossain and Islam (2020), industries operating in Bangladesh are subject to fluctuations dependent on the external economic environment and impacts such as fluctuating exchange rates or supply chain dependency challenge straightforward valuation techniques. Moreover, it is found that investor sentiments in Bangladesh are mostly formed by Macro factors such as global energy prices or changes in rules and regulations have a direct bearing on stock prices (Kabir & Rahman, 2019). Valuation studies limited to the pharmaceutical firms reveal that local firms achieve appreciable leverage based on generics influencing both internal and export prices (Haque, 2019). Therefore, it can be concluded that it is only through realizing the fine details of these industries in this context it would only be possible to adopt a new philosophy of working that draws financial policy from the global framework while factoring the market situation in Bangladesh.

3.1.2 Objectives

Primary Objectives

To examine the valuation method of companies in Bangladesh pharmaceuticals, automotive and cement industries, the study involves analyzing the firms' performance using benchmark internal and external measures and comparing market values of firms against average benchmark and industry-specific ratios to determine the fundamentals of firms' market valuations to determine if they are overvalued or undervalued compared to their industries.

Secondary Objectives

To assist IFC's Country Management Unit identify key sectors and companies for potential investment. As the CMU is the first layer for identifying key investors, this valuation will help to identify key investors in these 3 sectors and grasp the knowledge of the markets overall.

3.1.3 Significance

Practical Relevance

The outcomes of the study bear some implications for investors minimum capital requirement policy, financial analyst and policy maker specially in Bangladesh. To the investors, working knowledge of these valuation trends in these industries is essential when the investors are developing their portfolios diversification and working on risk management issues. In particular, the existence of these undervalued pharmaceutical firms may shed light on growth stocks discovery, while the overvalued firms can give a warning to those who look for investment certainly in the long run (Ahmed et al., 2021). Further, working in the field of stock analysis and financial forecasting, financial analysts will be helpful to gain knowledge of those matters of valuation related to Bangladesh where the operation of the market is different from the global supermarket.

3.2 Methodology

3.2.1 Research Design

This paper uses quantitative techniques specifically, the valuation analysis to evaluate whether companies in the pharmaceutical, automotive, and cement industries of Bangladesh are rightly valued. Financial analysis is especially appropriate with quantitative analysis as it lets us ascertain and compare numerical financial results and stock prices with different indices. Used in the context of this study, the main techniques identified are the use of financial ratio analyses, which comprises of the P/E ratios, the Comparable Company Analysis, and Asset Valuation which is based on quantitative data to draw conclusion.

A quantitative approach is appropriate here, especially given that nearly all the data being measured in some form of quantity. Market valuations, financial ratios and asset-based valuations are inherently quantified models which can be used to facilitate comparison with other companies and industries. This design allows a systematic approach, relative to each company and industry sector, towards ascertaining its fiscal health. Moreover, applying numerical methods helps make conclusions about concrete overvaluation or undervaluation tendencies in each industry that can be overlooked using qualitative methods. For companies that included the likes of ACI Limited, Beacon Pharmaceuticals, IFAD Autos, Crown Cement, relative valuation indicators and asset values secures quantitative groundwork for the overall evaluation of the feasibility of valuation ratios (Rahman et al., 2021).

3.2.2 Data Collection Methods

Secondary Data

Excessive use of secondary data is made in this study collected from authentic sources like company annual reports, stock exchange rates, and sector wise reports of capital markets of Bangladesh. This research used secondary data from the DSE and related reports of BSEC and other industry analytical media. To arrive at core valuation metrics, data on selected companies including Beacon Pharmaceuticals, Aftab Automobiles, and Premier Cement Mills were sourced from their balance sheets and listed prices. Such secondary data sources are crucial since they consist in objective and verified financial data indispensable for the execution of precise valuation analyses (Haque & Islam, 2020).

Secondary data serves to be useful in ensuring there is a convenient basis to assess trends between different companies and industries. For example, the study employs the historical stock prices of such firms as Confidence Cement and Acme Laboratories to track changes in expectations of investors and adjustments in the overall firm valuation. Furthermore, the ‘earnings, assets and liabilities’ data obtained from financial statements facilitated computation of asset-based evaluations and other financial rates (Kabir, 2021). The information obtained from these secondary sources allows for the data to represent the true state of company performance and for recommendations to be made when making the overall assessment of the valuation analysis.

3.2.3 Sampling Technique

Selection Criteria

The sample for this study was carefully selected to represent companies from three key sectors in Bangladesh’s economy: pharmaceuticals automotive and cement sectors, while the export destination has been mainly the US, Canada, India, and South Africa. Only those stocks that are listed prominently in the Bangladeshi markets and for which data is easily accessible were chosen considering the importance of each stock in the Bangladeshi economy. The focal firms were selected because they are industry leaders or hold dominating market shares in the industry; this is including Renata Pharmaceuticals & ACI Limited – pharmaceuticals, IFAD Autos & Runner Auto – automobile industry and Crown cement & Heidelberg cement – cement industry. These are market champions or considerable players across the sectors ensuring that each industry’s tendencies and investor perceptions are captured (Chowdhury & Rahman, 2019).

To increase the data reliability, companies were selected that submitted financial statements and stock information within the last year or the last quarter. This approach guarantees that the analysis can obtain correct financial measurements of EPS, asset value, and market capitalization, which is used in computer-generated P/E ratios, asset valuation, and comparable. For instance, Beacon Pharmaceuticals and Meghna Cement were selected because their financial information was reasonably available and their market valuations were indicative of trends within the industry (Ahmed, 2021). This sampling technique makes it certain that the sample possesses characteristics of the industry and that they remain useful to investors in evaluating such industries in Bangladesh.

Sample Size

This study targets twelve firms; four firms from the pharmaceutical industry and four firms each from both the automotive and cement industries. The pharmaceutical industries of the samples were ACI Limited, Renata Pharmaceuticals, Acme and Beacon Pharmaceuticals because of their representation in the market. In Automobile industry IFAD Autos, Aftab Automobiles, BD Auto and Runner Auto were selected because of their contribution in the both commercial and passenger vehicles segment. Last but not the least, in the cement industry, Crown Cement, Premier Cement Mills, Meghna Cement Mills and Heidelberg Cement are the market leaders Benchmark companies for valuation analysis in construction sector.

This sample size was deemed appropriate to effectively cover the necessary amount of data required to identify trends in valuation while permitting detailed evaluation of each valuation. The financial data of both companies, such as the most recent earnings statements, stock price trends, and asset appraisals, form the building blocks of estimating the valuation parameters used in this research. Each sector contains four companies, enabling cross-company comparison within industries to examine sectoral patterns and determine whether particular firms are systematically over or under-estimated compared to their industry peers (Patel, 2021). Also, the selected sample helps to identify investor expectations and market situation in each industry, which is helpful in understanding the valuation specifics in the Bangladeshi environment.

3.2.4 Data Analysis

Valuation Techniques

To evaluate the financial standing and investment potential of companies within Bangladesh's pharmaceutical, automotive, and cement sectors, three key valuation techniques were employed: These include the Price-to-Earnings (P/E) Ratio the Comparable Approach and Asset Valuation. All these techniques provide a distinctive angle at the company value consisting of varied facets of corporate value and market attitude.

P/E Ratio

P/E ratio is commonly used stock valuation index where it is arrived at by dividing the price per share in the market with the EPS. The formula used is:

P/E Ratio = Market Price of a Share / Earning Per Share (EPS).

In this study, use of P/E Ratio gave a snapshot of the investors' anticipated future per-share earnings. Companies having large P/E ratios such as P/E 86.30 of Beacon Pharmaceuticals are expected to have rapid growth in future. On the other hand, ACI Limited has negative P/E ratio because of negative EPS which means company is facing some financial issues may low investor confidence (Rahman & Ahmed, 2020). Using the P/E ratios of each company in the sample, cross check comparisons of each company's valuation with the average were conducted.

Comparable Approach

Comparable approach – otherwise known as Comparable Company Analysis – is a valuation method that involves comparing the actual value of a company to the value of other firms operating in the same business line. Forecasted Revenue and Operating Profit for FY15-17 were used for relative valuation such EV/Revenue and P/E. The formula for EV/Revenue, for instance, is:

Enterprise Value (EV) = Equity Value + Net debt

EV/Revenue ratio means the Enterprise value divided with the total Revenues earned by the firm.

Some firms such as Crown Cement comprised of EV/Revenue ratio lower than the industry's, implying that it could be undervalued while Beacon had a rather higher ratio implied that firms were overvalued in comparison to the industry mean (Haque, 2021). The comparable approach used in the study was especially useful in explaining how these establishments perform compared to what the industry means when it comes to market positioning across the firms under each sector.

Asset Valuation

The Asset Valuation approach relies on the NAV of a company where total assets are less than or equal to total liabilities. The formula for NAV per share is:

NAV per Share = (Total NAV) / No. of Shares

This method appraises a firm in terms of its sustained asset, which is more relevant to companies that have heavy asset base such as cement industry. For example, if Premier Cement's NAV is below the market price or even Confidence Cement's NAV is below the current market price, this might reflect investor expectation of existence of spectral value beyond the tangible value (Ahmed & Islam, 2022). The relative assessment of NAV with the market value gave understanding of how firms were valued according to tangible assets.

Tools Used

Microsoft Excel was used for data analysis because it facilitated easy computation of valuation ratios and corresponding comparisons between firms. Microsoft Excel was employed in developing the ratios, particularly the P/E and EV/Revenue ratios and in the arrangement of the financial data parsed from companies' annual reports. Moreover, work in the spreadsheet format enabled easy expression and differentiation of the Excel's financial functions, for instance, in the computation of enterprise value (by control for of net debt). Calculations which were made in the context of this assignment were all credible and could be repeated thanks to the availability of data analysis tools in Excel (Patel, 2021).

Excel also was preferable because it made it easy to create different graphics that enabled the analysis of trends within as well as across the industries. For instance, use of graphical presentation such as P/E ratios and NAVs gave stakeholders an overview of the position of each company in relation to average industry trends in terms of valuations (Chowdhury, 2021).

3.2.5 Validity and Reliability

Data Reliability

To guarantee the accuracy of the financial information more than one confirmation process was followed. Firstly, financial data was validated through cross-checking with more than two sources such DSE and BSEC documents. For example, while evaluating the effectiveness of reports, EPS of Renata Pharmaceuticals and the total liabilities of IFAD Autos in different reports were checked to ensure compliance, and reduce the likelihood of disparities (Rahman, 2020). Furthermore, annual reports were employed in collecting financial ratios whereby only updated data was utilized in the study.

Where possible, data was also crosschecked by visiting standard industry analysis Websites and financial newspapers. This approach helped as a cross check to ensure all sources provided similar numbers for some of the important metrics like EV and NAV. For instance, stock prices from Bloomberg and value added by total number of employees obtained from Yahoo Finance were contrasted with data from the DSE to confirm that the valuations used actual real time market rates (Hossain &38; Karim, 2021). Thus, using only reputable sources of information as well as adhering to consistent data formats within the study, the authors achieved great reliability in this piece of work.

Analysis Validity

It was important to make certain that validity of the results which was attained in the subsequent step while interpretating the results. To increase validity again, the analysis was performed in relation to industry standards like average P/E ratios of each sector in the Bangladeshi market. This made it possible to come up with a measure on how to evaluate whether or not players within Acme Laboratories and Aftab Automobiles were either over or under perceived worth in the industry. The benchmarks acted as a standard that helped reduce the possibility of bias in this analysis and were used to estimate findings to common set standards (Kabir, 2021).

Furthermore, validity was carried forward by comparing the financial statistics of each firm with regional and international benchmarks for the industry, which set the backdrop and standards for the valuation. For example, while estimating the P/E ratios for Beacon Pharmaceuticals and Premier Cement, comparison was made with not only P/E ratios of Bangladeshi industries but it was also compared with those of the South Asian region to get more accurate idea about the competitiveness and prevailing 'bearish/bullish' sentiments. In this way, the multi-level comparison was utilized to provide not only the local market perspective but also use the comparative analysis approach to position the findings more robust (Ahmed, 2021).

Last but not least, to ensure all calculations could be recreated and all assumptions made by the authors are transparent, all such matters were recorded. At every stage with regards to keying in the various data sets and applying formulae in Excel, care was taken to leave footprints so that the process could be retraced by other analysts, if necessary. This study was therefore able to avoid common vices of research works through strictly exercising methodological transparency and strictly following financial accounting standards.

3.3 Analysis and Findings

3.3.1 Analysis

Valuation of Companies in the Pharmaceutical Industry

P/E Approach

The P/E ratio compares a company's market price per share to its profits per share to determine how much investors are ready to pay each taka of profits. It is a popular method for assessing value. A high P/E ratio indicates that investors anticipate the firm to develop significantly in the future and are prepared to pay a premium for it but if the expectations are not satisfied the company may be overpriced. However, a low P/E ratio suggests that the firm may be undervalued or suffering difficulties which might be a purchasing opportunity for investors with excellent fundamentals. The P/E ratio is compared to determine whether a stock is fair, overpriced or undervalued.

A firm is overpriced if its P/E ratio is much greater than the industry average. Because this suggests investors are willing to pay more per taka of profits, perhaps owing to unrealistic growth expectations. Similarly, a firm is undervalued if its P/E ratio is below the industry average since its shares are cheaper than its profits. Market underappreciation might cause this.

Formula:

Price Earnings Ratio = Market Price per share /Earnings per share

P/E Approach			
Company Name	**Price Per Share**	**EPS**	**P/E Ratio**
ACI	**155.4**	**-8.27**	**-18.79**
Beacon	**205.4**	**2.38**	**86.30**
Acme	**72.3**	**8.53**	**8.48**
Renata	**776**	**22.95**	**33.81**
		Industry Average P/E	**27.45**

Analysis:

ACI (-18.79 P/E):

A negative P/E ratio suggests a loss since the firm has negative EPS. This complicates P/E evaluation. ACI's negative P/E indicates financial difficulty or a challenging moment. Before deciding, investors should investigate additional value indicators or qualitative aspects.

Beacon (P/E Ratio: 86.30):

Beacon's P/E ratio of 86.30 is much greater than the industry average of 27.45. The stock may be overpriced. Investors anticipate Beacon's profits growth to be strong because to its high P/E ratio. This may be justified if the firm has good growth prospects or market domination but a high multiple could indicate overoptimism, making the stock riskier if growth fails.

Acme (P/E Ratio: 8.48):

Acme's P/E ratio of 8.48 is below the industry average of 27.45, suggesting the company may be undervalued. This shows that the market is undervaluing the company's profits potential or that it has future performance challenges. Investors may choose to purchase if the firm has strong fundamentals and growth possibilities.

Renata (P/E Ratio: 33.81):

Renata's P/E ratio of 33.81 is higher than the industry average of 27.45, suggesting the company may be somewhat expensive. Renata's higher P/E ratio shows investors are ready to pay more for their profits either because to strong growth projections or a strong market position. Although not as dramatic as Beacon's, the above-average P/E suggests investors should consider these expectations viability.

Comparable Approach

The Comparable Approach, also known as the Comparable Method or Relative Valuation Method, estimates a company's worth by comparing it to similar companies in its field. This strategy assumes that organization with comparable size, growth potential and risk profiles should be valued similarly. To estimate the target company's value, select a set of comparable companies and use their financial multiples, such as P/E, EV/EBITDA or EV/Revenue. In this scenario, the EV/Revenue multiple was used to compute the estimated value per share of the firms and compare it to market price to determine which are overpriced and which are undervalued.

The firm is undervalued if its implied value per share is higher than its market value per share because its intrinsic worth or fair value is more than what the market is prepared to pay. It shows that the market may be underestimating the company's actual value, offering investors a purchasing opportunity if the company's fundamentals are good and the market price will ultimately match the suggested value.

However, if the determined value per share is less than the market price the firm is overpriced. This suggests the market values the company's shares greater than its assessed intrinsic or fair worth. The stock price may be inflated because of investor expectations, market speculation or overoptimism.

Formulas:

Equity Value = Price per share * Shares Outstanding

Net Debt = Total Liabilities – Cash and Cash Equivalents

Enterprise Value = Equity Value + Net Debt

EV/Revenue = Enterprise Value/ Revenue

Implied Enterprise Value = Industry Average EV/Revenue * Revenue

Implied Market Value = Implied Enterprise Value + Net Debt

Implied Value Per Share = Implied Market Value/Shares Outstanding

Company	Price Per Share	Shares Outstanding	Equity Value	Total Liabilities	Cash and Cash Equivalents	Net Debt	Enterprise Value	Revenue	EV/Revenue
ACI	155.4	76,205,626	11,842,354,280	87,727,955,000	3,785,456,000	83,942,499,000	95,784,853,280	92,962,674,000	1.03
Beacon	205.4	231,000,000	47,447,400,000	7,814,167,664	452,188,479	7,361,979,185	54,809,379,185	8,509,947,615	6.44
Acme	72.3	211,601,700	15,298,802,910	18,953,411,797	1,455,376,682	17,498,035,115	32,796,838,025	26,947,708,020	1.22
Renata	776	114,696,490	89,004,476,240	13,602,983,045	1,836,745,979	11,766,237,066	100,770,713,306	32,864,696,777	3.07
Industry Average EV/Revenue		2.94							

Company Name	Revenue	Implied Enterprise Value	Net Debt	Implied Market Value	Shares Outstanding	Implied Value Per Share

ACI	92,962,674,000	273,177,036,448.30	83,942,499,000	189,234,537,448.30	76,205,626	2,483.21
Beacon	8,509,947,615	25007050354.38	7,361,979,185	17,645,071,169.38	231,000,000	76.39
Acme	26,947,708,020	79187642730.43	17,498,035,115	61,689,607,615.43	211,601,700	291.54
Renata	32,864,696,777	96575110020.10	11,766,237,066	84,808,872,954.10	114,696,490	739.42

Analysis:

ACI:

ACI is undervalued, with an indicated value per share of 2483.21, much greater than the current market price of 155.4. The market may be underestimating the company's genuine worth, giving investors a purchasing opportunity provided the fundamentals match.

Beacon:

It looks that Beacon is overpriced, with a market price of 205.4 and an implied value of 76.39. This shows that the stock is overpriced owing to market expectations or speculation, and it might fall if the firm fails to satisfy those expectations.

Acme:

Acme is undervalued, with an indicated value per share of 291.54, much more than the market price of 72.3. The market may not completely recognize the company's profits potential or future growth, making it appealing to investors.

Renata:

Renata is somewhat overpriced, with a market price of 776 and an indicated value of 739.42. Though less significant than in Beacon's instance, it signals the market may anticipate Renata to do better than its underlying value suggests.

Asset Valuation Approach

The Asset Valuation technique employing Net Asset worth (NAV) values a corporation based on its total assets minus total liabilities, focusing on its underlying assets' intrinsic worth. Real estate, manufacturing, and investment funds utilize NAV to evaluate their physical assets including land, buildings, equipment, and financial instruments.

The firm may be undervalued if its market price per share is below its NAV per share. The investor may be able to purchase a firm’s ownership for less than its true asset value. If the market is negative about the company's future or investors don't fully recognize its assets, an undervaluation may result.

If the market price per share exceeds NAV, the firm may be overpriced. In this instance, the market is valuing the firm above its asset value, maybe due to strong growth forecasts, investor optimism, or significant intangible assets like brand strength or intellectual property not completely included in the NAV calculation. Overvaluation means the market expects the firm to earn returns above its present assets, but it also implies a risk if those growth expectations are not reached.

Asset Valuation Approach						
Company Name	**Shares Outstanding**	**Total Liabilities**	**Total Intangible Assets**	**Total Assets**	**Net Asset Value**	**NAV/Share**

ACI	76,205,626	87,727,955,000	1,409,150,269	90,908,122,246	1,771,016,977	23.24
Beacon	231,000,000	7,814,167,664	-	14,642,107,470	6,827,939,806	29.56
Acme	211,601,700	18,953,411,797	-	50,410,021,610	31,456,609,813	148.66
Renata	114,696,490	13,602,983,045	147,528,645	48,827,161,833	35,076,650,143	305.82

Analysis:

1. ACI:

Market Price/Share: 155.4
NAV/Share: 23.24

In this example, ACI's market price of 155.4 exceeds its NAV of 23.24. This means the market values ACI far more than its asset value. This might indicate that the market expects ACI's growth or profits potential to exceed its present assets. The asset valuation technique utilizing NAV overvalues ACI.

2. Beacon:

Market Price/Share: 205.4
NAV/Share: 29.56

Beacon is valued substantially over its asset value at 205.4, compared to its NAV of 29.56. This high premium shows that investors anticipate Beacon to provide considerable future profits or growth and are ready to pay more than its assets are worth. Based on NAV, Beacon is overvalued.

3. Acme:

Market Price/share: 72.3

NAV/Share: 148.66

Acme's market price is 72.3, below its NAV of 148.66. Acme's stock is trading below its asset value. Perhaps because to fears about future profitability, industry circumstances, or market sentiment, investors are valuing Acme below its assets. Acme may be undervalued based on its NAV, which might be a purchasing opportunity if asset prices are high and there is room for growth.

4. Renata:

Market Price/share: 776

NAV/Share: 305.82

Renata is priced at 776, more than double its NAV of 305.82. Investors are optimistic about the company's growth, brand, and profitability. NAV-wise, Renata is overvalued.

Valuation of Companies in the Automobile Industry

P/E Approach

P/E Approach			
Company Name	**Price Per Share**	**EPS**	**P/E Ratio**
Aftab Auto	**45.3**	**-1.40**	**-32.36**

BD Auto	**118**	**0.11**	**1072.73**
IFAD Auto	**33.2**	**0.05**	**664.00**
Runner Auto	**33**	**-3.57**	**-9.24**
		Industry Average P/E	**423.78**

Analysis:

Aftab Auto (P/E Ratio: -32.36):

Aftab Auto has a negative P/E ratio since its EPS is -1.40, indicating unprofitability. A negative P/E ratio implies a loss-making firm but does not compare to the industry average. For firms with negative profits, investors avoid P/E valuation. The P/E ratio does not indicate overvaluation or undervaluation for Aftab Auto, but it signals financial issues, so investors may hesitate to invest in it.

BD Auto (P/E Ratio: 1072.73):

BD Auto's P/E is 1072.73, substantially greater than the industry average of 423.78. This shows the market values BD Auto is far higher than its profits. A high P/E ratio may imply that investors anticipate BD Auto to develop rapidly or are prepared to pay a premium for the company. Since its P/E ratio is more than twice the industry average, BD Auto may be overvalued.

IFAD Auto: (P/E ratio: 664.00):

IFAD Auto's P/E ratio is 664.00, greater above the industry average of 423.78, but less extreme than BD Auto's. A higher-than-average P/E ratio indicates that investors are ready to pay more per unit of profits than other industry businesses. This may signal confidence about future growth, but IFAD Auto is overvalued in this P/E ratio, though less than BD Auto.

Runner Auto (P/E Ratio: -9.24):

Similar to Aftab Auto, Runner Auto has a negative P/E owing to negative earnings. Since the firm is unprofitable, it cannot be compared to the industry average P/E ratio. Investors may be wary of a negative P/E ratio, which indicates financial trouble. Like Aftab Auto, Runner Auto cannot be overvalued or undervalued based on P/E.

Comparable Approach

Company	Price Per Share	Shares Outstanding	Equity Value	Total Liabilities	Cash and Cash Equivalents	Net Debt	Enterprise Value	Revenue	EV/ Revenue
Aftab Auto	45.3	105,544,995	4,781,188,274	19,444,237,360	299,905,064	19,144,332,296	23,925,520,570	1,184,911,272	20.19x
BD Auto	118	4,326,013	510,469,534	24,772,844	4,540,348	20,232,496	530,702,030	64,778,671	8.19x
IFAD Auto	33.2	265,597,932	8,817,851,342	30,683,407,392	198,299,009	30,485,108,383	39,302,959,725	9,037,302,468	4.35x
Runner Auto	33	113,539,932	3,746,817,756	15,545,297,351	165,953,372	15,379,343,979	19,126,161,735	6,629,627,461	2.88x
Industry Average EV/Revenue		8.90							

Company Name	Revenue	Implied Enterprise Value	Net Debt	Implied Market Value	Shares Outstanding	Implied Value

						Per Share
Aftab Auto	**1,184,911,272**	**10,551,128,418.54**	**19,144,332,296**	**(8,593,203,877.46)**	**105,544,995**	**(81.42)**
BD Auto	**64,778,671**	**576826377.35**	**20,232,496**	**556,593,881.35**	**4,326,013**	**128.66**
IFAD Auto	**9,037,302,468**	**80473315724.41**	**30,485,108,383**	**49,988,207,341.41**	**265,597,932**	**188.21**
Runner Auto	**6,629,627,461**	**59033998883.33**	**15,379,343,979**	**43,654,654,904.33**	**113,539,932**	**384.49**

Analysis:

Aftab Auto:

Aftab Auto's Implied value per share is -81.42, which is exceptional and shows a negative enterprise value relative to sales. A negative Implied value per share may signal financial trouble, therefore the market price of 45.3 is substantially more than the suggested value.

BD Auto:

BD Auto's market price per share is 118, somewhat below its implied value of 128.66. This shows that the market price undervalues the firm compared to its estimated EV/Revenue value. This technique undervalues BD Auto, although not much.

IFAD Auto:

IFAD Auto's implied value per share of 188.21 is much more than its market price of 33.2. This big disparity shows the market undervalues IFAD Auto. The implied value says the firm should be valued significantly higher due to its potential. According to EV/Revenue, IFAD Auto is undervalued.

Runner Auto:

The market price per share of 33 for Runner Auto is far lower than its implied value of 384.49. This huge gap suggests that Runner Auto is undervalued in the market relative to its

EV/Revenue suggested value. The market price of Runner Auto is well below its revenue-based worth.

Asset Valuation Approach

Asset Valuation Approach						
Company Name	**Shares Outstanding**	**Total Liabilities**	**Total Intangible Assets**	**Total Assets**	**Net Asset Value**	**NAV/Share**
Aftab Auto	**105,544,995**	**19,444,237,360**	**-**	**24,907,218,516**	**5,462,981,156**	**51.76**
BD Auto	**4,326,013**	**24,772,844**	**-**	**56,360,470**	**31,587,626**	**7.30**
IFAD Auto	**265,597,932**	**30,683,407,392**	**-**	**40,752,747,233**	**10,069,339,841**	**37.91**
Runner Auto	**113,539,932**	**15,545,297,351**	**63,007,158**	**23,965,984,886**	**8,357,680,377**	**73.61**

Analysis:

1. Aftab Auto:

Market Price/Share: 45.3

NAV/Share: 51.76

Market price of Aftab Auto, 45.3 is below NAV per share 51.76. The market values Aftab Auto is below its asset value, suggesting an undervalued stock. Investors may be able to buy Aftab Auto shares below their asset value.

2. BD Auto:

Market Price/Share: 118

NAV/Share: 7.30

The market price 118 of BD Auto exceeds the NAV per share 7.30. This means the market values BD Auto far more than its asset value. High growth expectations or other variables not represented in the NAV may explain this. BD Auto is overvalued on NAV alone.

3. IFAD Auto:

Market Price/Share: 33.2

NAV/Share: 37.91

Market price of IFAD Auto 33.2 is somewhat lower than NAV per share 37.91, showing it is priced below its assets. The stock's discount to NAV suggests IFAD Auto is undervalued.

4. Runner Auto:

Market Price/Share: 33

NAV/Share: 73.61

Runner Auto's market price (33) is substantially lower than its NAV per share (73.61), indicating a major undervaluation. Runner Auto is cheap, thus if the market corrects it, the stock price may rise.

Valuation of Companies in the Cement Industry

P/E Approach

P/E Approach			
Company Name	**Price Per Share**	**EPS**	**P/E Ratio**
Crown Cement PLC	**65.10**	**5.90**	**11.03**
Premier Cement Mills PLC	**61.50**	**5.19**	**11.85**
Meghna Cement Mills PLC	**75.90**	**0.49**	**154.90**
Confidence Cement PLC	**73.70**	**8.06**	**9.14**
		Industry Average P/E	**46.73**

Analysis:

Crown Cement: (P/E Ratio: 11.03)

Crown Cement PLC's P/E ratio of 11.03 is much lower than the industry average of 46.73. Crown Cement is valued at a lower multiple of its profits than other industry players. The P/E ratio shows that Crown Cement PLC is undervalued since investors pay less per unit of profits than other industry businesses.

Premier Cement Mills: (P/E Ratio: 11.85)

Premier Cement Mills PLC has a P/E ratio of 11.85 significantly below the industry average of 46.73. Premier Cement is undervalued compared to the industry. Premier Cement Mills PLC's stock seems cheap relative to its profits.

Meghna Cement Mills: (P/E: 154.90)

Meghna Cement Mills PLC has a P/E ratio of 154.90 much greater than the industry average of 46.73. This implies the market values Meghna Cement at a far greater multiple of its profits than other industry player. A high P/E ratio could indicate that investors predict future growth or that the company is expensive. P/E analysis shows Meghna Cement Mills PLC is overvalued.

Confidence Cement: (P/E Ratio: 9.14)

Confidence Cement PLC has a P/E of 9.14, significantly lower than the industry average of 46.73. The market may be undervaluing Confidence Cement compared to its earnings potential. Investors pay far less per unit of profits than the industry. Because of its P/E ratio Confidence Cement PLC is undervalued.

Comparable Approach

Company	Price Per Share	Shares Outstanding	Equity Value	Total Liabilities	Cash and Cash Equivalents	Net Debt	Enterprise Value	Revenue	EV/Revenue
Crown Cement PLC	65.10	148,500,000	9,667,350,000	15,095,872,017	893,903,481	14,201,968,536	23,869,318,536	24,183,479,554	0.99x
Premier Cement	61.50	105,450,000	6,485,175,000	27,715,889,310	292,997,193	27,422,892,117	33,908,067,117	21,832,963,082	1.55x

Mills PLC									
Meghna Cement Mills PLC	75.90	31,588,529	2,397,569,351	13,057,208,987	90,785,524	12,966,423,463	15,363,992,814	3,523,928,871	4.36x
Confidence Cement PLC	73.70	86,253,790	6,356,904,323	7,669,175,336	134,688,626	7,534,486,710	13,891,391,033	4,556,355,135	3.05x
Industry Average EV/Revenue		2.49							

Company Name	Revenue	Implied Enterprise Value	Net Debt	Implied Market Value	Shares Outstanding	Implied Value Per Share

Crown Cement PLC	24,183,479,554	60,149,004,175.24	14,201,968,536	45,947,035,639.24	148,500,000	309.41
Premier Cement Mills PLC	21,832,963,082	54302813813.24	27,422,892,117	26,879,921,696.24	105,450,000	254.91
Meghna Cement Mills PLC	3,523,928,871	8764694588.38	12,966,423,463	(4,201,728,874.62)	31,588,529	(133.01)
Confidence Cement PLC	4,556,355,135	11332538951.93	7,534,486,710	3,798,052,241.93	86,253,790	44.03

Analysis:

Crown Cement:

Market price of Crown Cement 65.10 is significantly lower than Implied value per share 309.41, suggesting that the firm is undervalued based on revenue potential. According to the EV/Revenue method Crown Cement may be undervalued and its market price may not represent its whole revenue potential.

Premier Cement Mills:

Premier Cement Mills' market price 61.50 is much lower than its implied share value 254.91. Premier Cement Mills may be undervalued given this wide disparity.

Meghna Cement Mills:

Meghna Cement Mills' implied value per share is -133.01, which is uncommon and shows that the company's enterprise value is negative compared to its sales, potentially owing to financial difficulties or other structural concerns. According to the EV/Revenue method Meghna Cement Mills is Overvalued since its market price of 75.90 is considerably more than its estimated value. The company's stock price may not reflect its negative Implied value's financial problem.

Confidence Cement:

Confidence Cement's market price 73.70 exceeds its implied share value 44.03. The company is priced more than its revenue-based indicated value suggesting Confidence Cement is overvalued. The EV/Revenue indicator suggests the stock is trading over its fair value although investors may be too enthusiastic about the company's future.

Asset Valuation Approach

Asset Valuation Approach						
Company Name	**Shares Outstanding**	**Total Liabilities**	**Total Intangible Assets**	**Total Assets**	**Net Asset Value**	**NAV/Share**
Crown Cement PLC	148,500,000	15,095,872,017	21,577,088	22,850,581,357	7,733,132,252	52.07
Premier Cement Mills PLC	105,450,000	27,715,889,310	2,268,327	33,659,468,413	5,941,310,776	56.34
Meghna Cement Mills PLC	31,588,529	13,057,208,987	-	14,578,953,145	1,521,744,158	48.17
Confidence Cement PLC	86,253,790	7,669,175,336	-	13,411,427,025	5,742,251,689	66.57

Analysis:

1. Crown Cement:

Market Price/Share: 65.10
NAV/Share: 52.07

Crown Cement PLC's market price 65.10 exceeds its NAV 52.07. This suggests the market values Crown Cement above its assets. The NAV may not represent investors' strong growth or profitability expectations. Crown Cement PLC is Overvalued because its market price exceeds its net asset value.

2. Premier Cement Mills:
Market Price/Share: 61.50
NAV/Share: 56.34

Premier Cement Mills PLC's market price 61.50 is somewhat higher than its NAV 56.34. This shows the market values Premier Cement somewhat above its net assets. Premier Cement Mills PLC is somewhat overvalued based on this comparison.

3. Meghna Cement Mills:
Market Price/Share: 75.90
NAV/Share: 48.17

The market price of Meghna Cement Mills PLC shares 75.90 exceeds its NAV 48.17. This suggests the market values Meghna Cement above its net assets. According to the NAV comparison, Meghna Cement Mills PLC is overvalued since its market price is well above its asset value. Investors may be pricing in future growth or other variables.

4. Confidence Cement:
Market Price/Share: 73.70
NAV/Share: 66.57

The market price of Confidence Cement PLC shares 73.70 is somewhat higher than its NAV 66.57. Confidence Cement may be priced above its net assets, like Premier Cement. The market price exceeds the NAV, which makes Confidence Cement PLC significantly overvalued.

3.3.2 Findings

Examining Valuation Methods in Pharmaceuticals, Automotive, and Cement Industries

The study applied three valuation methods; P/E ratio, Comparable Approach, and Asset Valuation—to assess whether companies in the pharmaceuticals, automotive, and cement sectors in Bangladesh are overvalued or undervalued relative to industry benchmarks. Findings reveal that:

In the pharmaceutical industry, Beacon has a P/E ratio notably above the industry average, suggesting overvaluation, whereas Acme's low P/E ratio indicates it may be undervalued.
In the automotive industry, BD Auto and IFAD Auto show high P/E ratios, signaling potential overvaluation, while Runner Auto and Aftab Auto's negative P/E ratios suggest possible financial issues.

Investor Attitudes and Potential Investment Opportunities

The results provide insights into key investment opportunities for IFC's Country Management Unit. Companies as Acme Laboratories and IFAD Autos, which shows undervaluation across multiple methods, represent potential opportunities for strategic investment. Additionally, firms like Beacon Pharmaceuticals and Meghna Cement Mills, which appears overvalued should be under careful consideration before investment due to potential market corrections. These insights help in identifying key sectors and companies for potential investments, aligning with IFC's goal to maximize developmental impact.

3.4 Conclusion

The Valuation analysis of three industries of Bangladesh such as pharma, automobile, and cement suggested that industry varies significantly in terms of valuation and this variation is due to both industrial and overall market factors. P/E ratios, Comparable Approach & Asset Valuations helped to give a detailed appraisal of each of these companies in terms of strength and weakness in the current market as well as their importance scores, in terms of whether they were over- or under-valued in their respective sectors.

Strong investor expectation of future growth of firms has been depicted particularly in the pharmaceutical firms such as Beacon Pharmaceuticals having high P/E ratios due to the well-established industry of Bangladesh in generic Drugs production. On the contrary, low P/E of ACI Limited may indicate some problem related to some firms only like financial constraints which may negate future earning capacity. Likewise, in the automobile industry the performance of firms such as Runner Auto show valuation consistent with the market dependence on imported parts and emerging craze towards indigenization of parts. However, certain industries such as cement industry have their own challenges like high operations costs.

3.4 Recommendation

Considering the valuation parameters, IFC is suggested to increase its investment in the companies exhibiting strong growth potential and being undervalued like Acme Laboratories from the pharmaceutical sector and IFAD Autos from the automotive sector. These companies exhibit favorable multiples through various valuation approaches which provide strategic long-term investments. On a more cautious note, overvalued companies like Beacon Pharmaceuticals and Meghna Cement Mills should be treated with caution as the market has high expectations for these companies. From the perspective of the cement industry, investments should be sought in companies like Crown Cement and Premier Cement Mills as they remain undervalued relative to their current market prices and revenue generating capabilities. For the automotive and pharmaceutical sectors, investments should be made in firms with acceptable risk levels and strong fundamentals to match IFC’s objective of making sustainable and impactful investments in targeted sectors.

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