

Report on
“A Comprehensive study on Shipping Business: The case of Bangladesh”

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

Brac Business School
Brac University
October 06, 2024

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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.

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Letter of transmittal

October 06, 2024

Dr. Saad Md Maroof Hossain

Academic Supervisor
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Subject: Submission of Internship Report on “A Comprehensive Study on Shipping Business: The Case of Bangladesh”

Dear sir,

I am pleased to submit my internship report on “A comprehensive study on shipping business: The case of Bangladesh”. This report was prepared during my internship at ‘PH Navigation’. This report covers various aspects of the shipping industry in Bangladesh such as growth opportunities, challenges, development, and so on.

Expressing my utmost gratitude to you for providing guidance and support while preparing the internship report. I tried my best to ensure the quality and completeness of the report with professional manner. I hope this report will satisfy the needs and any further suggestions will be highly appreciated.

Yours sincerely,

Md. Sabbirul Islam
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Acknowledgement

My profound thanks go out to **BM Rakib Hassan, Manager Accounts, PH Navigation**, for giving me the chance to finish this internship and for their invaluable assistance in writing this report, which is titled "A Comprehensive Study on Shipping Business: The Case of Bangladesh."

I am also appreciative of at **Mirza Tarik Sanghi & Sahil Hossain (PH Navigation)** for their ongoing assistance and wisdom, which have tremendously enhanced my educational journey.

Sincere gratitude is extended to **Dr. Saad Md Maroof Hossain**, who oversees my academic work at **BRAC University**, for his invaluable advice and direction during this endeavor. Finally, I would want to express my gratitude for the encouragement I received from friends, family, and coworkers, all of whom helped me finish this report.

Executive summary

The internship report, entitled "A Comprehensive Study on Shipping Business: The Case of Bangladesh," offers a thorough examination of the maritime sector in Bangladesh. Key elements of the industry are examined in the study, such as its importance to the economy, difficulties in conducting business and potential for expansion.

Throughout my internship at PH Navigation, I learned about the most recent changes in the sector and how they affect trade and the economy of Bangladesh. In order to facilitate international trade, the study emphasizes the significance of ports, logistics, and infrastructure. Inadequate port facilities, legislative restrictions, and rivalry from nearby nations are just a few of the difficulties the industry faces.

Recommendations to boost innovation, increase efficiency, and make Bangladesh's shipping sector more globally competitive are included in the report's conclusion.

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Objectives:

Broad Objectives: The broad objectives of this study are to know the operations, growth prospects and comparison with the international competitors.

Specific objectives:

1. To know the present state of the shipping industry in Bangladesh which includes key segments, major stakeholders and services.
2. To know the operations of shipping industry.
3. To show the industry and comparative analysis with global competitors.
4. To evaluate the financial performance and accounting practices in shipping industry.

Methodology:

Primary Data source: Direct learning from the officials & discussing with experienced professionals.

Secondary data source: websites, journals and newspapers.

Limitations:

1. Lack of data availability is one of the difficulties that I faced preparing this report. Adequate information was needed to get an effective analysis.
2. Time constraints was another issue as I had to learn on the job and preparing internship report simultaneously.

Chapter 01

The Introduction part

1.1 Introduction:

From the economic point of view, we know that, one country is not fully capable of producing or meet the demand of every single good for the people. Therefore, the idea of international trade generated. In the concepts of international trade, the significance of shipping industry is tremendously higher as around 90% of international trade take places in the ocean route. *(These Are the World's Most Vital Waterways for Global Trade, 2024)* Shipping industry facilitates international trade by connecting worldwide markets, cost effective transportation and helps to foster the economic growth.

In Bangladesh, the shipping business holds massive importance due to its location aligning with Bay of Bengal. This strategic location allows Bangladesh to access a vast area of waterways. Every year a huge number of export-import take places in the Bangladeshi sea ports. However, Shipping industry of Bangladesh is left behind with its international competitors due to infrastructural problem, Quality control issues, economic inflation and recession and many more.

1.2 History of shipping:

Although ships have been used for trade for thousands of years, the vessels that we see cruising the oceans today are the result of the last 150 years of advancements in both science and engineering.

Wooden ships were popular in the past. Sailors would raise and lower the ship's sails to go from one location to another during that era. The weather had a determining effect on getting to the goal. Many experts now assert that wooden ships were manufactured in Bangladesh in antiquity and shipped overseas. Certain individuals, primarily from Chittagong and the Noakhali subdistricts, have developed specialized knowledge in this area.

Iron was employed as a substitute for wood in shipbuilding throughout the 19th century, since wooden ships were often damaged during storms. Nobody at first thought that floating iron might be used to build a ship. This industry saw a rebirth when iron was used to build ships in compliance with Archimedes' law. Steel eventually replaced iron as the primary material. 1777 saw the first steel ship come into dock.

The steam engine, which marked the start of the industrial revolution in Europe, had tremendous impact on the shipping sector. Steam-powered vessels elevated the shipping industry to new heights. However, the first trip wasn't as successful. The first steam-powered vessel, the S.S. 200 tons of cargo were carried by the Hindustan, but required 500 tons of fuel (Coal). Steam-powered ships did not evolve very quickly. There was a lot of competition because machinery was expensive and regular ships could transport products for a very low price. But the main benefit of ships with engines was that cargo could be delivered on schedule. In the beginning, shipping passengers by engine-powered ships was more profitable than shipping cargo.

1.3 Significance to the National economy:

Bangladesh's economy is largely dependent on the maritime sector, which generates a large amount of income, jobs, and trade.

1. Trade facilitation: Bangladesh is connected to international markets through its seaports, which include Chittagong Port and Mongla Port. These ports are vital entry points for the import and export of goods. The shipping sector propels global trade and economic activity by facilitating the transfer of essential commodities like clothing, textiles, jute, and agricultural supplies.

2. Employment Generation: A large section of the people can find work in the shipping industry, from logistics specialists and maritime engineers to seafarers and port laborers. Innumerable people rely on it for their livelihood, and it also supports livelihoods in allied sectors.

3. Infrastructure Development: By improving transportation efficiency and boosting trade competitiveness, investments in port infrastructure and maritime facilities support national development initiatives. Bangladesh is committed to promoting a thriving shipping industry, as seen by ongoing projects targeted at improving maritime infrastructure and increasing port capabilities.

4. Revenue Generation: Port fees, customs duties, and associated tariffs are some of the ways that the shipping sector helps the government make a sizable profit. Economic growth and prosperity are fueled by these earnings, which also support social welfare programs, infrastructure improvements, and national development efforts.

Chapter 02

Overview of shipping industry

There are only four ways to transport cargo from one place to another. Those are- marine, air, rail and road. Marine way is considered as the most effective transportation system due to huge amount of cargo it can carry and low-cost transportation service compare to the other way. Also, marine way has a very wide range of coverage in the globe. all those benefits create huge opportunity for shipping industry around the world.

Today, we see approximately 118,928 numbers of merchant ships is operational all over the world (Stalmans, 2023). Maersk, Mediterranean Shipping Co., COSCO shipping Crop., CMA CGM group, Ocean Network express etc. are the key players with the highest numbers of vessels, maximum numbers of country coverage and market share in the industry. By using sustainable development plan and advanced technology, all those key players proving themselves superior than others. (*Top 10 Largest Container Shipping Companies in the World*, n.d.). Now a days, Shipping industry plays such a pivotal role in the global supply-chain management that any disruption or delay can lead to economic losses.

In Bangladesh there are only 97 active ships that are providing global services. The key players are Akij shipping line, world era corporation, SR ship management etc. Though Bangladesh has 3 major sea ports located at strategically important area however, the numbers of ship and shipowners is still disappointing. Lack of fresh investment, unstable economy and challenging operational process might be the reason but still the sector have great potential and growth opportunities due to the strategic location of Bangladesh, continuous growth of competencies & expertise and government initiatives to increase port and logistic facilities. (Chowdhury, 2023)

2.1 Types of ship:

Regardless of the size and class of the ship we see 4 types of merchant's vessels are registered under the flag of Bangladesh. Those are, Container, Bulk career, Oil & Chemical tanker and Gas career. All those ships are specially designed to carry specific types of goods.

Ship type	Types of goods
Container	Dry bulk goods
Bulk career	grain, coal, ore, steel coils, and cement
O & C tanker	Petroleum products & liquid chemical
Gas Career	Ethylene, LPG, LNG, CNG, propylene etc.

2.2 Key players and Number of vessels owned:

Along BSC (Bangladesh Shipping corporation), we found multiple private company is involved in shipping business. BSC on the other hand is a publicly held organization that run by the government. Among the private shipping company, some company's main business is shipping and rest of the company operates shipping as their sister concern. In terms of market share and numbers of vessels Akij shipping, Mercantile marine ltd. World era corporation, SR ship management are the key players. My internship company, 'PH Navigation' operates 1 bulk career as merchant vessel named 'MV SAFINAH". However, another two merchant vessels have already been purchased yet to be registered.

Company name	No. of Merchant vessels	No. of employes
Akij shipping line	10	More than 750
Mercantile marine ltd.	10	Not specified
Worldera corporation	08	Approximately 365
SR Ship management	20	Approximately 280

2.3 Company Information: (PH Navigation)

PH Navigation has established on 1st July 2019 with some small size bulkers. Those small bulkers were involved domestic and international shipping business with exceptional services. Later it Started its journey with a bulk career named "MV Sarinah" on 2022. Now the company owned a bulk career, a tanker and a container. Only "MV Sarinah" is registered in the merchant vessels list under the flag of Bangladesh and provides services to the international market. The company owned 12 lighters or small size bulkers. The growth of 'PH Navigation' as a shipping company shows a significant sign that is going to be a key player in the shipping industry within a shorter period.

As a growing company 'PH Navigation' continuously working to expand by adding more departments and employing experienced manpower. This company also emphasizing on technological application and use of different automated software to run the entire operation smoothly.

Vision: To serve high quality of tonnage while maintaining high level of professionalism.

Mission: 1. To create an extensive network and service that plays a key role in coverage.
2. Optimize Globalization and execute numerous ways to continuously boost the quality of shipping services.

2.4 Departments in shipping industry:

In a shipping business there are a ton of activity involved. To carry out those activities a shipping business needs to introduce multiple departments to run the business effectively and efficiently. In the modern era of shipping, we see various kinds of departments have already introduced such as

1. Operations departments;
2. Technical departments;
3. Commercial departments;
4. Safety and compliance department;
5. Finance and accounting department;
6. Human resource department;
7. Logistic department;
8. Information technology department;
9. Legal & compliance department;
10. Marketing department;

To carry out the basic functions of shipping business, operations departments, technical departments, Finance & Accounting department, Human resource department and Chartering departments plays the key role. Among the shipping companies in Bangladesh, the earlier mentioned departments are very common. Employees of those specific departments plays different role and work together to help the company to achieve its goals.

Departments	Major responsibilities
1. Operations department	Day-to day vessel operations such as scheduling, routing and cargo handling.
2. Technical department	Perform a wide range of activity. overseeing maintenance, repair, technical aspects of the ship such as engine room, navigation equipment and vessel upgrades.
3. Finance and accounting department	financial transactions, budgeting, financial reporting, payroll and invoicing.
4. Human resource department	recruitment, training, crew welfare, compensation, training and development etc.
5. Chartering department	Analyze freight rate, work together with charterer, broker, suppliers and distributors to negotiate price, quantities and time scale. Deals with consumer relationships and ensures best practices for the company.

Chapter 03

Ship chartering & Operations

3.1 Ship Chartering:

Ship chartering is the practice of leasing a ship's usage for cargo transportation from a ship owner to a different business, known as the charterer. The goal of the procedure is to maximize the freight income for a portfolio of ships and cargoes by individuals employed by shipowners, operators, cargo owners, or traders.

3.1.1 Parties involved in ship chartering:

- **Ship owner:** The company that provides the ship.
- **Charterer:** The party who rents out the vessel for transportation and has control over the cargo is the charterer.
- **Ship Broker:** Ship brokers act as a middleman between charterers and vessel owners or operators, offering market intelligence.

3.1.2 Types of charters:

- **Voyage Charter:** The most popular kind of ship charter is a voyage charter. For a specific voyage between two or more ports, a voyage charter often entails renting the ship together with its crew. The rent is determined by the volume or weight of cargo that is transported during the trip. Owner is responsible for all expenses incurred during the voyage; freight is the amount paid for using the vessel.
- **Time charter:** When a vessel is time-chartered, the charterer rents it for a predetermined amount of time, typically a few months or years. In addition to covering trip-related expenses, the charterer hires the vessel. The crew, insurance, and maintenance of the ship are all the responsibility of the ship owner.
- **Bareboat charter:** The charterer has total control over the boat. All additional expenses, including as fuel, personnel, port fees, maintenance, and insurance, are covered by the charterer.

3.1.3 The Chartering process:

The chartering procedure is a efficient technique for shipping companies to guarantee the global transportation of essential cargo. The practice of chartering has changed over many centuries and will continue to do so as global trade expands.

- **Determining Needs:** The initial stage of the chartering procedure is to determine the precise transportation needs. This entails determining factors like the kind of cargo, the route, any port limitations, and the timetable.
- **Choosing a ship broker:** The majority of businesses use shipbrokers, who are experts in connecting charterers with ship owners. Brokers will be well aware on the state of the freight market, available ships, and their condition.
- **Selecting Appropriate Vessels:** The following phase is selecting appropriate vessels according to their size, age, quality, and preferred timeline.
- **Finding appropriate vessel:** In order to obtain the owners' bid, the broker will approach the ship owners with the cargo requirement. Negotiations will start if one or more offers are received.
- **Negotiating Terms:** In the negotiation process, the charter fee, demurrage (the overtime payment if the laytime has elapsed), laytime (the entire amount of time permitted for loading and unloading the cargo), and other particular terms specified in the charter party agreement are all agreed upon.
- **Agreement on Charter Parties:** Following the conclusion of negotiations, an agreement on charter parties is created. The terms and conditions of the charter are described in this legacy binding document, together with information about the type of charter, payment periods, responsibilities, and any other requirements. (Hand, 2024)

3.2 Operations in shipping industry:

The daily administration of the company's ships and cargoes is known as ship operations, sometimes referred to as voyage management. It is the ship operator's duty to make sure that everything runs smoothly and safely. When a ship is set for a journey or time charter, the operations department of the ship owning firm is primarily in charge of managing the voyage of the vessel. (Hand, 2024)

Key responsibilities	Descriptions
1. coordinating with different parties involved	The primary coordinator is the department of operations. They serve as a liaison between the owners of the ships, the departments of the firm, the management fleet, the charterers, and any other parties connected to the ships. A few examples of third parties that may be associated with a ship are ship agents, ship chandlers, suppliers of bunkering, shippers, receivers, stevedores, etc.
2. Post-fixture assistance	the operations division offers the ships post-fixture assistance. The provision of voyage instructions, monitoring ship performance in accordance with charterparty agreements, updating stakeholders on vessel progress, and guaranteeing the safe and effective carriage and delivery of goods are all included in the post-fixture assistance.
3. Overseeing financial aspects	Managing freight, hire and demurrage collection from charterers, and payments for the provision of bunkers on the boats. the department is in charge of overseeing the disbursement of fund required to operate the ships.
4. Purchasing of bunker	scheduling the vessel to bunker at the most advantageous and cost-effective port and negotiating the best price with the bunker providers.
5. Cargo handling and port activities	The operations department selects the ship agent for each port and oversees a variety of tasks including cargo handling, port operations, pilotage, towage, wharfage, dockage, freight conveying, and loading and unloading of boats.
6. Voyage documentation	Bills of lading, port documentation, and other necessary paperwork are among the documents they prepare and manage during a voyage.

Source: (Hand 2024)

Chapter 04

Industry analysis and comparison with global competitors:

4.1 SWOT Analysis

Strengths:

1. **Strategic Location:** Bangladesh's location alongside the Bay of Bengal offers good access to international marine trade routes. Its ports are essential to both domestic and foreign trade, especially the ports of Chittagong and Mongla.
2. **Professional customer services:** Most of the shipping companies maintain high degree of professionalism while providing services. Those ships are maintained by experienced crew and the companies always ensure timeliness and cost-effective approach to delivery cargos from one point to another.
3. **Labor Availability:** Bangladesh's shipping sector operates at a lower cost of operation because of the large number of labor force is available with cost effective price.

Weakness:

1. **Purchasing old ship:** Though purchasing of old vessels required low initial capital however, those vessels have to undergo continuous repairing. Those vessels frequently go off-service which leads to potential opportunity of customers and increase the repair and maintenance cost for the company. Most of the ships in Bangladesh were purchased from various other countries from various shipping companies.
2. **Lack of Modern Infrastructure:** Many port facilities and logistics systems, as well as other aspects of the maritime industry, do not meet international standards, which causes delays and higher operating expenses.
3. **Lack of International connectivity:** Very limited numbers of Bangladeshi containers are providing services to the global market.

Opportunities:

1. **Diversification:** Given the rising need for power plant fuel in Bangladesh, the shipping companies may choose to diversify their operations beyond just cargo vessels and into the tanker vessel market.
2. **Positive attitude of government:** The Bangladeshi government is making a number of efforts to foster a favorable environment for the shipping sector. Bangladesh is currently attracting a lot of foreign nations. which is an excellent chance.
3. **Advance technology and automation:** Bangladeshi shipping companies may introduce advanced communication tools for every segment of their ships and use of AI will help the business to run smoothly.

Threats:

1. **Reduced freight costs:** As a result of the availability of both large and small shipping lines, freight costs have gone down. it gives exporters and importers their combined bargaining power.
2. **Increasing rivalry:** A large number of new investors are entering the shipping industry as Bangladesh strives to establish a positive reputation in the global marketplace. As a result, there is more competition.

4.2 Porter's Five forces Analysis:

1. Threat of new entry: The shipping sector is very profitable since cargo needs to be moved around the world, but starting a shipping firm involves significant financial inputs in the form of boats, operating risk, and cargo availability. The characteristics of the shipping industry are as follows:

1. High need for capital
2. The profit margin is substantial.
3. Less likely is a growth into a new industry.
4. There are less government restrictions because industry is pushed worldwide.

The shipping business has a high capital requirement, which reduces the threat of new competitors. In the shipping sector, profits are excessively high due to the massive capital required. Because all importers and exporters are aware that shipping lines are the most efficient means of transportation for their goods.

Overall threat of the new entry is moderate to high.

2. Threat of Substitution: A shift in customer behavior toward a rival or against the organization might lead to a substitution threat. When service is delayed or the quality declines while the freight costs remain the same, customers will move to the new alternatives. The corporation will be obliged to raise its transportation costs if the price of oil surges. Customers will turn to alternatives like airlines, trucks, or goods trains as a result of rising shipping costs and more time spent getting to their destinations. Customers will consider such alternatives if the freight train, trucks, or airline can accomplish the same destination on time at almost the same cost as shipping corporations. People today are unwilling to compromise on anything. They would go to other replacements who can provide better prices and services if they are dissatisfied with the current one.

1. The alternatives are widely available.
2. The cost of alternatives is substantial.
3. The replacements have excellent performance and quality.
4. There is a substantial switching cost.

The overall risk of substitutes ranges from moderate to high.

3. Bargaining power of Suppliers: When it comes to shipping line businesses, particularly the major shipping corporations, suppliers hardly ever matter. It might, however, have some impact on minor players who are finding it difficult to make a name for themselves in the market. For the shipping line businesses, suppliers supply things like paints, lubricant oil, fresh water, fuel, and repair services. A succinct summary of the bargaining power is this:

1. There are a lot of providers.
2. The vendors' pricing factor is elevated.
3. The provider makes less profit.
4. The supplier has a significant cost of switch.
5. There are significant operating costs.

Suppliers generally have little negotiating leverage.

4. Bargaining power of buyers: In the shipping line industry, one of the most powerful factors is the buyer. Buyers might be manufacturers of goods, clearing agents, freight forwarders, importers, or exporters.

The foundation of the shipping industry is twofold: service quality and cost. The price is the freight charge that a shipping business determines for each container that it wants to move from one location to another. The buyer's bargaining power has grown in relation to the freight price because of the intense competition in this industry.

1. There is a large number of customers.
2. The cost of switching is minimal.
3. Customers are less informed and conscious.
4. Customers have a strong capacity for demand.
5. There are many freight forwarders and clearing agents.

Because items are imported and exported from all over the world, there are a lot of customers in this industry. However, the desirability will decrease due to the identical price and quality. Due to the operators' fear of losing business, customer demand is strong. Because there are more operators, customers have lower switching costs.

Customers and buyers have significant overall negotiating power.

Competitive rivalry: Every industry has rivalry, and daily business operations involve it. Sometimes it is terrible because businesses have to split hard-earned earnings with rivals, and other times it is helpful because it allows businesses to compete with one another on factors like work satisfaction, business strategy, and service quality. Following is a summary of the competitive rivalry:

1. The number of rivals is substantial.
2. Industry expansion is rapid.
3. Low turnover among competitors who transfer to new clients.

The shipping sector has a large number of rivals due to the perception that the profit margin is quite substantial. Due to the industry's rapid growth, there is little likelihood of leaving it.

Overall competition in the industry is high.

4.3 Comparative analysis with global competitors:

Bangladesh's rapidly expanding garment exports are the main focus of the country's shipping line industry, which is dominated by a small number of state and private companies. Comparing the business to global rivals like China, Singapore, South Korea, and the titans of European shipping, however, reveals a number of difficulties.

Comparison metrics	Bd shipping line business	Global competitors
1. Size of fleet and global reach	smaller, older ships that are utilized on short-to medium-distance routes. Serving mostly regional trade routes, the state-owned Bangladesh Shipping Corporation (BSC) runs a small number of bulk carriers and container ships.	Chinese shipping companies, led by COSCO Shipping and China Merchants Group, control a big portion of the world's shipping market. They have a substantial presence on all major international shipping routes and operate enormous fleets of extremely large container ships and bulk carriers.
2. Operational cost efficiency	The shipping lines operating in Bangladesh have a modest cost competitive advantage due to lower operational and labor cost. But delays, obsolete ships, and inefficient port operations frequently outweigh these benefits.	In spite of their higher labor expenses, Chinese shipping lines are able to maintain high operating efficiency because of government subsidies, sophisticated automation, and cutting-edge fleet technology.
3. Competitiveness	The transportation of commodities associated with Bangladesh's garment industry is the primary emphasis of the country's shipping lines. They primarily travel on regional routes, which reduces their ability to compete in long-distance international trade.	Large-scale maritime routes spanning important international markets are dominated by China and Europe. Along with handling cargo transportation, these shipping companies are highly integrated into international supply chains and provide value-added services like warehousing and logistics management.
4. Automation and Modernization of Fleets	The majority of the vessels operated by Bangladesh Shipping Corporation (BSC) are older, less sophisticated models. Modern automation technologies for cargo handling, navigation, and fuel efficiency are absent from these ships, which results in reduced efficiency and increased operating expenses. Bangladeshi shipping lines' competitiveness is hampered by their inability to make large investments in fleet modernization.	Modern ships with fuel-efficient engines, automated navigation systems, and intelligent cargo management systems are operated by Chinese maritime companies, led by COSCO shipping. China is leading the world in the adoption of AI and autonomous technology for predictive maintenance and real-time tracking.

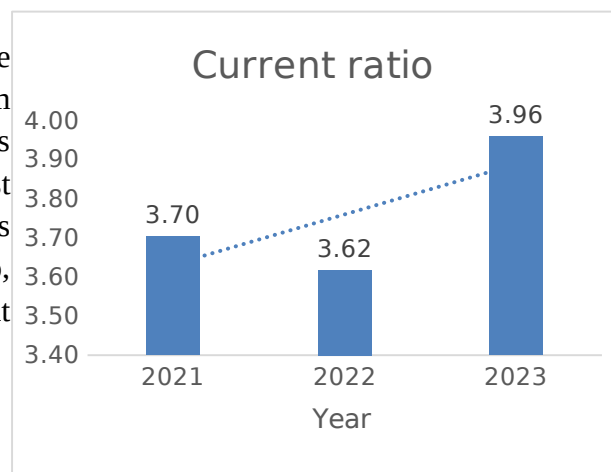
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Chapter 05

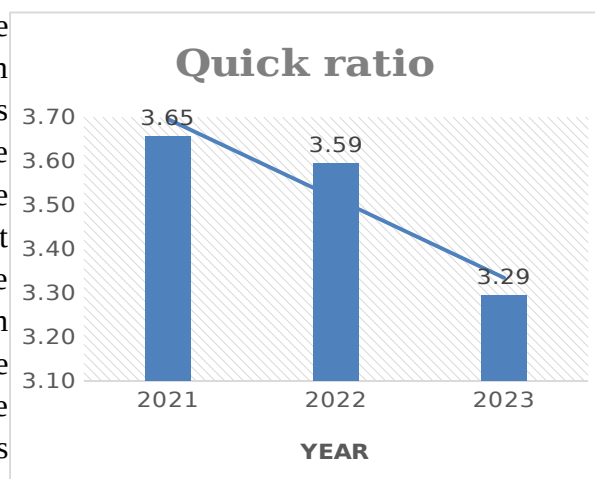
Financial performance of BSC & Acc. Practices in shipping business

5.1 The Financial Ratios

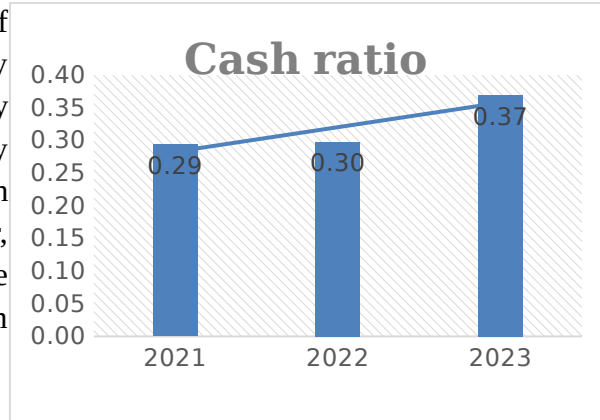
1. Current Ratio: Current ratio measures the capability of the firms to pay off its short-term obligation. If the number is greater than 1, it means that the company has more current assets against its current liabilities. The shipping company has good liquidity, as evidenced by its current ratio, which ranges from 3.62 to 3.96, indicating that it can pay short-term obligations with ease.



2. Quick ratio: quick ratio measures the capability of the firms to pay off its short-term obligation excluding inventories. If the number is greater than 1, it means that the company has more current assets against its current liabilities and the firm is capable of paying its liabilities without relying on the inventories to sell. Although the BSC is capable enough to pay off its short-term liabilities excluding inventories however, the downward trend from 2021 to 2023 suggests, the firm needs to monitor its cash and liabilities closely.

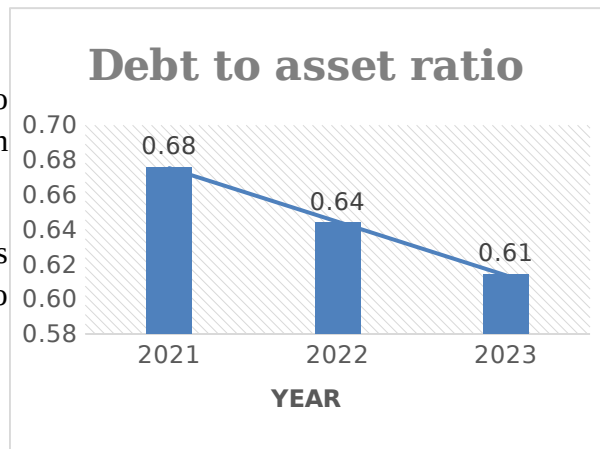


3. Cash Ratio: Cash ratio indicates the ability of the firm to pay of its short-term obligation only by the available cash & cash equivalent the company has. Although BSC is not capable enough to pay off its short-term liabilities with cash and cash equivalents as the quick ratio is below 1 however, the upward trend from 2021 to 2023 indicates, the firm has growing ability to cover its short-term obligation using cash & cash equivalents.



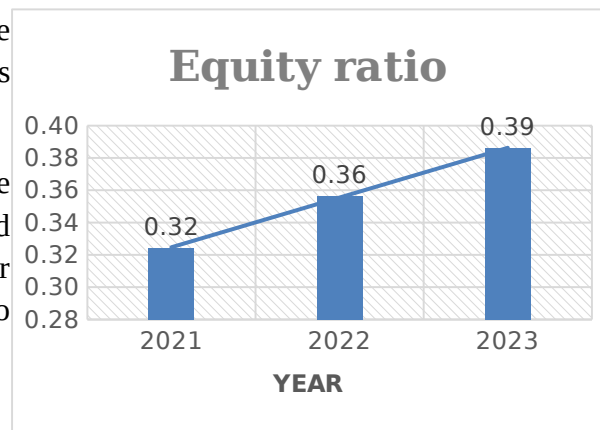
4. Debt-to-asset Ratio: The debt-to-asset ratio calculates the portion of debt used to finance an organization's assets.

The downward trend from 2021 to 2023 shows that, BSC is reducing its dependency on debt to finance the asset and improving financial stability.



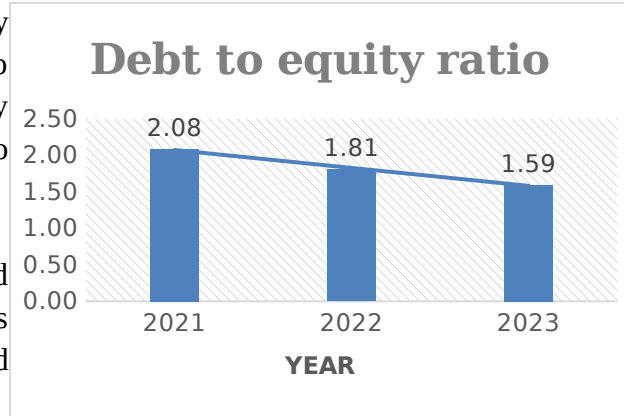
5. Equity Ratio: The equity ratio calculates the portion company's assets financed by shareholders equity.

As a result of lower reliance on debt and more funding from shareholders' equity, the upward trend in financial structure is indicated of better health. This strengthens the business's ability to deal with losses.



6. Debt-to-equity ratio: The debt-to-equity ratio illustrates how much debt is utilized to finance a company in relation to equity by comparing the total amount of debt to shareholders' equity.

The shipping company's declining trend suggests it is progressively reducing its leverage, enhancing its financial stability, and reducing risk.

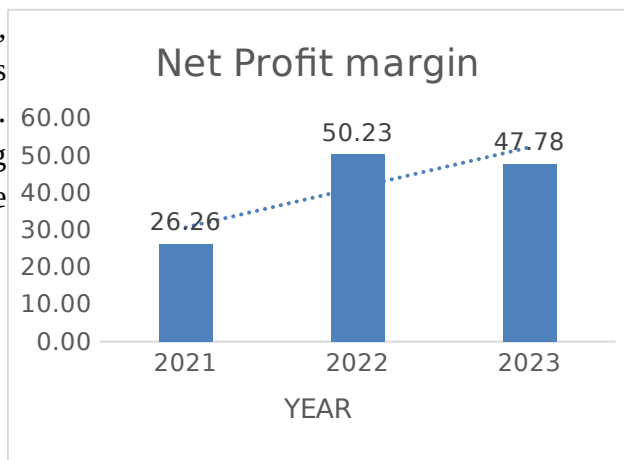


7. Gross profit margin: An organization's ability to make money from sales after deducting cost of goods sold (COGS) is determined by its gross profit margin.

Although 2022 will be a very successful year, the changes could also be a result of shifting operating expenses, price adjustments, or market volatility.



8. Net profit margin: After deducting all costs, expenses, and taxes, the net profit margin shows what proportion of income remains as profit. The company's net profit margin is still strong despite minor changes, demonstrating effective cost control and profit generating.



5.2 Dupont Analysis

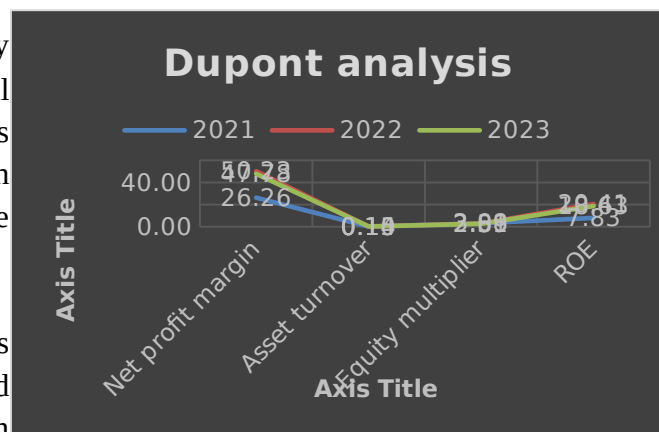
Net profit margin: Substantial rise from 2021 to 2022, suggesting that the business enhanced its revenue generation or expense control. Even though the margin shrank a little in 2023, it is still substantial and increases ROE.

Year	2021	2022	2023
Net profit margin	26.26	50.23	47.78
Asset turnover	0.10	0.14	0.15
Equity multiplier	3.08	2.81	2.59
ROE	7.83	20.41	18.63

Asset Turnover: Every year, asset turnover has increased, indicating better usage of assets to generating revenue. Even while it's still low, the steady rise in turnover improves overall productivity and raises ROE.

Equity multiplier: A decrease in the equity multiplier is evidence of less financial leverage. This suggests that the business is financing its assets with less debt, which decreases financial risk but also lowers the contribution of leverage to ROE.

ROE: Because of the net profit margin's remarkable rise in 2022, ROE increased significantly. Despite a small decrease in 2023, ROE remained strong. Strong profitability and increased asset efficiency surpassed the reduction in debt and the resulting decline in the equity multiplier.



5.3 Accounting practices in shipping business

Adopting strong accounting procedures is crucial for a Bangladeshi shipping line firm that wants to expand strategically and maintain financial transparency and regulatory compliance. The following accounting procedures are suitable for this type of business:

1. **Accrual Accounting Method Practice:** Regardless of monetary transactions, use accrual accounting to record revenues and costs as they are earned or incurred. This aids in accurately

portraying the financial situation. Offers a more realistic picture of earnings and outlays, particularly for lengthy shipping cycles.

2. Revenue Recognition for Shipping Services Practice: Generally, revenue from shipping services is recognized at the time of delivery, which is when the client assumes the major risks and benefits of ownership. aligns revenue recognition with the requirements of international financial reporting

3. Depreciation of Assets: Based on the projected useful life of the equipment and vessels, determine depreciation using the decreasing balance approach or the straight-line method. Ensures that big capital assets, such as ships, are regularly depreciated to reflect their deterioration over time.

4. Foreign Currency Transactions Practice: Make use of appropriate foreign exchange accounting since shipping companies frequently deal with several currencies (USD, EUR, etc.). After accounting for currency variations, record transactions at the rate in effect on the transaction date. Reduces the possibility of currency exchange-related risks and guarantees accurate financial reporting.

5. Taxation and Compliance Practice: Adhere to local tax laws, especially those pertaining to corporation taxation and VAT. It is advised that shipping businesses seek advice from a tax specialist as they may be eligible for special tax benefits in Bangladesh under certain regulations. Minimizes tax obligations while guaranteeing that the business complies with Bangladesh's tax regulations.

7. Cash Flow Management Practice: Because of the frequently high upfront expenses (fuel, docking fees, etc.) and the occasionally slow customer payment receipt, it is important to routinely monitor and estimate cash flows. Assists in preventing liquidity problems and guarantees that the business can pay for running expenses and make investments in growth.

8. Audit & Internal control: Internal audits and control systems should be conducted on a regular basis to guarantee financial accuracy and control compliance. It is necessary to put in place an internal control mechanism to stop fraud and guarantee responsibility. Boosts stakeholder and investor confidence and fortifies corporate governance.

9. Practices for Financial Reporting and Performance Analysis: Create regular financial statements, such as cash flow, income, and balance sheets, and compare them to industry standards. For bigger shipping lines, segment reporting by business divisions or geographic regions is essential. Aids in strategic decision-making and offers insights into operational performance.

Chapter 06

Findings of the study

The key findings of this study can be segmented into four specific parts. Those are Strategic importance, challenges, growth potentials and comparative analysis with global competitors.

6.1 Strategic importance:

Bangladesh's location along the Bay of Bengal, which gives it access to important international trade routes, adds enormous importance to the country's shipping sector. Imports and exports are made easier by the ports of Chittagong and Mongla, which are essential to global trade.

6.2 Challenges:

Challenges that have identified from this study are

- **Outdated Infrastructure:** Bangladesh's logistics and port infrastructures are out of date, which leads to delays and inefficiency.
- **Outdated fleet:** The majority of the vessels operated by shipping companies in Bangladesh are considered to be older and in need of ongoing repairs, which can result in frequent out-of-service times and increased maintenance expenses.
- **Limited Global Connectivity:** Bangladesh's maritime companies mostly serve regional routes and lack the capacity to compete on long-haul international trade routes because of their aging and smaller fleets.

6.3 Growth potential:

the specific area where growth potential has been found out are-

- **Government Initiatives:** The government's attempts to support the maritime industry and upgrade port facilities indicate to future growth possibilities.

- Technological Advancements: Using automation and cutting-edge communication technologies like artificial intelligence (AI) could boost productivity and boost competitiveness internationally.

6.4 Rivals with Global players:

Rivals from Europe, Asia, South Korea, and China run sizable, contemporary fleets that are equipped with cutting-edge automation systems and eco-friendly designs. These rivals take advantage of effective port infrastructure, robust government backing, and incorporation into international supply chains.

In case of Bangladesh, its shipping line industry suffers from outdated ships, a lack of technology integration, and ineffective port facilities, all of which make it less competitive than these international competitors.

Chapter 07

Recommendations and Conclusion

7.1 Recommendations:

- To remain competitive in the global market, Bangladesh's shipping companies need to modernize their fleet. Modern ships can cut operating costs and increase competitiveness by implementing automated technologies for cargo handling, navigation, and fuel efficiency.
- Prioritizing technologies like AI-driven systems for cargo management, predictive maintenance, and real-time tracking is a good idea. This will bring Bangladesh's shipping capacities into line with those of competitors around the world, including China and Singapore.
- Delays would be decreased and operational efficiency would rise with investments in automated cargo handling, digital port management systems, and connectivity with international logistics networks.
- It is recommended that the government provide more stable financial support and incentives to fleet modernization and adoption of new technologies. Creating stable, well-

defined policies will draw in outside capital and promote domestic expansion in the shipping sector.

- Expanding international alliances and joint ventures with major shipping companies might assist Bangladesh in becoming more visible on international shipping lanes.

7.2 Conclusion:

Although strategically significant for Bangladesh's economy, the country's shipping industry falls behind competitors worldwide in terms of technology, fleet modernization, and operational effectiveness. Adopting AI-driven systems, green technology, and advanced automation has allowed countries like China, Singapore, and South Korea to function effectively on a global scale. Bangladeshi shipping lines, on the other hand, are primarily run by older ships and face challenges from obsolete technology and congested ports, which raises operating expenses and reduces their ability to compete internationally.

Bangladesh must invest in port infrastructure, update its fleet, and embrace digitization in order to remain competitive. For innovation to flourish and investment to be attracted in, the government must provide clear, consistent policies and incentives. Bangladesh can leverage its advantageous location for future shipping sector growth, improve operational efficiency, and strengthen its global shipping capabilities by filling these deficiencies.

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