Evaluating Shipping Companies: The Critical Role of ESG Metrics

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Abstract - The maritime industry acts as a critical link in the value chain of virtually every other industry, from manufacturing and retail to energy and agriculture. There has been a significant push towards sustainability within the maritime industry in recent years, particularly in achieving net-zero carbon emissions. Various measures, trajectories, and compliance frameworks have been implemented to reduce the environmental impact of maritime operations.

While the "Environmental" pillar of Environmental, Social, and Governance (ESG) criteria is crucial for stakeholders, the "Social" and "Governance" pillars are equally important and play a significant role in the comprehensive evaluation of a shipping company's sustainability and ethical practices. Studies have shown that companies that excel in all three pillars are better positioned to manage risks, capitalise on opportunities, and maintain a competitive edge in the global market. This paper discovers the impacts of the maritime industry on the environment and society, as well as how ESG risks and opportunities could potentially influence financial performance within the maritime industry.

Keywords: Environmental; Social; Governance; Reporting; Materiality.

INTRODUCTION

An organisation's Environmental, Social, and Governance (ESG) reporting entails publicly disclosing its performance in these crucial dimensions. The main goal of an ESG report is to offer transparency regarding the organisation's ESG activities and evaluate its sustainability performance. This level of transparency allows stakeholders, such as investors, consumers, and non-governmental organisations (NGOs), to make better-informed decisions[1].

In recent years, there has been a rising tide of support for stakeholder capitalism, emphasising long-term value creation. Investors realise that companies excelling in ESG criteria are less risky, better poised for long-term success, and more resilient in the face of uncertainty.

The proliferation of mandatory ESG regulations worldwide has significantly contributed to this transformation, a trend that is expected to persist. To attract quality investments, companies must provide transparent and accurate ESG statements that are easily comparable, verifiable, and understandable. Consequently, it is essential for companies to be equipped for ESG data collection, analysis, and reporting, as investors' demand for transparent ESG disclosures continues to intensify[2].

The shipping industry is a critical driver of global trade and economic growth, facilitating the transportation of over 80% of the world's goods by sea[3]. As the industry expands, it faces increasing scrutiny regarding its ESG performance. Climate change, labour rights, and corporate governance have become pivotal concerns for investors, emphasising the importance of integrating ESG criteria into the investment decisions of shipping companies. This integration is a focal point for sustainable development and long-term value creation[4].

Given the significant importance of ESG, more research is needed within the maritime industry, particularly regarding its environmental and societal impacts and the influence of various ESG topics on financial performance. This study aims to address this by applying the ESG framework to the maritime industry and answering the following research questions (RQs):

RQ1: What are the material ESG topics within the maritime industry?

RQ2: How do ESG topics impact financial performance in the maritime industry?

Methodologically, this paper first discusses the transition from unregulated to regulated ESG reporting, examining the evolving ESG landscape across various countries. Building on regulatory pressure, the study delves into key ESG topics in the maritime industry, addressing the RQs in the context of impacts on the environment, society, and the financial performance of shipping companies.

A. *A New Era of ESG Reporting*

Preparing for annual sustainability reporting has always been a significant undertaking for organisations. However, in recent years, the complexity and scope of this task have intensified markedly. Over the past decade, there has been a substantial 155% increase in global ESG regulations, with 1,255 new rules introduced since 2011, compared to 493 between 2001 and 2010[5]. Historically, these regulations have often been voluntary, primarily adhered to by leading companies or targeted at larger institutions.

However, governments worldwide are instituting mandatory reporting requirements, impacting organisations of all sizes. Despite this shift, a recent KPMG report indicates that 75% of companies are unprepared to meet the new ESG data requirements[6]. This lack of readiness is understandable, given that investing in new processes, developing new strategies, and potentially establishing new reporting infrastructures is a considerable commitment. Additionally, the initial reporting deadlines for many of these directives are not until the following year and do not apply to all companies immediately.

Key Developments:

1) Increased Stakes: The recent surge in ESG regulations has necessitated companies complying with more rigorous sustainability reporting standards, significantly raising the stakes for reporting efforts.
2) Standardized Reporting: There is a clear trend towards standardised sustainability reporting. In 2023, the International Sustainability Standards Board (ISSB) released its first global sustainability standard, and the EU introduced its European Sustainability Reporting Standards (ESRS) standard, underscoring a global movement towards unified reporting practices.
3) Value Chain Disclosures: Companies are increasingly expected to report on their impacts beyond direct operations, such as Scope 3 emissions and supplier labour rights. The introduction of the EU's Corporate Sustainability Due Diligence Directive exemplifies this.

B. *ESG Regulations around the world*

ESG regulations encompass government-mandated standards for ESG activities, reporting, and disclosures. The European Union (EU) is leading the way with diverse implementation timelines, and many companies are already embracing ESG reporting and disclosures, signalling a positive shift towards more sustainable business practices.

A few of the important ESG regulations around the globe are summarised below:

Corporate Sustainability Reporting Directive (CSRD) - The CSRD mandates that companies disclose extensive data concerning their ESG practices in accordance with the European Sustainability Reporting Standards (ESRS). This encompasses the principle of double materiality, which entails evaluating how a company affects and is influenced by climate change. Large companies in the EU and listed SMEs will have to report on sustainability, as will some non-EU companies if they make over EUR 150 million on the EU market.[7]

International Sustainability Standards Board (ISSB) - ISSB sets global standards for sustainability reporting, aiming to enhance transparency and comparability of ESG information across companies and jurisdictions. These standards provide clear guidance on how organisations should disclose their sustainability-related risks, opportunities, and impacts, thereby promoting better decision-making and accountability in the global financial markets. Following the issuance of its initial two global sustainability standards in June 2023, the ISSB has seen widespread adoption intentions from various jurisdictions worldwide. As of March 13, 2024, five jurisdictions have implemented these standards either voluntarily or mandatorily, effective from January 1, 2024, while an additional 11 jurisdictions have outlined plans for future adoption[8].

Business Responsibility and Sustainability Reporting (BRSR) - In 2023, India introduced Business Responsibility and Sustainability Reporting (BRSR), marking its first framework mandating eligible Indian companies to disclose metrics on sustainability-related factors. Introduced by the Securities Exchange Board of India (SEBI), the BRSR is designed to adhere to global reporting standards such as the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and Task Force on Climate-Related Financial Disclosures (TCFD). Effective from the 2022-2023 fiscal year, all eligible Indian companies, defined as those among the top 1,000 by market capitalisation according to SEBI, must include a BRSR-compliant report within their annual filings submitted to SEBI.

C. Material ESG Topics within the Maritime Industry

Environmental

The main environmental and ecological impacts of the maritime industry include air pollution, water pollution, and underwater noise pollution. Maritime transportation is the most energy-efficient mode of transport, generating significantly lower carbon emissions per tonne-mile of cargo compared to other fossil fuel-based modes[10]. However, the shipping industry's contribution to global greenhouse gas emissions, presently around 3%, is expected to increase if left unchecked. In addition to greenhouse gases, traditional fuels release nitrogen oxides (NOx), sulfur oxides (SOx), and particulate matter (PM), posing long-term health risks. To address this, there has been a recent push for the adoption of alternative fuels such as ammonia, methanol, and hydrogen, along with advancements in propulsion systems to support their efficient use (e.g., dual fuel engines/hybrid vessels) for cleaner and more efficient transportation.

Other than emissions, maritime transportation poses a significant risk to maritime biodiversity due to releases like ballast water, bilge water or, in the worst cases, accidental spills.

Social

The maritime sector presents unique social challenges owing to the nature of the profession onboard ships. Seamen work in confined environments and are unable to leave or evacuate during emergencies. Living in the same confined area for work and relaxation, they remain distant from their loved ones and acquaintances for long stretches of time. This prolonged isolation, combined with factors such as tight schedules, changing time zones, adverse weather, increased port turnaround times, job stress from reduced crew numbers, and limited shore access due to heightened port security, significantly impacts their social well-being.

Moreover, ensuring safety onboard ships is not only a legal and regulatory requirement but also a moral imperative to safeguard the well-being and lives of seafarers, who play essential roles in global trade and commerce. This underscores the need for high-quality training and development, especially in the face of rapid technological advancements. For instance, concerns have been raised regarding the safety implications of methanol's flammability and ammonia's toxicity. Therefore, training has become a critical social factor in the maritime industry, particularly in achieving decarbonisation targets.

Governance

Governance plays a crucial role in ensuring that stakeholders' interests are protected and that financial matters and business operations are conducted with accountability. In the maritime industry, the significance of good governance was exemplified by the bankruptcy of Hanjin Shipping, the leading ocean carrier in South Korea at the time. Implementing effective governance practices not only allows for close monitoring of company performance, such as issuing profit warnings, but also improves overall business and management efficiency, providing a competitive edge. Transparency in decision-making within shipping companies becomes increasingly vital in the heavily regulated maritime industry, especially as companies must adapt to decarbonisation rules and comply with labour regulations. Therefore, it's essential for the board to uphold sustainability and uphold internationally accepted business ethics and principles.

<u>*Summary to address RQ1*</u>

The maritime industry plays a critical role in global trade and significantly impacts various sectors, making it a key player in advancing the United Nations Sustainable Development Goals (SDGs). The IMO recognises the vital role of the maritime industry and actively advocates for the 2030 Agenda for sustainable development, urging stakeholders in the shipping sector to enhance their economic, environmental, and social sustainability. While the environmental component of ESG criteria has garnered considerable attention, the social and governance factors are equally crucial for long-term top-line growth.

D. ***Impacts of ESG topics on financial performance within the maritime industry***

Financial impacts could encompass achieving higher investment returns through capital allocation to promising and sustainable opportunities, such as alternative fuels, vessel retrofitting, and dual fuel/hybrid vessels. Conversely, it could involve steering clear of stranded investments due to enduring environmental issues or non-compliance with regulations, leading to fines, penalties, or operational restrictions in specific areas. Indirect financial impacts could also materialise, affecting reputation, business expansion, strategic goals, and stakeholder relationships as a result of regulatory non-compliance.

<u>*Financial Impacts of Environmental Issues*</u>

Revised IMO GHG Trajectory, Fuel EU Maritime, EU ETS for Shipping, EU Taxonomy, EU MRV and Poseidon Principles are important maritime-specific environmental standards/regulations that can impact a shipping company's financial performance. Figure 1: Environmental Regulatory Framework in the Maritime Industry outlines the environmental regulatory framework in the maritime industry.

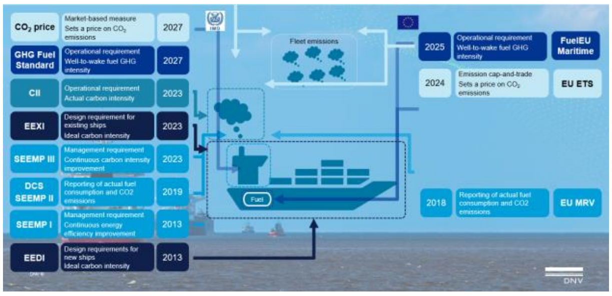

Figure 1: Environmental Regulatory Framework in the Maritime Industry

The cumulative breakdown of financial implications of these standards/regulations are as follows –

- <u>*Compliance and Capital Expenditures*</u>

  Significant investments are needed to adopt new technologies, retrofit existing vessels, and design new ships that meet stricter emission standards. Developing infrastructure for alternative fuels such as LNG, hydrogen, and ammonia requires substantial capital expenditure.

- <u>*Operational Costs*</u>

  Transitioning to alternative, cleaner fuels can increase fuel costs in the short term due to the higher prices of these fuels compared to traditional marine fuels. Advanced technologies and alternative fuel systems often require specialised maintenance, leading to higher operational expenses.

- <u>*Access to Finance and Investment*</u>

  Compliance with these regulations improves access to green financing options, such as green bonds and sustainability-linked loans. Adhering to environmental standards makes companies more attractive to ESG-focused investors.

- <u>*Regulatory Costs*</u>

  Enhanced MRV requirements increase administrative costs. At the same time, non-compliance with regulations can result in significant financial penalties, increasing overall costs.

- <u>*Market Competitiveness*</u>

  Companies that comply with environmental standards can enhance their reputation, attract environmentally conscious clients, and gain market share. Early adopters of cleaner technologies may gain a competitive edge in the market.

• *Insurance and Risk Management*

Compliance with environmental regulations can lead to lower insurance premiums due to reduced environmental risks. Also, investing in cleaner technologies can mitigate regulatory and reputational risks, lowering overall risk exposure.

• *Long Term Benefits and Innovation*

Long-term benefits include enhanced sustainability, reduced environmental impact, and alignment with global climate goals, which can improve stakeholder relations and market position. These regulations can incentivise innovation in the maritime industry, leading to the development of new technologies and business models.

Financial Impacts of Social Issues

Maritime Labour Convention (MLC), International Safety Management (ISM) Code, Standards of Training, Certification, and Watchkeeping (STCW), Collective Bargaining Agreements (CBAs), and several Anti-Discrimination and Equal Opportunity Regulations can impact the shipping companies financially in the form of-

• *Implementation Costs*

The cost of implementation involves policy development and compliance systems, such as IT resources, training and certification, and developing safety and health infrastructure, such as installing safety equipment and upgrading shipboard accommodations.

• *Operational Costs*

Operational costs include Ensuring fair wages, overtime compensation, and repatriation as mandated by MLC, which increases payroll costs and administrative costs associated with maintaining compliance records, conducting regular audits, and reporting to regulatory bodies.

• *Reputation Management*

Failure to comply can harm a company's reputation, potentially leading to loss of business, while strong compliance can enhance reputation and market position.

• *Legal and Liability Costs*

Non-compliance with these regulations can result in significant fines, legal fees, and compensation claims. Also, poor implementation can lead to lawsuits from seafarers or other stakeholders, adding to legal expenses.

Financial Impacts of Corporate Governance

Corporate governance standards in the maritime industry include but are not limited to IMO guidelines, Organization for Economic Co-operation and Development (OECD) guidelines, corporate governance codes, securities exchange regulations, anti-corruption and anti-bribery regulations like the UK Bribery Act, ESG reporting, internal controls, and audits. The financial implications are the same as social issues; however, good corporate governance can benefit in the following ways-

• *Improved Decision Making*

Strong corporate governance can lead to more effective and transparent decision-making processes, enhancing overall operational efficiency.

• *Risk Management*

Comprehensive governance frameworks help in identifying and mitigating risks, potentially reducing the costs associated with unforeseen events.

• *Investor Confidence*

Improved investor confidence, making it easier to attract capital and potentially reducing the cost of capital.

• *Customer Preference*

Customers and charterers increasingly prefer to work with companies that demonstrate strong governance, potentially leading to increased business and higher rates.

• *Regulatory Preparedness*

Being ahead in governance compliance can position companies better as regulations tighten, avoiding future retroactive compliance costs and disruptions.

Summary to address RQ2.

Research indicates that companies incorporating ESG principles into their strategies often attract a broader spectrum of investors focused on sustainability and social responsibility[9]. The alignment of ESG practices holds the promise of driving increased capital inflows and enhancing companies' financial performance. ESG practices empower companies to effectively manage environmental and social risks, reducing regulatory, legal, and reputational costs that could impact financial outcomes. Furthermore, the adoption of ESG practices can optimise cost management, strengthen employee retention, and fuel innovation, leading to sustained long-term growth prospects.

Considering the evolving ESG regulatory landscape, it is imperative to analyse the financial impacts, particularly concerning regulations and compliance within the maritime industry.

E. ***Conclusion***

In conclusion, the maritime industry stands at a pivotal juncture, confronted by the urgent need to align with global sustainability efforts and the increasing emphasis on ESG principles. The critical role of ESG metrics in evaluating shipping companies cannot be overstated, as evidenced by the comprehensive examination of their impact on environmental sustainability, social responsibility, and governance practices. This study has underscored the importance of ESG reporting as a tool for transparency, allowing stakeholders to make well-informed decisions while highlighting the maritime industry's significant environmental and societal impacts. The rising tide of mandatory ESG regulations worldwide reinforces the imperative for shipping companies to adopt robust ESG reporting frameworks, enabling them to navigate the evolving regulatory landscape effectively and maintain their competitive edge. The integration of ESG criteria into investment decisions and operational strategies offers a pathway to sustainable development and long-term financial stability within the maritime industry. As this paper has shown, addressing the material ESG topics within the maritime industry and understanding their impact on financial performance are crucial steps towards achieving these goals. The transition from unregulated to regulated ESG reporting represents a new era of accountability and opportunity for the shipping sector. To thrive in this new era, shipping companies must be proactive in embracing ESG reporting, investing in sustainable practices, and engaging with stakeholders transparently. By doing so, they can contribute to a more sustainable future while navigating the challenges and harnessing the opportunities that lie ahead in the global maritime landscape.

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