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The Triple Bottom Line and Firm Financial Performance: A Systematic Review of Empirical Evidence

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Abstract

This systematic review explores the relationship between the Triple Bottom Line (TBL) framework—encompassing economic, environmental, and social dimensions—and firm financial performance. Using the PRISMA methodology, 54 empirical studies were selected from 633 initial documents for focused analysis. The findings highlight that environmental sustainability enhances operational efficiency, social sustainability builds stakeholder trust, and the economic dimension aligns sustainable practices with financial viability and competitiveness. A VOSviewer network analysis underscores the interdisciplinary nature of TBL research, connecting sustainability, governance, and financial performance themes across diverse contexts. While TBL adoption demonstrates significant benefits, variability in outcomes due to industry, regional, and methodological differences suggests the need for tailored strategies. Advanced tools like big data analytics are recommended to address measurement inconsistencies and refine frameworks. This

review positions TBL as a pivotal tool for balancing stakeholder interests with shareholder value, driving long-term sustainability and competitiveness. It emphasizes the importance of governance, stakeholder engagement, and region-specific approaches, particularly in emerging economies. Future research should focus on longitudinal impacts, sectoral variations, and integration of advanced methodologies to enhance TBL's practical and strategic effectiveness in achieving global sustainability goals.

Keywords: VOSviewer, SLR, PRISMA methodology, Triple Bottom Line (TBL)

Introduction

Achieving the sustainability goals outlined in the 2030 Agenda presents a significant challenge for businesses, requiring them to manage their development effectively. The Triple Bottom Line (TBL) framework, introduced by Elkington in 1996, helps companies address this challenge by focusing on value creation across three key dimensions: economic, environmental, and social. Known as the 3Ps—profit, planet, and people—TBL emphasizes balancing these values to ensure financial viability while minimizing negative impacts on and social systems. ecological integrating TBL into their strategies, companies can identify opportunities to enhance competitive advantage and align business with stakeholder goals expectations. The economic dimension of TBL plays a central role, linking financial performance to the broader economic system and supporting long-term sustainability by fostering economic This dimension also helps growth. businesses meet stakeholder expectations, aligning their strategies with sustainable financial practices and enabling them to contribute to progress while ensuring future generations' needs are met.

Companies are increasingly recognizing their responsibility for the environmental and social impacts of their activities on host communities and other stakeholders. The traditional view of corporations as entities focused solely on maximizing shareholder wealth is shifting toward a broader perspective, where businesses are seen as accountable to society as a whole. This shift reflects a growing commitment to sustainability, as companies embrace strategies that balance the interests of all stakeholders. ultimately benefiting shareholders the long term. Transparency in addressing environmental, economic, and social concerns has become a critical part of corporate strategy, enabling firms to thrive while contributing to local economies, fostering connections with local suppliers, and addressing community needs. Achieving this transparency requires adopting and reporting practices aligned with the triple bottom line approach.

The core objective of any private enterprise is to achieve sustained profitability by engaging in effective

financial and operational activities that enhance the well-being of all stakeholders. A company's operational and financial performance reflects its ability efficiently utilize assets to generate revenue and effectively deploy resources to drive sales and increase shareholder wealth. Consequently, corporate strategies are deemed valuable when they lead to improved financial operational and outcomes. This perspective not only creates significant opportunities for profit and competitive advantage but also positions businesses as key players in addressing global challenges by leveraging their capacity for innovation and problemsolving. A sustainable company is one that prioritizes long-term health through the strategic management of economic, social, environmental and dimensions. demonstrating adopting that environmentally and socially responsible practices need not come at the expense of shareholder wealth. Instead. such approaches enhance competitive can advantage and contribute to more sustainable effective and business operations.

Stakeholder Theory

Stakeholder theory plays a central role in understanding the relationship between corporate sustainability and financial performance. Establishing strong stakeholder relationships, driven by ethical corporate behaviour, is crucial for gaining a competitive edge. Companies operate with a mission, and their ability to achieve

this mission is influenced by stakeholders, whose needs and interests may align or conflict with those of the organization's owners. The primary aim of stakeholder theory is to harmonize these diverse interests, recognizing that organizations rely on the support of key stakeholders for their survival.

The original concept of stakeholders highlights the importance of addressing their needs and concerns when formulating strategies and defining objectives. This inclusive approach ensures continued support from vital stakeholder groups. The collaborative efforts of various stakeholders collectively generate benefits involved. When for adopting sustainable management practices, the influence of diverse stakeholder groups including shareholders, suppliers, clients, communities, governments, competitors, and non-governmental organizationsbecomes pivotal. Their expectations and pressures significantly shape the decision embrace sustainability initiatives. underlining the importance of aligning business strategies with the interests of all stakeholders.

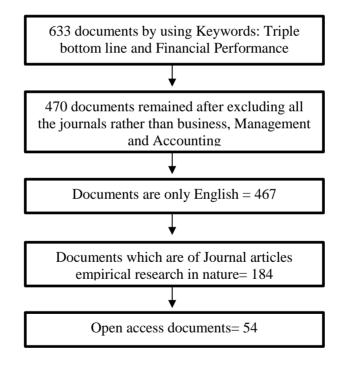
The objective of this review is to analyse the relationship between the Triple Bottom Line (TBL) framework—economic, environmental, and social dimensions and firm financial performance. It aims to identify how TBL integration influences productivity, stakeholder trust, and competitive advantage while addressing industry variations, adoption barriers, and

measurement advancements to support sustainable business strategies.

Methodology

The PRISMA diagram outlines systematic review process for examining the relationship between the triple bottom line and firm financial performance. Initially, 633 documents were identified using relevant keywords: Triple Bottom Line and Financial Performance from the Scopus database. After excluding journals outside the fields ofbusiness. 470 management, and accounting,

documents remained. Further refining the selection to English-language documents reduced the count to 467. Among these, only 184 documents were identified as empirical research studies, emphasizing their relevance to the review's objective. Finally, the focus narrowed to 54 openaccess documents for deeper analysis, ensuring accessibility and relevance to the study's goals. This structured filtration ensures a robust and focused review of empirical evidence linking the triple bottom line and financial performance.



The research articles collectively discuss the evolving understanding of the relationship between the Triple Bottom Line (TBL)—encompassing social, environmental, and financial dimensions—and firm financial performance.

1. Environmental Sustainability and Financial Performance

The intersection between environmental sustainability and financial performance highlights how businesses integrate environmental stewardship with profitability. A study focusing on pharmaceutical companies in Bangladesh assessed sustainable production distribution practices through the triple bottom line (TBL) framework, revealing that sustainable production positively impacts both environmental and economic performance (Islam et al.). Similarly, research on reverse logistics in the electronics sector demonstrated recycling and remanufacturing initiatives improve waste management while yielding financial benefits. thus aligning environmental objectives with economic goals (Keh et al.). Other research examined the relationship firms' between environmental performance and financial metrics like Return on Assets (ROA). Findings suggested that environmental performance is more strongly influenced industry factors than financial performance, emphasizing the importance of sector-specific strategies (Aigbedo). Moreover, studies in China evaluated how environmental management systems based TBL influence corporate social responsibility (CSR) activities, which indirectly enhance financial outcomes by environmental improving compliance (Chen et al.).

The findings consistently underscore that integrating environmental sustainability can contribute to financial performance by enhancing operational efficiency, attracting environmentally conscious investors, and meeting regulatory requirements.

2. Social Impact and Financial Performance

Social sustainability, a critical dimension of TBL, has significant implications for firm performance. Research in Malaysia's energy sector highlighted that corporate reputation and social sustainability initiatives enhance financial performance by fostering trust and engagement among stakeholders (Nagiah & Suki). Similarly, studies on Nigerian banks employing TBL-compliant metrics showed that investment in corporate social activities is positively correlated with profitability, albeit at a low percentage of profit allocation (Onwuka et al.).

In the context of supply chains, a study in Ghana examined sustainable supply chain management (SSCM) practices, revealing that social sustainability initiatives mediated by firm capabilities positively impact financial performance (Asante-Darko & Osei). Moreover, the role of green investment in Indonesia highlighted how firm characteristics, such as size and foreign ownership, drive social environmental which spending, subsequently improves financial outcomes (Chariri et al.).

These findings illustrate that socially sustainable practices—ranging from community engagement to employee welfare—enhance a firm's reputation and stakeholder relationships, ultimately contributing to improved financial performance.

3. Economic Sustainability and Financial Performance

Economic sustainability involves aligning long-term profitability with sustainable business practices. Research Portuguese companies revealed that the economic dimension of TBL, represented accounting indicators, positively impacts financial performance, especially in value creation and continuity (Nogueira et al.). This was further supported by studies that linked green investments to profitability, emphasizing that environmentally and socially conscious activities bolster financial economic performance (Chariri et al.).

The concept of financial sustainability is also evident in industries with significant environmental footprints. For instance, energy firms in Malaysia demonstrated that integrating economic, environmental, and social sustainability enhances overall business performance (Nagiah & Suki). Meanwhile, the case of IBM's reverse logistics activities showcased how economic benefits from recycling and refurbishing align with broader TBL objectives (Keh et al.).

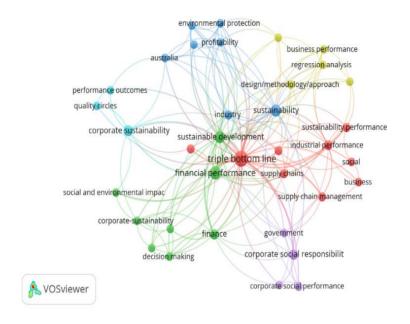
These studies reinforce that economic sustainability is not only a component of TBL but also a driver of financial stability and competitive advantage.

4. Integrated Triple Bottom Line and Financial Performance

The integrated TBL approach explores the interconnectedness of environmental, and social economic dimensions Research in Australia revealed weak but relationships positive among outcomes, suggesting that businesses often perceive environmental and social goals as burdensome, despite their potential to enhance financial outcomes (Venkatraman & Navak). Similarly, a study of energy firms in Malaysia demonstrated that corporate reputation and comprehensive sustainability strategies improve both financial and non-financial performance & Suki). Research (Nagiah emphasized the role of non-financial reporting in aligning TBL practices with business strategies. While TBL frameworks initiated the focus on sustainability, their integration into financial performance and strategic alignment remains limited (Sridhar). Another study on supply chains in Ghana found that TBL-driven SSCM practices enhance firm performance, mediated by firm capabilities, thus underlining the necessity of a holistic approach (Asante-Darko & Osei).

Overall, integrating TBL into business operations promotes long-term value

creation by fostering environmental responsibility, social welfare, and economic growth.

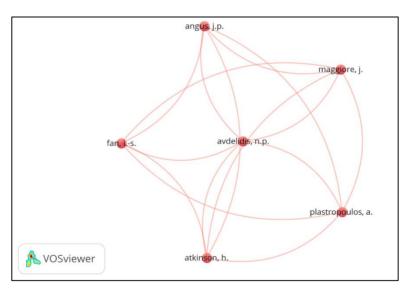


The VOS-viewer network visualization highlights the interconnected nature of research surrounding the "Triple Bottom Line" (TBL), emphasizing its centrality in discussions about sustainability, corporate performance, and decision-making. The TBL concept, placed prominently at the center, serves as a pivotal node connecting diverse thematic clusters, each represented by a distinct colour. These clusters underline the interdisciplinary focus of the TBL framework, which seeks to balance financial. social. and environmental outcomes in business and governance. The red cluster focuses on themes like social sustainability performance, with and

keywords "sustainability such as "industrial performance," "social," performance," and "supply chain management," reflecting the integration of TBL principles into operational and industrial domains. The green cluster links TBL to financial performance, decisionmaking, and corporate sustainability, demonstrating how firms align their financial goals with broader social and environmental considerations, as seen in terms like "financial performance" and "social and environmental impact." The blue cluster brings an environmental and global perspective, including keywords like "environmental protection,"

"profitability," and "Australia," suggesting a connection between profitability and environmental stewardship, as well as region-specific research focus. The yellow cluster is methodologically oriented, including terms such as "regression analysis," "business performance," and "design/methodology/approach," pointing to empirical approaches that assess TBL outcomes. Meanwhile, the purple cluster highlights the governance and CSR dimensions of TBL, with terms like "corporate social responsibility" "corporate social performance," reflecting the role of governance in driving sustainability initiatives. The dense web of connections between keywords collaborative underscores the and

overlapping relationships between financial, social, and environmental objectives, as well as their reliance on governance and robust methodological approaches. Collectively, the map showcases the centrality of the TBL concept in bridging corporate performance with sustainable development, emphasizing the need for a holistic approach that integrates operational, financial, environmental, and social dimensions in research and practice. This visualization underscores how TBL. acts as a framework for understanding the multidimensional impacts of business strategies, supporting decision-makers in sustainable achieving balanced and outcomes across industries.



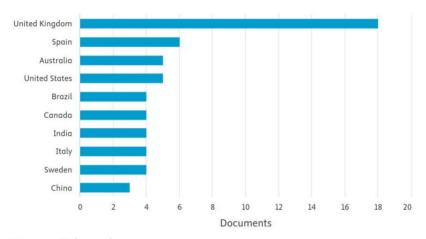
This VOSviewer visualization depicts a co-authorship network among six authors: Avdelidis N.P., Angus J.P., Maggiore J., Fan I.-S., Atkinson H., and Plastropoulos

A. The interconnected lines between the nodes indicate collaborative relationships, with thicker lines representing stronger or more frequent collaborations. The central

position of Avdelidis N.P. suggests that they are a key collaborator within this network, acting as a hub connecting other authors. The symmetrical connections between authors highlight a closely-knit research group with significant mutual interactions, indicating a high level of collaboration on shared research topics or projects. This visualization effectively demonstrates the importance of teamwork and interdependence in academic publishing.

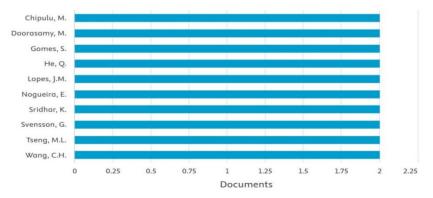
Documents by country or territory

Compare the document counts for up to 15 countries/territories.



Documents by author

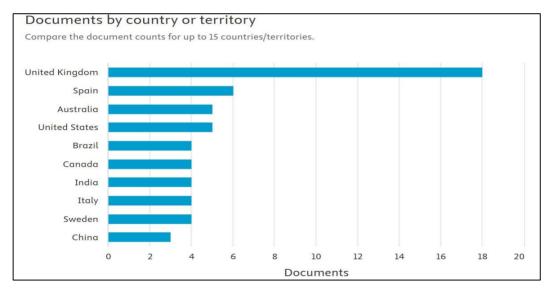
Compare the document counts for up to 15 authors.



The bar chart effectively summarizes the number of documents authored by key contributors in the literature that explores the relationship between Triple Bottom Line (TBL) sustainability and firm performance. Each author listed, such as Chipulu, M., Doorasamy, M., Gomes, S., and others, has contributed approximately

the same number of documents (around 2 each) on this topic, as indicated by the uniform length of the bars. The objective of the review is to analyze how the integration **TBL** principles of social. encompassing financial. environmental dimensions—impacts a firm's overall performance metrics. The selected authors appear to represent a balanced set of contributions to this body of research, providing insights into various

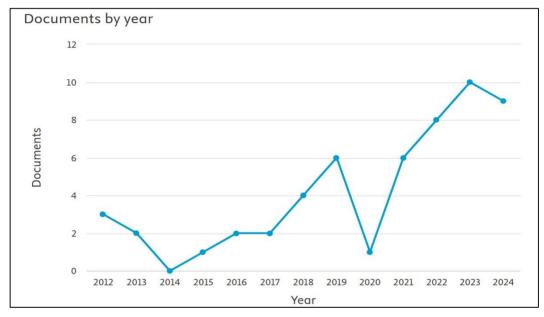
methodologies, case studies, or conceptual frameworks linking sustainability efforts with measurable business outcomes. This visual representation underscores the systematic effort in consolidating academic perspectives on how sustainable practices influence firm performance, helping researchers and practitioners identify prominent contributors and key works in this domain.



This bar chart provides an overview of the number of documents related to the relationship between Triple Bottom Line (TBL) sustainability and firm performance across different countries or territories. The United Kingdom leads significantly with the highest number of publications, suggesting a strong research focus in this domain. Following the UK, countries such as Spain, Australia, and the United States also contribute a substantial number of

documents. indicating their active engagement in exploring the linkages between TBL dimensions—financial, social, and environmental sustainability and firm performance metrics. Other countries, including Brazil, Canada, India, Italy, Sweden, and China, show moderate contributions, reflecting a growing global interest in this area of study. This distribution highlights the prominence of developed economies, such as the UK, the US, and Australia, in advancing research on sustainable business practices, while emerging economies like India, Brazil, and China are also increasingly recognizing the strategic importance of integrating TBL sustainability into firm performance evaluations. Overall, this data reflects a

geographically diverse yet uneven research landscape, emphasizing the need for further contributions from underrepresented regions to achieve a more global understanding of the TBL framework's impact on business success.



This line chart illustrates the annual trend in the number of documents published on the relationship between Triple Bottom Line (TBL) sustainability and firm performance from 2012 to 2024. The data reveals fluctuating research activity over the years, with a notable dip in publications around 2014, indicating minimal interest or fewer studies conducted during that period. Starting in 2016, there is a gradual and consistent increase in the number of publications, peaking in 2023 with approximately 10 documents. This upward

trend highlights growing interest and academic attention toward exploring how sustainability practices impact firm performance. A minor decline in 2024 suggests a slight reduction in publication activity, possibly due to a shift in research priorities or data lag. Overall, the trend underscores the increasing recognition of sustainability as a critical component of firm performance over the last decade, reflecting the growing alignment of corporate strategies with environmental, social, and governance (ESG) principles.

Conclusion

The systematic review highlights the critical interplay between the Triple Bottom Line (TBL)—comprising economic, environmental, and social dimensions—and financial performance. Research findings consistently reveal that businesses aligning their strategies with TBL principles not only enhance their sustainability performance but also achieve competitive advantages. Environmental sustainability increasingly linked operational to efficiency and profitability, while social responsibility fosters stakeholder trust and long-term value creation. Moreover, the economic dimension underscores the importance of integrating sustainable practices into business operations to drive financial viability. The review also emphasizes the vital role of corporate governance in supporting sustainability through effective decision-making and accountability frameworks.

Despite the extensive exploration of TBL and financial performance, the findings indicate variability in results due to differences in methodological approaches, industry-specific factors, and regional contexts. The research underscores the need for businesses to balance stakeholder interests and shareholder value, positioning TBL as a framework for achieving holistic sustainability and long-term success.

Future research should focus on sectoral differences and regional in TBL in implementation, particularly underrepresented emerging economies, to provide tailored strategies and a global perspective. Longitudinal studies are needed to explore the long-term impacts of TBL on financial performance, while advanced methodologies like machine learning and big data analytics can refine measurement and address inconsistencies. Additionally, integrating governance structures and ESG practices into TBL and frameworks understanding stakeholder perceptions can enhance the effectiveness of sustainability strategies and their alignment with corporate objectives.

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