

Mixing Accounting Regulation and Corporate Accountability in the Era of Non-Financial Information, Intangibles and Digitalization

TOrnado or SUnshine?

edited by
Rosa Lombardi



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Innovation and digitalization in port enterprises

Federica Marroni

1. Introduction¹

Port infrastructure, and the authorities that are called upon to manage it, constitute a fundamental element that assists the port system. The port system constitutes a central factor in the economic and social development of any country, it contributes to the creation of not only economic and social value but also to the determination of transnational networks useful in strengthening exchanges of all kinds.

Ports contribute to economic development and employment in port cities even if can have negative impacts on the environment (Vega-Muñoz, 2021). In recent years, people have become more aware of the need for environmental protection. Making port activities in harmony with the sustainability of sea resources is an important goal in terms of sustainable development. The port community, including port authorities and locals, prioritizes environmental sustainability due to the negative impacts of transportation and port activities that often go unnoticed in business strategies (Acciaro, 2014). The transport sector is facing growing pressure from various stakeholders, including governments, customers, and environmentalists. Infrastructure stress, congestion, accidents, and pollution (such as air, noise, and debris) are

¹ Federica Marroni is a PhD Student, PhD Program in Business Administration, XXXVII Cycle, L.R. 13/2008, Sapienza University of Rome. This work was carried out as part of the Research Project scholarship titled "Economia del mare tra turismo e food" funded by the Lazio Region and Consorzio Industriale del Lazio.

contributing to this pressure. This pressure is also being felt in the port sector, where there is a push for internalizing external costs to promote eco-awareness, boost resource efficiency, and ensure fair competition among transport company chains (Acciaro, 2014).

While the 17 Sustainable Development Goals (SDGs) serve as international standards for sustainability, the level of initiative adoption varies by country. Among the reasons that highlight these differences are certainly geographical, political, economic, and regulatory contexts and more. In addition to these internal factors, there is one related to governance.

Research on green ports is still in its infancy despite the increasing orientation towards sustainability in port governance. Many aspects require further investigation (Munim et al., 2020; Davarzani et al., 2016; Bergqvist & Monios, 2018). Seaports are under pressure to balance economic objectives with sustainability due to the significant impact of the maritime sector on the economy, society, trade, and the environment. (Valenza et al., 2023, Lozano et al., 2019).

Seaports have taken up corporate sustainability practices to ensure the protection of the environment and the well-being of their employees. These practices include sustainability reporting, which provides information on pollution, biodiversity protection, energy consumption, waste management, health, and safety. Studies by Valenza et al. (2023) and Ashrafi et al. (2019) highlight the importance of such practices in promoting sustainable development. Drobotz et al. (2014) also emphasized the need for seaports to prioritize sustainability in their operations. Transparency and communication of sustainability report information, and beyond, certainly can be enhanced by the presence of technological innovations within port enterprises or rather the port system. The introduction of technological innovation, in addition to fostering sustainable economic integration and growth of the economic system, can also bring productivity benefits to the ports themselves.

The process of digitization is crucial not only for ports but also for the regions and countries that rely heavily on the port ecosystems. By studying the digitalization level of ports, we can discover the best ways to enhance safety, security, and visibility during the digital transformation. This can help to attract both passengers and freight flows, which can have a positive impact not only on ports but also on the sustainable development of coastal regions. (Paulauskas et al., 2021). Although the support and presence of technological innovation within the port system could improve the performance of operations subordinate to port activity, some authors (Inkinen,

Helminen, & Saarikoski, 2021), point out that it is important to note that the incorporation of digitization in port strategies may not be readily apparent or given due consideration. This gap prompted the Author to analyze the extent to which previous literature has followed this social and organizational evolution and how research in this area has developed.

Using the structured literature review (SLR) (Paoloni & Demartini, 2016) and following the protocol's suggestions, this article aims to address the following research questions: RQ1. How is research in the literature developing the topic of port enterprises and their sustainable development?; RQ2. What are the main foci of analysis in the extant literature?; RQ3. What are the possible future research areas?

Answering these questions, the paper seeks to emphasize the sustainable governance of port enterprises since they have an important responsibility in this context, given that, much of the global threats to environmental damage are thought to stem from economic activity and the way it is conducted. The results of this contribution are directed to academics, practitioners and decision-makers.

The rest of this document is structured in the following manner: Section 2. aims to describe the methodology used to conduct this analysis, and Section 3. discusses the generalization of the results obtained from the structured literature review (SLR). Section 4. deals with the discussion of the results and provides concluding remarks. While Section 5. includes future perspectives. The final section details the theoretical implications and limitations of the study.

2. Research methodology

The methodology used is a structured literature review (SLR), for a rigorous and structured mapping of the critical literature central to and underlying the research we are conducting. (Tranfield et al., 2003), which allows for highlighting the most significant research related to a given topic (Saunders et al., 2009).

To carry out SLR, we used the Scopus platform as a source for searching and obtaining scientific articles. As the analytical framework for conducting an SLR advises, several keywords were identified, which made it possible to identify documents related to the subject matter of this paper.

Keywords used on Scopus were: "port" and "sustainability" or "governance" or "digitization". The authors limited the search to "Paper

title," "Abstract" and "Keywords" to prevent documents not related to the objective of the research from being extracted. This search produced 2,632 document results. Then filters were applied to narrow the subject area into "Business Management and Accounting" and "Economics, Econometrics and Finance," excluding irrelevant areas outside the scope of port business and sustainability, so that 554 articles were obtained. To make the search more concentrated, an additional filter was applied about document type: "Article," "Book," and "Book Chapter," so that 460 documents were obtained.

Finally, the search was limited to scientific articles written in English. Therefore, the results obtained and analyzed are 446. To further improve the analysis, duplicates were removed, resulting in the final analysis of 424 documents. Referring to the analytical framework used to conduct this SLR, the process used to identify eligible research is depicted in Figure 1.

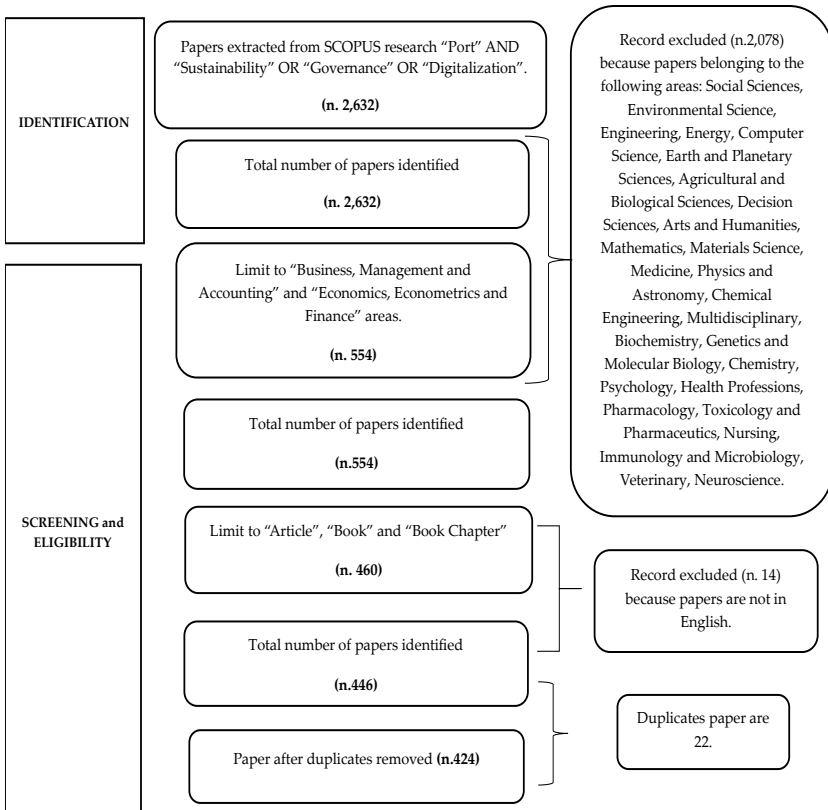


Fig. 1. The procedure for selecting the eligible papers. Source: Author elaboration.

2.1. Definition of the analytical framework

This paper consists of three sections: research focus (A), research method (B), and geographical area (C). The analytical framework is by Paoloni, and Demartini, 2016. Reading the titles, keywords and abstracts of the selected papers enabled the authors to define the analytical framework itself. The different topics identified are:

(1) Environmental impacts: includes all literature that analyses the topic of sustainability in ports and the subsequent analysis of performance using indicators linked directly and indirectly to sustainable actions.

(2) Strategies: includes all literature that analyses the topic of port governance, and the strategies adopted to create greater efficiency of the same. Especially, the organizational model developed by Green Ports is highlighted.

(3) Technological innovation: includes all literature that analyses the topic of digitization in the port environment by highlighting any innovative technological solutions currently present or under development.

(4) Other: includes all residual literature that cannot be placed within the article focuses previously identified.

<p>A. ARTICLE FOCUS</p> <p><i>A1. Environmental impacts</i></p> <p><i>A2. Strategies</i></p> <p><i>A3. Technological innovation</i></p> <p><i>A4. Other</i></p>
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Concerning how the research is conducted, the authors identify the following methodologies:

<p>A. RESEARCH METHOD</p> <p><i>B1. Literature analysis</i></p> <p><i>B2. Qualitative research</i></p> <p><i>B3. Quantitative research</i></p> <p><i>B4. Research mix</i></p> <p><i>B5. Theoretical analysis</i></p> <p><i>B6. Other</i></p>

The last section is called "geographical area" (C), which aims to classify documents according to the geographic affiliation of the authors.

<p>C. GEOGRAPHICAL AREA</p>

C1. East Europe	Hungary, Russia, Slovenia, Romania, Lithuania, Croatia, Serbia, Macedonia
C2. Middle East	Israel, Lebanon, United Arab Emirates, Jordan, Saudi Arabia, Iran, Iraq, Oman, Kuwait
C3. South and Central America	Argentina, Dominican Republic, Brazil, Jamaica, Mexico, Chile
C4. North America	USA and Canada
C5. Northern Europe	Austria, Belgium, Denmark, Ireland, France, Germany, Netherlands, Scandinavian countries, Switzerland, Poland, Czech Republic, Slovakia
C6. Southern Europe	Italy, Spain, Portugal, Greece, Turkey
C7. Asia	China, Japan, Korea, Singapore, Sri Lanka, Malaysia, Pakistan, India, Indonesia, Hong Kong, Thailand, Vietnam, Armenia, Nepal, Kazakhstan
C8. Africa	Tanzania, Uganda, Botswana, South Africa, Nigeria, Ethiopia, Zambia, Mauritius
C9. UK	
C10. Oceania	Australia and New Zealand
C11. Mixed	

Source: Paoloni, P. & Demartini, P. (2016).

3. Results

To define which articles are eligible, the authors read the title, abstract, and keywords so that they are relevant to the purpose of the proposed research.

3.1. Article focus

Following the reading of each abstract, title, and keywords, of the selected papers in the literature, several topics discussed by the authors were identified. The focus most discussed by the researchers was A2, with 150 of 424 papers (35%), followed by A4, with 138 of 424 papers (33%), followed by A1, with 106 of 424 papers (25%), and finally A3 with 30 papers (7%). Figure 2 shows the results obtained.

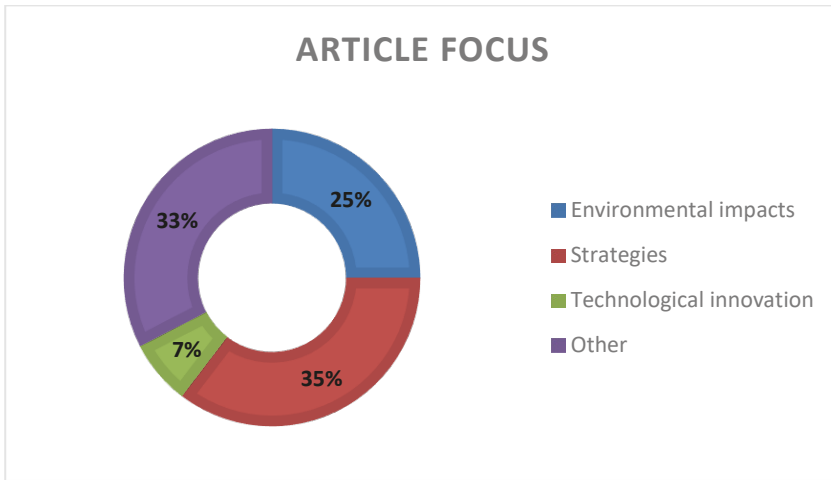


Fig. 2. Article focus of eligible papers.

3.2. Research method

The most used research methodology, from the analysis of the results, appears to have been B2 (qualitative research), with 194 of 424 papers (46%), followed by B5 (theoretical analysis), with 98 of 424 papers (23%), followed by B4 (research mix), with 92 of 424 papers (22%), then followed by B1 (Literature analysis), with 17 of 424 papers (4%), B3 (quantitative research) with 16 papers (4%), and finally B6 (Other) with 7 papers (1%). Figure 3 presents all the results obtained.

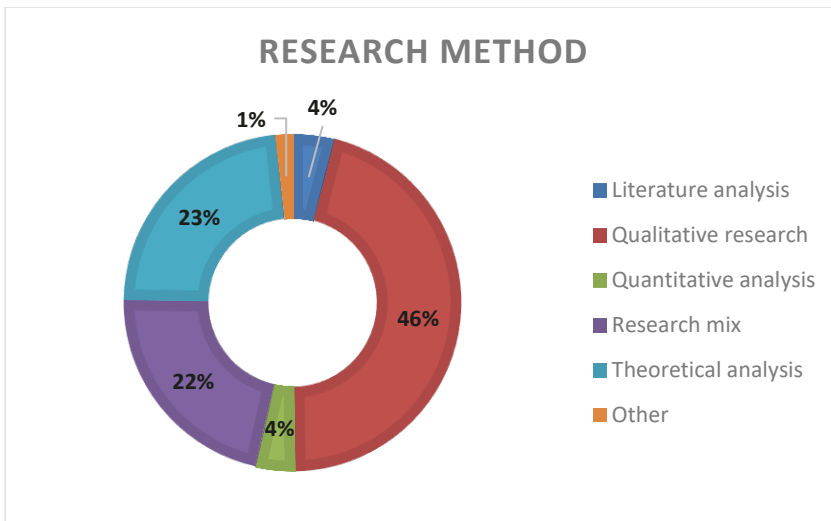


Fig. 3. Research method of eligible papers.

3.3. Geographical area of authors' affiliations

Analyzing the results obtained from the SLR, it is possible to show that most of the authors come from different geographical areas (26%), with 111 of 424 documents, followed by research conducted in Northern Europe (18%), with 75 of 424 documents, Asia (15%), with 62 of 424 documents, and Southern Europe (13%), with 57 of 424 documents. All the results obtained are shown in Figure 4.

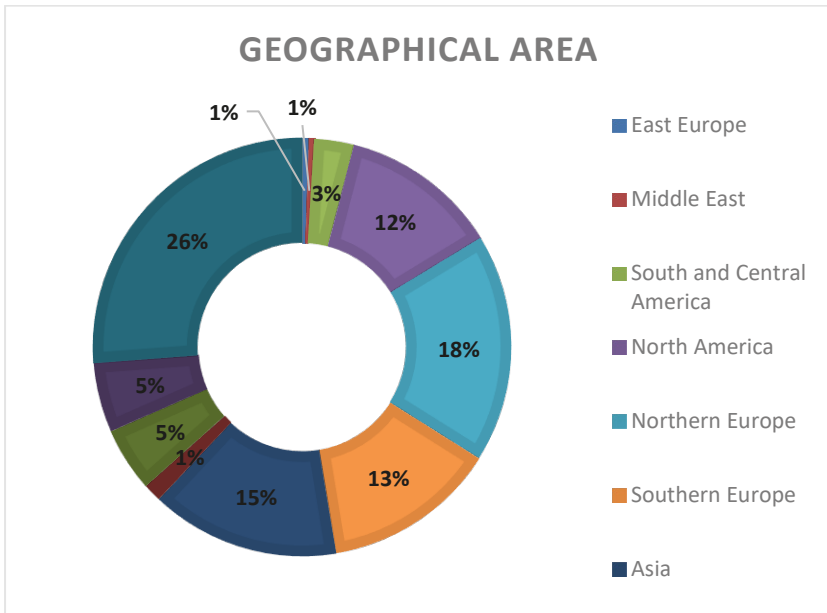


Fig. 4. Representation of the geographical area of authors.

4. Discussion and conclusions

The purpose of this section is to explore the most relevant topics of each identified focus. To answer RQ1 (How is research in the literature developing the topic of port enterprises and their sustainable development?), the following contributions are presented.

Regarding article focus A1 (Environmental Impacts), the contributions included in this section highlight what environmental impacts ports cause and propose possible indicators for monitoring them. Although ports promote economic and employment development, on the other hand, they harm the port city environment; in fact, several sources of pollution arise from port operations, such as wastewater,

solid waste, noise, and air pollution (Teerawattana et al, 2019). For this reason, the sustainability of port activities is becoming increasingly important (Zheng et al., 2020; Dong et al., 2019).

One of the most relevant papers related to this section is that of Lirn et al, 2013, in which the authors analyze the ecological performance of a port by identifying the performance indicators of the three major ports in Asia.

Specifically, a questionnaire was administered to 100 academics involved in maritime studies, who were asked to rate the importance of 17 indices on a five-point Likert scale, which included management of air pollution, noise, solid waste, liquid waste, and finally conservation of marine biology. Results of the research conducted show that "air pollution management" was the most important dimension that influenced the ecological performance of these ports, followed by liquid pollution management, solids, and then noise pollution and biodiversity conservation.

This sustainability approach aims to preserve natural resources and biodiversity. The increasing amount of waste generated is a problem due to the inefficient use of resources and the harmful effects it produces. (Vega-Muñoz et al, 2021), for this reason, it is becoming increasingly important to establish a set of comprehensive green performance indices for a port (Lirn et al, 2013). Papers related to Article A3 (Technological Innovation) were also examined, which include all those dealing with the topic of technology and digitization within port enterprises. Among the documents analyzed, this topic is the least addressed by the scientific community.

But although scientific production concerning this issue is lacking, one of the noteworthy contributions is Assunta Di Vaio and Luisa Variabile, "*Digitalization in the sea-land supply chain: experiences from Italy in rethinking the port operations within inter-organizational relationships*, 2019". The authors investigate how digital business process management platforms can be used to redesign operational processes in inter-organizational relationship systems between public and private actors in seaports. Specifically, through the case study methodology, they consider the ports of Livorno and Levante as the first to adopt the use of digital platforms in their process. It is important to note that utilizing IT can result in alterations to conventional procedures. This includes the lack of face-to-face interaction among those involved in port operations, the automation of all port-related tasks, and the implementation of a universally accepted language code.

Finally, under article focus A2 (Strategies), fall all those contributions that analyze how a port is structured from a governance perspective. Despite the great relevance of corporate governance in business studies, and despite the increasing importance that the topic of sustainability has in every sphere, the link between sustainability strategies and the achievement of corporate goals is still unclear. In this area, particularly relevant is the contribution of Schrobback P. and Meath C., 2020. That contribution presents a survey of the degree of corporate sustainability strategy adoption within ports, especially in Australia and New Zealand. The analysis conducted through interviews, highlighted, in the relevant contexts, that the port industry has begun to implement to develop sustainable corporate governance strategies, for example, through the high use of general good governance practices, environmental practices, safety practices, and sustainability performance indicators.

Regarding RQ2 (What are the main points of analysis in the existing literature?), the analyses obtained from the structured literature review, following the model of Paoloni and Demartini, 2016, show that the most discussed topic was A2 (Strategies), with 35% of the documents analyzed. Indeed, the research obtained shows that the scientific community has paid more attention to the study of organizational models and port development strategies, this is partly because over the last thirty years, port governance issues have become central to the agendas of many governments (Brooks et al., 2012).

One of the most relevant research papers in A2 (Strategies) is the work of Munim et al., 2020, in which the authors discuss which model of port governance is most appropriate for the management of green ports. The study takes up the four governance models, proposed by the World Bank, based on port functions, ordered by increasing levels of privatization: service port, instrument port, ownership port, and private port. Following the proposed interviews with top executives of three Indian Ocean ports (Bangladesh, Sri Lanka, & Tanzania), and the data collected, it emerges that increasing the level of privatization in port governance would lead to positive results in terms of building green ports, hence green ports management positively influences port performance (Lun, 2011). Therefore, private participation in port operations is perceived as a positive aspect for developing countries, and this, in addition to being an effective management tool for companies to achieve superior performance (Montabon et al., 2007), is also a

source of competitive advantage (Lun,2011). Consequently, regarding port governance, the focus is on “green ports”.

“Green ports can be defined as those ports engaging in the proactive development, implementation, and monitoring of practices aiming at reducing the environmental impacts of the port at local, regional, and global levels beyond regulatory compliance” (Acciaro, 2015, p.5). They engage in innovation and research to balance environmental challenges with economic performance (Acciaro, 2015), and identify best practices that contribute to better firm performance (Lun, 2011).

Thus, it seems appropriate to focus studies on the competitiveness and efficiency of ports by promoting initiatives based on green port management. In conclusion, the trend of going green is spreading among seaports worldwide, and environmental management is playing a crucial role in port operations. Apart from enhancing customer satisfaction and corporate image, environmental management offers cost savings and environmental protection (Teerawattana et al., 2019). Among other issues, “green ports are concerned, with resource preservation, air/water/soil pollution reduction and control, limitation on the impacts on the fauna and flora, as well as climate change mitigation and adaptation (Acciaro, 2015, p.5)”.

5. Future perspectives

Concerning RQ3 (What are the possible areas of future research?), one possible area for future research, could be related to digitization and smart technologies within the port system, first, because the results of the analysis conducted show that the number of contributions related to the topic is lacking and, second, because we are in the era of digitization, where the role of information technology plays a key role in improving competitiveness, safety, and sustainability (Pipitsoulis 2009). Although the maritime sector is an example of a traditional industry where the integration of new digital applications into daily processes and practices has started slowly (Inkinen et al., 2021), each port develops and promotes digitization based on its own internal needs (Inkinen et al., 2021). The use of technology in port enterprises includes disseminating data on weather and environmental conditions for efficient maritime traffic and port operations. (Inkinen et al., 2021).

The port industry must adopt innovative technology to manage logistics

and supply chains in a competitive environment (De Martino et al., 2013). To summarize, innovation has the potential to address several environmental challenges that ports face (Yap & Lam, 2013). In fact, by shaping the pace and methods of economic sector development, innovation can help maintain competitiveness (Acciaro et al, 2014).

6. Theoretical implications and limitations of the research

The contribution of this SLR makes it possible to identify what areas of research are related to port enterprises and the research methods used. Referring to theoretical implications, this contribution suggests enlarging studies on these issues, as well as suggesting possible areas for future research. A limitation of this research is the use of the manual approach, which, although cheaper and more flexible, may involve the use of personal judgment which could influence the results. The use of only one database (SCOPUS) for article analysis and consultation implies a further limitation of this work. For these reasons, it is desirable to use other databases (e.g., WoS or Google Scholar) in the future and replicate the SLR protocol from this study. Finally, just reading titles, keywords, and abstracts can be considered a hindrance to both the insight of primary information and the understanding of what research methodology is being applied.

References

- ACCIARO M., VANELSLANDER T., SYS C., FERRARI C., ROUMBOUTSOS A., GIULIANO G., LAM, J. S. L. AND KAPROS S. (2014), Environmental sustainability in seaports: a framework for successful innovation, *Maritime Policy & Management*, 41(5), 480-500.
- ACCIARO M. (2015), Corporate responsibility and value creation in the port sector, *International Journal of Logistics Research and Applications*, 18(3), 291-311.
- ASHRAFI M., ACCIARO M., WALKER T.R., MAGNAN G. M., MICHELLE A. (2019), Corporate sustainability in Canadian and US maritime ports, *Journal of Cleaner Production*, 220, 386-397.
- BERGQVIST R., MONIOS J. (2018), *Green Ports: Inland and Seaside Sustainable Transportation Strategies*, first ed. Elsevier.
- BROOKS M. R., PALLIS A. A. (2012), *Port Governance*. The Blackwell Companion to Maritime Economics, 491-516.
- DAVARZANI, H., FAHIMNIA, B., BELL, M. SARKIS, J. (2016), Greening ports and maritime logistics: a review. *Transport. Res. Transport Environ.* 48, 473-487.
- DE MARTINO M., ERRICHIELLO L., MARASCO A., MORVILLO A. (2013), "Logistics Innovation in Seaports: An Inter-Organizational Perspective." *Research in Transportation Business and Management* 8: 123-133.
- DI VAIO, A., VARRIALE, L. (2019), Digitalization in the sea-land supply chain: experiences from Italy in rethinking the port operations within inter-organizational relationships. *Production Planning and Control*, 1-13.
- DONG G., ZHU, J., LI, J., WANG, H. GAJPAL, Y. (2019), Evaluating the Environmental Performance and Operational Efficiency of Container Ports: An Application to the Maritime Silk Road. *Int. J. Environ. Res. Public Health*, 16, 2226.
- DROBETZ W., MERIKAS A., MERIKA A., TSIONAS M.G. (2014), Corporate social responsibility disclosure: The case of international shipping, *Transportation Research Part E: Logistics and Transportation Review*, 71, 18-44.
- FAULIN J., GRASMAN, S., JUAN, A., HIRSCH, P. (2018), *Sustainable Transportation and Smart Logistics: Decision-Making Models and Solutions*. Elsevier.
- INKINEN, T., HELMINEN, R., SAARIKOSKI, J. (2021), Technological trajectories and scenarios in seaport digitalization. *Research in Transportation Business & Management*, 10(12).
- LIRN T., JIM WU Y., CHEN Y. J. (2013), Green performance criteria for sustainable ports in Asia. *International Journal of Physical Distribution & Logistics Management*, 43(5/6), 427-451.

- LOZANO R., FOBBE L., CARPENTER A., SAMMALISTO K. (2019), Analysing sustainability changes in seaports: experiences from the gavle " port authority. *Sustain. Dev.* 27 (3), 409-418.
- LUN Y. H. V. (2011), Green management practices and firm performance: A case of container terminal operations. *Resources, Conservation and Recycling*, 55(6), 559-566.
- MONTABON F., SROUFE R., NARASIMHAN R. (2007), An examination of corporate reporting, environmental management practices and firm performance *J. Oper. Manag.*, 25 (5).
- MUNIM, Z. H., SORNN-FRIESE, H., AND DUSHENKO, M. (2020), Identifying the appropriate governance model for green port management: Applying Analytic Network Process and Best-Worst methods to ports in the Indian Ocean Rim. *Journal of Cleaner Production*, 122156.
- MUNIM Z.H., DURU O., NG A.K.Y. (2020), Transshipment port's competitiveness forecasting using analytic network process modelling.
- PAOLONI, P., DEMARTINI, P. (2016), Women in Management: Perspective on a Decade of Research (2005-2015), *Palgrave Communication*, 2(1), 1-7.
- PAOLONI P., MODAFFARI G., MATTEI G. (2020), Knowledge resources in the university context: an overview of the literature, *Journal of Intellectual Capital*.
- PAULAUSKAS V., PHILIPP, R., HENESEY, L., PAULAUSKAS, D., SUTNIKAS, A., MEYER C., GERLITZ, L., HEINE, N., KOZYCZKOWSKI, K., ZIGUS, A. AND SILONOSOV, A. (2021), Smart Ports' Influence on Coastal Sustainability, *Proceedings of 25th International Scientific Conference. Transport Means*.
- SAUNDERS, M., LEWIS, P. AND THORNHILL, A. (2009), *Research Methods for Business Students*. Pearson, Harlow.
- SCHROBBACK, P., MEATH, C. (2020), Corporate sustainability governance: Insight from the Australian and New Zealand port industry. *J. Clean. Prod.* 255(2020), 120280, 1-12.
- SYS C., VANELSLANDER T., ADRIANSSENS M. (2012), Worrying Clouds? International Emission Regulations and the Consequences for Deep-Sea Shipping and European Ports. In *Maritime Transport 5, Technological Innovation and Research*, 868-887.
- TEERAWATTANA R., YANG Y.-C. (2019), Environmental Performance Indicators for Green Port Policy Evaluation: Case Study of Laem Chabang Port. *The Asian Journal of Shipping and Logistics*, 35(1), 63-69.
- TRANFIELD D., DENYER, D., SMART, P. (2003), *Towards a Methodology for*

- Developing Evidence-Informed Management Knowledge by Means of Systematic Review; *British Journal of Management*, 14 (3), 7-222.
- VALENZA G., DAMIANO R. (2023), Sustainability reporting and public value: Evidence from port authorities. *Utilities Policy*, 81,101508.
- VEGA-MUÑOZ A., SALAZAR-SEPULVEDA G., ESPINOSA-CRISTIA J.F., SANHUEZA-VERGARA J. (2021), How to Measure Environmental Performance in Ports. *Sustainability*, 13, 4035.
- YAP, W. Y., LAM J. S. L. (2013), 80 Million-Twenty-Foot-Equivalent-Unit Container Port? Sustainability Issues in Port and Coastal Development. *Ocean & Coastal Management* 71, 13-25.
- ZHENG Y., ZHAO J., SHAO, G. (2020), Port City Sustainability: A Review of Its Research Trends. *Sustainability*, 12, 8355.