



Corporate sustainability of Portuguese seaports

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This study is dedicated to the memory and contribution of Professor Lúcia Lima Rodrigues, who sadly passed away on October 3rd of this year at the age of 64. We miss her dearly and deeply regret that she has not lived long enough to see this paper published.

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Corporate sustainability

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Resource dependence perspective

ABSTRACT

Responding to calls for studies examining corporate sustainability (CS) in a seaport setting, this study analyzes the Portuguese case since it is little known, despite some pioneering initiatives of Portuguese seaports as the development of the Logistic Single Window. Following a qualitative approach, information was collected through semi-structured interviews, publicly available news and videos, seaports' websites, and reports. Starting from Oliver's (1991) model, which combines institutional theory and resource dependence perspective, we extended the theory by adding the resource-based view to analyze the institutional factors that predict seaports' strategic responses to CS. Our findings suggest that, while CS interpretation by Portuguese seaports has an underlying acquiescence strategy, the way CS is put into practice reveals a compromise one. CS strategies are related to seaports' legitimacy and reveal great dependence on seaports from their external institutional context, resulting in a harmonious port-city relationship and promoting consistency between institutional pressures and organizational norms, voluntarily widespread in a context of great interconnectedness.

1. Introduction

Since the industry sector is a corporate sustainability (CS) determinant (e.g., Moseñe et al., 2013), it is necessary to analyze less studied sectors in the literature such as the seaport sector. Sustainability in this sector has been studied from diverse perspectives and focuses, as evidenced by the literature on the topic which has grown considerably in the last few years (e.g., Kong and Liu, 2021; Lim et al., 2019; Rodrigues et al., 2021; Tan et al., 2021; Xu et al., 2021). Notwithstanding the diversity in the perspectives and topics studied, we took as the basis for our analyses the scarce empirical literature on CS (e.g., Acciaro, 2015; Ashrafi et al., 2019, 2020; Batalha et al., 2020; Rodrigues et al., 2021; Santos et al., 2016; Stein and Acciaro, 2020; Vanellander, 2016).

CS cannot be considered a new concept in the seaport sector, given its role "in shaping the developments of local communities and the external impacts of port activities" (Acciaro, 2015, p. 294). Thus, calls for further research are still being put forward, particularly on perceptions of CS and the extent to which approaches to CS adopted by seaports are complex and diverse, using case study methodologies and

practitioner surveys (Acciaro, 2015; Ashrafi et al., 2019). Besides, only a few studies have analyzed CS in the seaport industry using institutional theory (e.g., Acciaro, 2015; Schrobback and Meath, 2020).

Despite the small size of the country and its seaport sector, and the limited number of studies focusing on it, we decided to focus on the Portuguese seaport sector. Existing literature has focused on the European largest seaports and across the world. Although small and medium-sized seaports are in majority, studies exploring them are less common. Hence, the likelihood of many of them being able to take lessons from a study focusing on Portugal is considerable. Portuguese seaports are responsible for some pioneering initiatives – e.g., the publication of the first sustainability report by a European seaport; the development of the Logistic Single Window (LSW). Portuguese seaports were also among the European leaders regarding the content of online sustainability communication (Santos et al., 2016). It is also worth noting the strategic importance of the Sines seaport not only for the European Union (EU) but also for both China and the US (Pinto Arena, 2022).

Data were collected through semi-structured interviews with all the chairpersons of the board of directors (CBD) of the Portuguese port

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authorities (key informants), as CS practices “are outcomes of boards’ decisions” (Rao and Tilt, 2016, p. 327) and from corporate reports, news and videos broadcast on the Internet.

In this study, we start from the theoretical model proposed by Oliver (1991) (hereafter Oliver’s model), which was also applied by Vejvar et al. (2018) to Danube inland ports. To Oliver’s model, which combines institutional theory and resource dependence perspective (RDP), we add a third perspective – the resource-based view (RBV) – given its utility to understand why organizations adopt CS practices (Branco and Rodrigues, 2006). From this new enlarged theoretical model, we extended the theory by identifying the institutional factors that affect Portuguese seaports and their strategic responses to institutional pressures. It proved to be useful in explaining: seaports’ dependence on external resources (e.g., social approval) – RDP; the homogenization of their CS practices and the type of institutional pressures exerted over them – institutional theory; and the strategies that are used to build or reinforce some intangible resources, such as corporate reputation – RBV.

The theoretical background and research propositions are discussed in Section 2, followed by the characterization of the seaport sector in Section 3. Section 4 presents the research method and Section 5 discusses the results. Conclusions are provided in Section 6.

2. Theoretical background and propositions development

Oliver’s model first analyzes institutional pressures that exist in the external context (institutional theory), including external resources that organizations depend on (RDP), to then understand what strategic responses are taken.

While the RDP is useful to identify the external resources that organizations depend on (Pfeffer and Salancik, 1978), institutional theory tells us that organizations are affected by their external context, characterized by institutions with more or less formal structures. Consequently, a tendency toward an organizational isomorphism of structures and practices can emerge (Dillard et al., 2004; DiMaggio and Powell, 1983; Meyer and Rowan, 1977). Referring to the use of institutional theory in examining seaports’ CS, Acciaro (2015, p. 293) argues that “seaports are an interesting example” due to “their dual nature of public bodies with private firm characteristics”, their international focus and because “they are deeply rooted in the local normative and social context”.

Starting from Oliver’s model, which goes from the outside to inside, we extended the theory by adding the RBV, which goes in the opposite direction: what internal resources are created by organizations? Are these resources useful in dealing with their context?

The RBV has been widely used to examine how CS practices are useful in the creation of valuable resources such as reputation (Branco and Rodrigues, 2006). In the seaport sector, CS can be explained through the RBV lens if we look at the motivations behind these intangible resources (e.g., reputation). Adopting an inside-to-outside perspective and considering corporate reputation as an internal resource, it is possible, through the RBV, to analyze Portuguese CS seaports’ practices.

At this point, it is important to distinguish corporate reputation from social approval. Although an “inherent overlap” can be perceived between them, it is possible to distinguish both concepts (Bundy and Pfarrer, 2015).

Bundy and Pfarrer (2015) describe ‘social approval’ as an outcome, with a “more intuitive and affective cognitive basis”, rooted in the stakeholder’s “perception of a general affinity toward an organization” (p. 347). Being an outcome rooted in external perceptions, in our study, we assume that social approval is an external important resource on which seaports depend to continue to operate.

Corporate reputation is viewed here as a valuable and difficult to imitate intangible asset that can be understood through the lens of the RBV (Branco and Rodrigues, 2006; Mahon, 2002). Sousa Filho and Farache (2011, p. 108) and Parente-Laverde et al. (2022) explicitly consider corporate reputation as an internal resource. The former

researchers refer to it as an internal resource that requires good management in view of its crucial role as “an important differentiating criterion and potential creator of competitive advantages”.

Through our enlarged framework, we try to understand what CS-related resources are internally created by Portuguese seaports (RBV) to help them in dealing with their context (institutional theory), ensuring access to the external resources they depend on (RDP). Strategic responses addressed by Oliver’s model, are also analyzed.

Based on Oliver’s model, Vejvar et al. (2018) provide a summary of strategic responses to institutional forces, in which each strategy is subdivided into three tactical responses. In the following summary, they present five strategic responses, ordering them from the least resistant to institutional forces to the most resistant.

In Oliver’s model, these strategies vary according to institutional antecedents: cause, constituents, content, control, and context. Once again, Vejvar et al. (2018) offer a summary in the following table:

Following the approach adopted by Vejvar et al. (2018), further insights about the theoretical model will be offered during the discussion of our findings.

Although Oliver (1991) analyzes the likelihood of organizations to resist institutional pressures, organizations tend to conform or resist to those pressures depending on their context. In terms of the content of online sustainability communication Portuguese seaports’ leadership (Santos et al., 2016), may be an indicator of their conformity rather than resistance.

Vejvar et al. (2018) develop three propositions considering operational efficiency, institutional antecedents (Table 2) and strategic responses (Table 1).

Since efficiency is among the institutional antecedents, we developed the following two propositions:

Proposition 1. (P1): Portuguese seaports are exposed to many institutional pressures that can be manifested with different strength and ways, driving them to adopt CS practices.

Proposition 2. (P2): Portuguese seaports employ a set of strategies that lead them to adopt CS practices, revealing their conformity with institutional pressures.

In Table 3 we summarize our extended theoretical model by gathering all the information about institutional antecedents, strategic responses and

Table 1
Strategic responses to institutional forces.

Strategy	Tactic	Explanation
Acquiesce	Habit	Following norms, “taken-for-grantedness”
	Imitate	Mimicking institutional model, “modelling”
	Comply	Obedying rules and conforming to pressures
Compromise	Balance	Balancing pressures exerted by multiple sources
	Pacify	Accommodating institutional elements, “lip services”
	Bargain	Negotiation with sources of institutional pressure
Avoid	Conceal	Disguising nonconformity
	Buffer	Loosening institutional attachments
	Escape	Adapting or changing organizational goals to avoid pressures
Defy	Dismiss	Ignoring expectations
	Challenge	Contesting rules and regulations
	Attack	Actively undermining the source of pressure
Manipulate	Co-opt	Including influential constituents in decision-making
	Influence	Attempt to actively shape framework
	Control	Attempt to dominate the source of pressure

Source: Vejvar et al. (2018, p. 278).

Table 2
Antecedents of institutional processes.

Institutional antecedents	Explanation
Cause Legitimacy Efficiency	Organizational fit with intended objectives of pressure: Conformity to pressure enhances social fitness Conformity to pressure enhances economic fitness
Constituents Multiplicity Dependence	Multiplicity of and dependence on external stakeholders: Conformity to pressure lower for multiple constituents Pressures stronger from organizations highly dependent on
Content Consistency Constraint	Effect on internal goals and decision-making capabilities of forces: Pressures consistent with internal goals Degree of restriction for firm by conforming to pressures
Control Coercion Diffusion	Strength of coercive and normative institutional forces: Gravity of legal pressures on non-conformity Voluntary acceptance and diffusion of pressures
Context Uncertainty Interconnectedness	Environmental context of practice diffusion: Degree of uncertainty in environmental context Density of interorganizational relations

Source: [Vejvar et al. \(2018, p. 277\)](#).

Table 3
Overview of the extended theoretical framework

		Oliver (1991)			
		Institutional Theory	Resource Dependence Perspective	Resource-Based View	
Proposition 1	Institutional antecedents				
	Cause	Legitimacy Efficiency	The adoption of CS practices is related to the <u>institutional environment</u> , which, in turn, is affected by several institutional antecedents.	The adoption of CS practices, helps to create or improve <u>valuable, rare, non-substitutable and/or inimitable intangible resources</u> (e.g., reputation).	
	Constituents	Multiplicity Dependence			
	Content	Consistency Constraints			
	Control	Legal coercion/enforcement Voluntary diffusion			
	Context	Uncertainty Interconnectedness			
		External focus (Oliver, 1991, p. 147) "Conformity with external criteria"			Internal focus Create/improve <u>internal resources</u>
Output: strategic responses and tactics					
Proposition 2	Acquiesce <i>habit, compliance or imitation</i> total or partial Conformity with pressures	Compromise <i>balance, bargain or pacify</i> partial	Avoid <i>conceal, buffer or escape</i> more	Defy <i>dismiss, challenge or attack</i> or Resistance to pressures	Manipulate <i>co-opt, influence or control</i> less

Our theoretical model adds an internal focus to Oliver's model and focuses on conformity rather than resistance.

tactics, our two propositions, and the triple theoretical perspective. Further insights will be provided during the discussion of our findings.

3. Characterization of the seaport system

3.1. European seaport system

In the European seaport system, reforms began with a gradual increase in private participation along with continuous control and ownership of assets by the public sector. This is the reason why the European public sector continues to finance some seaports' investments (Trujillo and Tovar, 2007).

The European Commission has issued some recommendations to eliminate anti-competitive practices in seaports services, but little has been done in this respect due to political, environmental, and security reasons, promoting a great variety of European political goals. While Anglo-Saxon seaports have a straightforward commercial approach,

their European peers are part of a macroeconomic policy to create employment and economic growth (Trujillo and Tovar, 2007).

Because of social, economic, and environmental reasons, the European Commission recommends the creation of sea motorways (CdR, 2010): Portugal integrates the Western Europe Motorway (Trujillo and Tovar, 2007).

3.2. Portuguese seaport system

Talking about Portugal is talking about seaports due to their historical importance to the country. During a short video,¹ Portuguese Ports Association (PPA) stated that the word "port" is written in the name of the country (Portus Calle), in the name of their major cities – Lisbon (Allis Ubbo which means Safe Port) and Oporto (Portus) – and in

¹ <https://www.youtube.com/watch?v=29bwGiehKQI>.

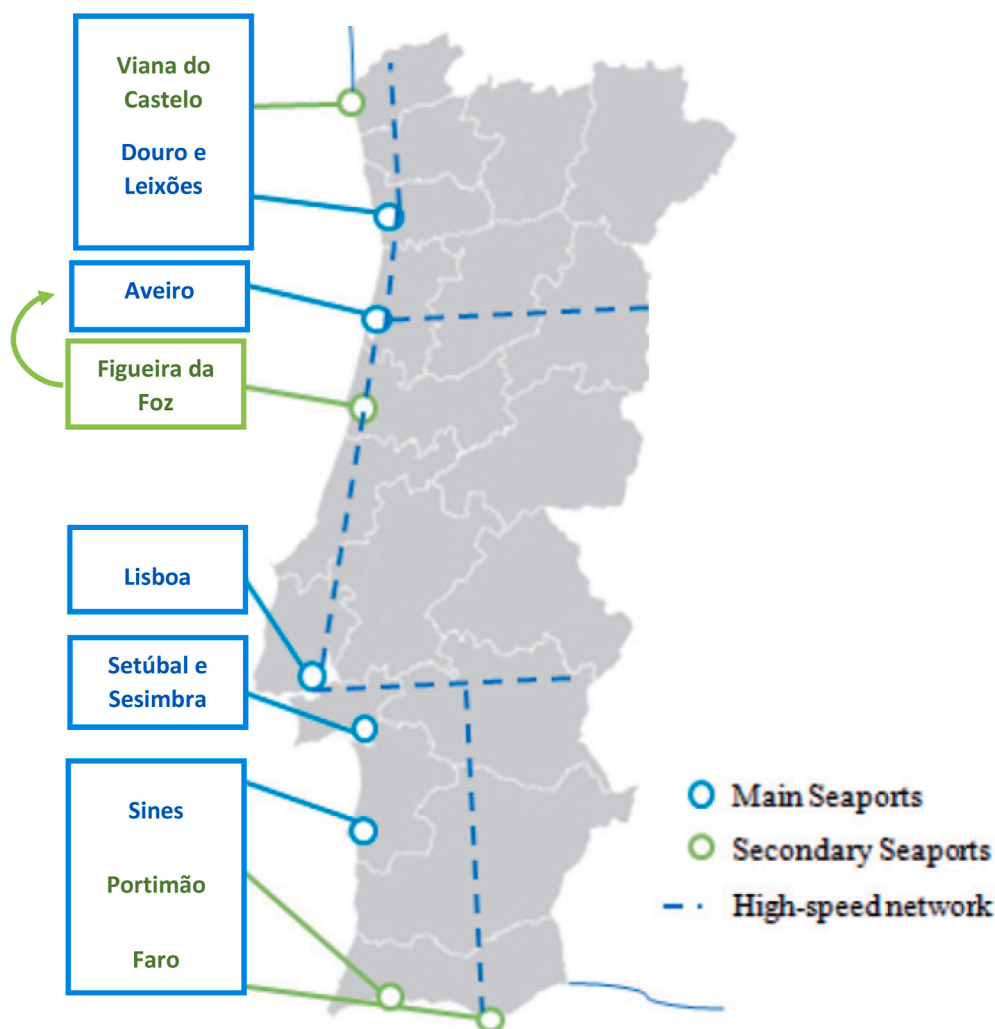


Fig. 1. Portuguese seaport system.

Source: adapted from Marques and Fonseca (2010).

port wine.

Portugal has the third major Exclusive Economic Zone from EU and a privileged geostrategic location in the Atlantic side of the Iberian Peninsula, where some of the most important sea routes cross.

The continental Portuguese seaport system is state-owned and follows the landlord model of management, having legal, financial, and administrative autonomy over their own assets (Marques and Fonseca, 2010). Currently, there are ten seaports, organized into six port authorities (Fig. 1). Since the seaports from Aveiro and Figueira da Foz share their administration, there are five boards of directors.

After constant changes and restructurings of the Portuguese seaport system, currently, Portuguese port authorities run under the technical tutelage of the Ministry for Infrastructure and Housing and the financial tutelage of the Ministry for Finance. Furthermore, the PPA – a nonprofit association – was created to be a place for debate and exchange of information regarding common interests of seaports and the maritime transport sector. All Portuguese seaports are PPA's members.

In economic terms, Portuguese “ports registered 63.8 million tonnes of international traffic [...] reaching 86.0% of the total” (INE, 2021, p. 8), which is in line with the growing international trend of the maritime transport mode (e.g., Trujillo and Tovar, 2007; UNCTAD, 2020), reinforcing the need to know more about their CS practices.

3.2.1. Portuguese seaports' CS

Since Portuguese port authorities are state-owned companies, we

analyzed public business sector legislation and competencies of current and extinct public organisms related to the seaport sector. Little information was found about CS in this sector; this is not consistent with the idea that in coordinated market economies (CME), such as Portugal, CS legislation is more developed (e.g., Koos, 2012). Analyzing “The global competitiveness Report 2019 ²” from the Davos – World Economic Forum we have realized that, in a total of 141 economies, Portugal ranks 96th in the topic “Burden of government regulation”. This means that Portugal is among the countries with the lowest levels of government regulation, which is consistent with the low level of law that we found. The lack of CS regulation, even in CME, can be considered normal, since CS practices are largely voluntary (Verhoeven, 2009).

We realized that the development of CS practices depends on each port authority. The Resolution of the Council of Ministers n° 49/2007 and the Decree Law n° 133/2013³ state, vaguely, that corporate governance should be designed to achieve a “high level of performance”, “including the adoption of concerted sustainable strategies in the economic, social and environmental field”. It also defines that, annually, each public company must report on its social responsibility or sustainable development policy. There is also an implicit reference to a

² http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf.

³ A free translation of this legislation was made by the authors.

mimetic isomorphic process, stating that “under this domain, even when this does not result directly from the applicable legislation, the State should give the example, adopting the best international practices”, which includes the “disclosure of information”. Despite this recognition, the Portuguese State exempts itself from the obligation to regulate the CS field arguing that “good governance is not only achieved through the consecration into law of the most appropriate legal models and structures, since there are ethical and behavioral domains that are essential for companies”. Moreover, current regulation does not define what CS reporting practices companies must adopt; instead, it just requires an annual non-financial statement⁴ (e.g., Decree Law n° 89/2017) for large companies. As Song and Rimmel (2021) state CS “disclosure still remains voluntary for most firms in most jurisdictions. Even if it is a mandatory requirement to include some CSR related information in the annual report for some firms in some countries, there is still great flexibility in terms of the disclosure content” (p. 23–24).

Finally, there is some existing EU regulation, often on environmental aspects, but not exclusive to the seaport sector – e.g., directives on habitats, birds, the water framework, port reception facilities for ship-generated and cargo residues, and environmental noise.⁵

4. Research method

As identified in Fig. 1, in Continental Portugal, there are six port authorities with five CBDs. The five CBDs were contacted, by e-mail and telephone, and all of them accepted to collaborate. We used key informants because they permit collection of information from a wide range of people (Carneiro et al., 2017). We sent a list of interview topics to CBDs in advance to enable them to begin preparing their responses, discussing the topics with the other members of the board. Due to anonymity reasons, they are represented by letters A to E.

Interviews were conducted over three years. During this period, several contacts were maintained until achieving the participation of the total population. The first interview was face-to-face, took 90 min, and was recorded. The second interview was conducted by videoconference, took 60 min, and the answers were transcribed in real-time by the interviewer; both interviews took place in September 2014. After this, transcripts were sent by email to each respondent asking to do any correction of eventual errors or misinterpretations or to volunteer additional information. The answers of the remaining three interviews (collected in November 2014, March 2017, and May 2017) were received by email. Whenever there were doubts about the correct interpretation of the written answers, and to ensure that the information remains up to date, new contacts by email were established; the last contact occurred in March 2022. Additional data were collected directly from seaports’ websites, and more than fifty news and over two and a half hours of videos broadcasted on the Internet. Furthermore, 115 reports were also analyzed (Table 4).

We triangulated these additional data with data collected from the answers of the interviewees allowing us to test the coherence of the responses collected through interviews. It also permitted us to know the CS practices adopted by Portuguese seaports (in Appendix 2 we present a summary of the most common practices).

To acquire an in-depth understanding of events leading to the adoption of CS strategies and their determinants, a qualitative approach was adopted. The small size of the population of this study was also determinant in pursuing this purpose. Thus, semi-structured interviews followed a questionnaire that was developed around 16 main open-answer questions.

⁴ The non-financial statement should include information about the business model, main risks and non-financial indicators about environmental, social and worker issues, among others.

⁵ Directives: 92/43/CEE; 79/409/CEE; 2000/60/CE; 99/31/CE; 2000/59/CE; 2002/49/CE.

Based on the methodologies suggested by Batalha et al. (2020) and Guerreiro et al. (2012), we followed an analytical method. Data collected from the interviews were coded during the reading of transcripts, resulting in a conceptual matrix developed to help summarize the main topics discussed by the interviewees. We applied the same coding scheme to data collected from news and videos spread on the Internet. Finally, through re-reading the data, we established the relationships between topics collected from interviews and on the Internet. The results were explained through our extended theoretical model.

5. Results and discussion

All Portuguese seaports recognize their impact on natural and urban surroundings, which can jeopardize compliance with social and institutional norms and expectations – e.g., seaports’ public image is subjected to deterioration as a result of port operations (interviewee C). Thus, CS emerges as an internal strategy through which Portuguese seaports develop a positive corporate image and reputation, and a social brand, being a good “citizen-company” (interviewee B), helping them to achieve the external social approval that they depend on, and renewing their “social license to operate”. However, once social approval has been obtained, institutional pressures do not cease to exist resulting in a continuous “work in progress” as in a virtuous cycle (Fig. 2): seaports’ practices (what they do) must be aligned with what they say and result in a consistent practice over time, fostering their credibility and reputation. This is even more imperative under a legitimacy-threatening scenario because companies’ credibility (what they do) is more effective in protecting their legitimacy than disclosures (what companies say) (O’Neill et al., 2022).

Consistent with a posture of conformity with institutional pressures rather than resistance, all Portuguese seaports voluntarily take actions on CS (Appendix 2), as an essential corporate strategy well integrated into the seaport agenda, validating P2.

Our findings also suggest that Portuguese seaports are exposed to many institutional pressures, validating P1, which can be explained through our theoretical model (see Table 5).

5.1. Cause (Legitimacy)

Legitimacy was the most emphasized cause to develop CS practices. Even when interviewees point to the seaports’ image, quality (interviewee C), reputation or efficiency (interviewees A, B and E), as mentioned by Acciaro (2015), these reasons are related by them to seaports survival evoking implicit legitimacy issues.

When directly asked about the legitimation power of their CS strategies, interviewee A considered it “a normal consequence of the activity”, interviewee D assumed that CS reporting has “an added relevance [...] in the ‘legitimation’ toward the society” and interviewee E adds the benefits to the “seaports’ brand”. In turn, interviewee C recognizes that seaport’s value creation is only achieved when social and environmental matters are taken into account.

The concern of Portuguese seaports in building a positive reputation, is not only evident in their CS practices (what they do – see Appendix 2), but also in their *modus operandi* (how they do it). For example, seaports A, C and D refer giving preference to suppliers and concessionaires that show legal compliance and adopt environmental good practices, even when this implies excluding commercial proposals with more attractive costs.

Additionally, knowing that the “sustainability of the company depends on its ability to interact with the surroundings” (seaport D) all Portuguese seaports develop frequent activities such as the Open Days, among others (see Appendix 2 – Sociocultural, philanthropic, associative and recreational activities), also maintaining an open and permanent dialogue with different stakeholders (see Appendix 2 – Communication activities and involvement with the local communities).

Table 4
Portuguese seaports' reports.

Port authorities (interviewees)	Sustainability report			Corporate governance report			Annual report		
	Number of reports	Oldest	Newer	Number of reports	Oldest	Newer	Number of reports	Oldest	Newer
A	13	2006	2020	2	2019	2020	18	2002	2019
B	8	2009	2019	8	2013	2020	8	2013	2020
C	3	2008	2011	3	2015	2018	4	2015	2018
D	12	2009	2020	8	2013	2020	12	2009	2020
E	2	2008	2020	7	2014	2020	7	2014	2020
	38			28			49		

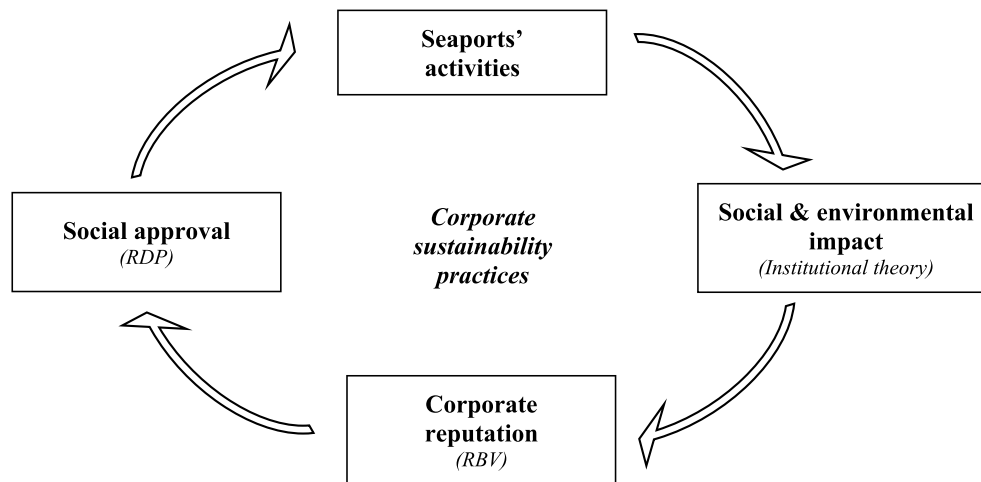


Fig. 2. Dynamics in the Portuguese seaport sector.

Doing things properly is not enough; they must inform stakeholders. Thus, communication strategies emerge, as an important legitimacy tool, with the ability to promote a positive public image of seaports (Darbra et al., 2004): all Portuguese seaports disclose CS information on their Annual Corporate Governance Practices Report, Annual Report, corporate websites, and Sustainability Report, which follows the GRI guidelines. Seaports C and D stopped producing sustainability reports a few years ago, mainly due to the costs associated with this type of GRI report. However, given the relevance of this report, seaport D decided to produce it again from 2020, while seaport C decided to include a chapter on “sustainability” in their annual report instead of having a standalone report.

At this point, it is worth noting that the first sustainability report, within the European seaport sector, was disclosed by a Portuguese

seaport in 2006, as is mentioned in some reports we analyzed and confirmed by one of the interviewees.

As mentioned by interviewee B, open dialogue is not seen as a cost, but as a seaport’s obligation and reports also play an important role in helping the seaport to raise its own awareness; however, according to him, disclosures are just the visible external part of its socially responsible attitude, promoting transparency and public scrutiny, while communicating what they really do. Since CS strategies help in building a positive reputation (RBV), and due to their external context (institutional theory), Portuguese seaports adopt CS strategies as a legitimacy tool to achieve the social approval they depend on (RDP).

Table 5
Extended theoretical model applied to the Portuguese seaport sector.

Institutional antecedents		Institutional Theory	Resource Dependence Perspective	+	Resource-Based View
Proposition 1	Cause	Legitimacy	1 st External institutional context impels Portuguese seaports in adopting CS practices.	3 rd Social approval, on which Portuguese seaports depend, is achieved.	2 nd Through CS practices, Portuguese seaports develop a positive corporate reputation (valuable intangible asset).
	Constituents	Dependence			
	Content	Consistency			
	Control	Voluntary diffusion			
	Context	Interconnectedness			
External focus			Internal focus		
Strategic responses and tactics					
Proposition 2	<u>Acquiesce</u> <i>compliance</i>		<u>Compromise</u> <i>bargain</i>		
	Whenever there is <u>total</u> conformity		Whenever there is <u>partial</u> conformity		

5.2. Constituents (Dependence) and content (Consistency)

Despite the multiplicity of external constituents (e.g., municipalities, universities, firemen, seaports' neighbors) listed by interviewees A, B, D, and E, also mentioned by Wagner (2018), all respondents place them in a single category named "city" in line with Sánchez and Daamen (2020) concerning to the port city of Lisbon. All interviewees, in their sustainability reports, highlight the port-city relationship: sometimes it has an exclusive chapter, while seaport B adds a matrix with a set of materially relevant topics, emphasizing port-city relationship as the most important topic.

The port-city relationship is a very important topic with growing attention in the academy, particularly concerning sustainable port cities (e.g., Kong and Liu, 2021; Wagner, 2019).

In this regard, most of the interviewees highlighted, the enormous social and urban pressure: the closer seaports are to cities, the greater their impact on social aggregates and, consequently, the more pressure is exerted on seaports (e.g., Darbra et al., 2004; Poulsen et al., 2018; Sánchez and Daamen, 2020; Wagner, 2019). Only interviewee E acknowledges not being "subject to any kind of pressure", which does not minimize a possible dependence on the city that he recognizes as of the "utmost importance", highlighting the port-city relationship in its sustainability reports.

This dependence can act as an isomorphic mechanism, aligning corporate strategies with institutional pressures (Oliver, 1991), which results in great consistency by pressuring seaports to have social fitness (e.g., Darbra et al., 2004; Wagner, 2019).

Returning to the aforementioned externalities, all respondents acknowledge the strong impact of seaports' activities and the need to minimize the disturbances caused to the city, that threaten seaports' legitimacy and reputation. To minimize this impact, they try to integrate seaports' water plan into the city master plan as explicitly mentioned by interviewee B and also pointed out by Sánchez and Daamen (2020), about the port of Lisbon. In the reports of seaport C, for example, it is also mentioned that the seaport has expanded in the opposite direction to the city, causing fewer urban constraints.

In the sustainability reports of seaports D and E, dialogue with municipalities is also mentioned as a way to improve seaports' urban integration. The abovementioned communication activities can emerge as part of conflict management (COM, 2007). Through different communication channels, seaports try to establish a close relationship with stakeholders, including urban actors (city), and understand their needs and expectations. Seaports A and B explicitly assume in their sustainability reports that these disclosures are prepared in close collaboration with the local community. In this way, Portuguese seaports ensure greater consistency between CS practices and institutional pressures (from the city) – institutional theory –, maintaining their credibility and reputation – RBV –, and consequently the social approval they depend on – RDP.

5.3. Control (Voluntary diffusion) and context (Interconnectedness)

Our findings suggest a voluntary adoption and diffusion of CS practices: "Portuguese legislation has transposed everything [...] so we are perfectly aligned and, even on the environmental side, I think we have gone beyond what the European directives define" (interviewee A). Besides, "the few regulations that exist are not specific to CS" (interviewee C) and "no seaport sector regulation is known" (interviewee D). "This is the seaports administration's responsibility. Each seaport administration has its area of jurisdiction and its responsibilities [...]. The responsibility is taken by the seaport's administration which somehow passes it along to concessionaires [...] respecting boundaries ruled by national and international policies [...] for example, about noise" (interviewee B).

During a public debate, the Mayor of Aveiro also pointed out the traditional lack of legal state regulation in the seaport sector. He noted

that this sector has always been very normative by creating its own rules, being a "State within the State". According to him, although there has been much progress in this sector, especially in the cooperation between mayors and CBDs, much remains to be done at the legal level. Thus, seaports voluntarily adopt CS practices in response to urban pressure and their dependent port-city relationship, and not due to legal pressures.

The voluntary adoption of CS practices – also pointed out by Wagner (2018) – is further boosted by the high level of interconnectedness, which promotes the sharing of experiences and the voluntary diffusion of best practices among the sector, as the search for innovative and common solutions, in a proactive strategy of continuous improvement assumed by all the interviewees. It also has the advantage of leading to sector cohesion through "synergies" from which seaports take "some economies of scale by being gathered" (interviewee B).

The Port Single Window (JUP⁶), which currently is in an updated version (LSW), is a good example of this proactive attitude and interconnectedness and it is worth noting the external recognition achieved: LSW earned a European award to seaport D in the category of innovative products and solutions. The LSW is an innovative approach that put "Portuguese ports in a leading position in comparison with other European ports" (Osmólski and Zhuravskaya (2020, p. 5) and after a full implementation "Portugal intends to be the first country in the world to offer a complete electronic catalogue of rail, sea and inland navigation services" (p. 8). Although the LSW was not developed as part of a seaports' CS strategy, it has a positive direct impact on their sustainability, being recognized and promoted by several global organizations such as the United Nations Network of Experts for Paperless Trade and Transport in Asia and the Pacific (UNNEXt) (Osmólski and Zhuravskaya, 2020).

According to interviewee B, the waiting time at the seaports' entrance to comply with bureaucratic procedures, caused road congestion, constraints to the city, noise, and pollution. After LSW implementation these problems were solved resulting, currently, in a more harmonious port-city relationship.

LSW emerged from an EU project (WiderMos) and in its "genesis came from Leixões, Sines, and Lisbon" and then the PPA gathered all the remaining seaports into the same single system (interviewee B).

According to interviewee C, the PPA is a symbol of this interconnectedness, as it is a forum for voluntary discussion of "common positions on the seaport sector", supporting the homogenization process of CS standards – "All seaports seek to align their CS general practices with each other or through the PPA, which integrates all port administrations" (interviewee D). However, even without the PPA, there is a voluntary spirit to share ideas and experiences expressed by interviewee C.

It is also worth noticing that the Portuguese seaports' interconnectedness goes even beyond the sector: seaports develop several actions that bring them closer to the city, establishing partnerships with, for example, the nearest universities, resulting in "mutual advantages" (interviewee B).

Based on interviewee B's answers, news published on the Internet, and the reports, it was possible to observe the existence of voluntary partnerships established even with seaports from other countries and with international organizations in the sector, such as RETE,⁷ which deals specifically with the port-city relationship.

Portuguese seaports' interconnectedness fosters the homogenization of CS practices (institutional theory) and cohesion between them, which can help to develop a positive reputation (RBV), not only for seaports individually but in the entire sector, helping to obtain the social approval they depend on (RDP) in a more sustained way.

⁶ JUP is the Portuguese name of the previous version of LSW.

⁷ <https://retedigital.org/>.

5.4. Acquiesce and compromise strategies

Since Portuguese seaports voluntarily adopt CS practices, it is possible to observe acquiescence and compromise strategies.

Similar to [Guerreiro et al. \(2012\)](#), we found that Portuguese seaports' acquiescence strategy is not a blind response to institutional pressures, but rather a predictable one, since seaports are aware of the institutional pressure that the city imposes on them. Seaports' reports and responses collected point to the existence of a formal CS policy: "CS is well integrated into the companies [seaports]" (interviewee A) crossing several departments (interviewees A, B, and C) as part of the whole company (interviewees D and E), and being present in the "corporate mission" (interviewee C).

Furthermore, acquiescence does not have to be a passive strategy; instead, it may include active or proactive forms as conflict anticipation as suggested by [Wagner \(2018\)](#) and assumed by interviewees A, B, C and D – e.g., "We don't usually expect things to happen ... We always try to anticipate" (interviewee B). In fact, seaports B and C, in their sustainability reports, refer that they decided to publish such disclosure to anticipate an expected future obligation to do so. However, many years later, seaport B continues to voluntarily publish this report, although it is still not mandatory. According to the knowledge of interviewee B, they were the first European seaport to publish a sustainability report, and this was done on a voluntary basis.

Finally, acquiescence strategies easily emerge in contexts marked by high levels of interconnectedness ([Oliver, 1991](#)), which is the case of Portuguese seaports when there is total conformity with institutional pressures.

Despite all efforts, it is not always possible to eliminate all negative externalities of seaport operations as assumed by the interviewees, leading them to partial conformity with external pressures (institutional theory). Thus, to prevent a deterioration of seaports' image and reputation (RBV), with a direct impact on their legitimacy and a possible loss of social approval (RDP), compromise strategies emerge through tactics of bargain. There is evidence of this tactic whenever Portuguese seaports emphasize the social and economic benefits that they offer – job creation (improving the living conditions of local communities, and industry support) –, which is a common strategy in this sector ([Acciario, 2015](#)), trying to develop a sense of pride and belonging among workers and all citizens ([Sánchez and Daamen, 2020](#)).

According to our extended theoretical model, the institutional theory explains how seaports are influenced by the pressures of their context in voluntarily adopting CS strategies and not due to a mere legal imposition. These pressures also act as isomorphic mechanisms that lead to the homogenization of Portuguese seaports' practices. In turn, as explained by the RBV, through CS strategies, seaports build a positive image and corporate reputation, helping them to obtain social approval they depend on (RDP), while showing their social fitness through CS practices and good reputation.

6. Conclusions

CS practices adopted by the Portuguese seaport sector are not well known. Neither are the institutional factors that motivate and limit the adoption of such practices. However, it is essential to know what seaports do concerning CS because of their physical and social impact and the growing interest and notoriety of this sector in an increasingly

Appendix 1. Questionnaire

1. Does the Port Authority (PA) activity directly impact the social and physical environment in which it operates?
2. How do you think the PA is regarded from the outside?
3. Where does CS fit in the PA's corporate structure and philosophy?
 - 3.1 Is CS a primary or secondary activity?

globalized world. For this reason, we focused on the adoption of CS practices by Portuguese seaports as a strategic response to their institutional contexts.

Data were collected through interviews with all Portuguese seaports' CBDs (key informants), news and videos publicly available on the Internet, seaports' websites and 115 reports. By combining Oliver's model with RBV, we created a new and extended theoretical framework to analyze strategic responses from a two-way organizational perspective – internal and external.

Through institutional theory, we could interpret how the external context of seaports shapes their CS decisions and practices, leading to a homogenization of such practices across the sector due to (i) a voluntary diffusion (control) of their standards, (ii) a great interconnectedness among seaports and (iii) high consistency of content between institutional pressures and their organizational goals. In turn, RDP provides insights into how the port-city dependency relationship affects strategic responses linked to CS practices, while RBV allows the understanding of how certain internal resources (e.g., corporate reputation) help seaports deal with external institutional forces, maintaining their social approval and legitimacy (cause).

It was also observed that the strategies that best explain the responses of Portuguese seaports to institutional pressures are *acquiescence* – when there is full compliance with these forces – and *compromise* – under partial compliance scenarios, where tactics of bargain take place by communicating the socio-economic benefits offered by seaports.

This paper contributes to the thin volume of literature on the institutional analysis of CS in the seaport sector that is underexplored in the literature. In terms of theory development, this paper extends Oliver's model by incorporating RBV.

We are wary not to generalize findings based on the Continental Portuguese seaports. However, when research results are related to theoretical propositions as we do here, the findings have a broader significance.

The approach adopted here can be used to explain the institutionalization processes of CS practices in the seaport sector of other countries. Further research could use the extended theoretical framework used in this paper to explore the adoption of CS practices. Additionally, future qualitative studies might analyze how CS rules develop from the political and economic level to the organizational field of seaports and finally to the seaports as proposed by [Dillard et al. \(2004\)](#).

CRedit authorship contribution statement

Solange Santos: Conceptualization, Methodology, Writing – original draft, Writing – review & editing. **Lúcia Lima Rodrigues:** Reviewing and Editing. **Manuel Castelo Branco:** Reviewing and Editing.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

The authors do not have permission to share data.

4. Who are the main stakeholders of the PA's CS practices?
 - 4.1 Are such CS practices developed for the whole group of stakeholders or is each activity adapted to different groups?
5. What are the preferred means of CS communication?
6. Is the PA subjected to external pressures to develop CS general and reporting practices? If so, what pressures are those?
7. Has the PA ever had to develop CS-specific activities following incidents or upon requests from stakeholders?
8. What are the main reasons/advantages to adopt CS practices?
9. What are the main reasons/disadvantages not to adopt or develop such practices?
10. How can CS practices contribute to the PA's growth?
 - 10.1 How important are CS general and reporting practices?
 - 10.2 Can CS practices legitimate the PA within society?
 - 10.3 Can CS practices increase the PA's economic value?
11. How would you classify CS practices within the PA? (e.g., proactive; reactive)
12. How do you rank the PA's CS at the national, European and international seaport sector levels? (e.g., innovative; follower; don't know about the CSR practices of other ports/PAs)
 - 12.1 Are the PA's CS practices inspired by other PA's CS models?
13. What CS regulation exists in the Portuguese seaport sector?
 - 13.1 Should CS practices be regulated or further regulated? Why?
 - 13.2 Can the lack of CS regulation create uncertainty about what/how should be done?
14. Has the PA increased CS obligations, being State-owned?
15. Has the PA increased CS obligations, given its activities and the sector in which it operates?
16. Have you worked at other PAs? If so, has the know-how acquired in those PAs helped in the definition of this PA's CS practices?

Appendix 2. Most common CS Portuguese seaport practices

Environmental activities
Commitment with the SDGs
Environmental monitoring (e.g., air quality, underwater noise)
Environmental protection and biodiversity
Development of action plan for risk or accident situations
Reinforcement of the dune system
Recommendations for ship ballast operations
Environmental management
Sociocultural, philanthropic, associative, and recreational activities
Open Days event
Festivals
Exhibitions
Seminars
Guided public and scholar visits
Cultural competitions and awards (e.g., photography)
Sports activities
Scientific activities
Partnership with local schools/universities
Sponsorship
Internship
Ocean Campus Portugal
Urban integration
New seaports' access to reduce road traffic
Creation of public and leisure spaces inside the port area
Construction or refurbishment of port heritage buildings (port and urban usage)
Leasing spaces for diverse usage (e.g., restaurants, clubs, shops)
Relocate noisy activities away from the urban fabric
Communication activities and involvement with the local communities
Sustainability report
Social network platforms
Corporate website
Corporate governance report
Annual report
Surveys to the population
Meetings with several urban actors (e.g., city authorities)
Social and economic development
Job creation
Economic drivers as part of a global logistic chain
Preference to local suppliers
Preference to suppliers and concessionaires that show legal compliance and environmental good practices
Promotion and commitment to human rights (e.g., Ethics and Conduct Code)
Training of employees
Innovation and technology activities
JUP/LSW
WiderMoS project
National and International cooperation
PPA
RETE
Welcoming visitors from international seaports

References

- Acciaro, M., 2015. Corporate responsibility and value creation in the port sector. *Int. J. Logist. Res. Appl.* 18 (3), 291–311.
- Ashrafi, M., Acciaro, M., Walker, T.R., Magnan, G., Adams, M., 2019. Corporate sustainability in Canadian and US maritime ports. *J. Clean. Prod.* 220 (20), 386–397.
- Ashrafi, M., Walker, T.R., Magnan, G.M., Adams, M., Acciaro, M., 2020. A review of corporate sustainability drivers in maritime ports: a multi-stakeholder perspective. *Marit. Pol. Manag.* 47 (8), 1027–1044.
- Batalha, E., Chen, S., Pateman, H., Zhang, W., 2020. The meaning of corporate social performance in seaports: the managers' perspective. *J. Marit. Aff.* 19 (2), 183–203.
- Bundy, J., Pfarrer, M.D., 2015. A burden of responsibility: the role of social approval at the onset of a crisis. *Acad. Manag. Rev.* 40 (3), 345–369.
- Branco, M.C., Rodrigues, L.L., 2006. Corporate social responsibility and resource-based perspectives. *J. Bus. Ethics* 69 (2), 111–132.
- Carneiro, J., Rodrigues, L.L., Craig, R., 2017. Assessing international accounting harmonization in Latin America. *Account. Forum* 41 (3), 172–184.
- CdR, 2010. Opinion of the committee of the regions - green paper TEN-T: a policy review. *Off. J. Eur. Union* C79, 23–26. Brussels.
- COM, 2007. Communication from the Commission. Communication on a European Ports Policy, Brussels.
- Darbra, R.M., Ronza, A., Casal, J., Stojanovic, T.A., Wooldridge, C., 2004. The self diagnosis method. A new methodology to assess environmental management in sea ports. *Mar. Pollut. Bull.* 48 (5–6), 420–428.
- Dillard, J.F., Rigsby, J.T., Goodman, C., 2004. The making and remaking of organization context: duality and the institutionalization process. *Account. Audit. Account. J.* 17 (4), 506–542.
- DiMaggio, P.J., Powell, W.W., 1983. The iron cage revisited: institutional isomorphism and collective rationality in organizational fields. *Am. Socio. Rev.* 42 (2), 47–160.
- Guerreiro, M.S., Rodrigues, L.L., Craig, R., 2012. Voluntary adoption of International Financial Reporting Standards by large unlisted companies in Portugal – institutional logics and strategic responses. *Account. Org. Soc.* 37 (7), 482–499.
- INE, 2021. Estatísticas dos Transportes e Comunicações 2020, p. 2021.
- Kong, Y., Liu, J., 2021. Sustainable port cities with coupling coordination and environmental efficiency. *Ocean Coast Manag.* 205, 105534.
- Koos, S., 2012. The institutional embeddedness of social responsibility: a multilevel analysis of smaller firms' civic engagement in Western Europe. *Soc. Econ. Rev.* 10 (1), 135–162.
- Lim, S., Pettit, S., Abouarghoub, W., Beresford, A., 2019. Port sustainability and performance: a systematic literature review. *Transport. Res. Part D* 72, 47–64.
- Mahon, J.F., 2002. Corporate reputation: research agenda using strategy and stakeholder literature. *Bus. Soc.* 41 (4), 415–444.
- Marques, R.C., Fonseca, A., 2010. Market structure, privatisation and regulation of Portuguese seaports. *Marit. Pol. Manag.* 37 (2), 145–161.
- Meyer, J.W., Rowan, B., 1977. Institutionalized organizations: formal structure as myth and ceremony. *Am. J. Sociol.* 83 (2), 340–363.
- Moseñe, J.A., Burrit, R.L., Sanagustín, M.V., Moneva, J.M., Tingey-Holyoak, J., 2013. Environmental reporting in the Spanish wind energy sector: an institutional view. *J. Clean. Prod.* 40, 199–211.
- Oliver, C., 1991. Strategic responses to institutional process. *Acad. Manag. J.* 6 (1), 45–179.
- O'Neill, J.J., Bondy, K., Hang, H., 2022. Effectiveness of value congruent disclosures and firm credibility in mitigation legitimacy threats. *Account. Forum* 46 (1), 1–29.
- Osmólski, W., Zhuravskaya, M.A., 2020. Using the standards of electronic communication on the example of solutions applied in creating Logistics Single Window at the ports of Portugal. In: Kolinski, A., Dujak, D., Golinska-Dawson, P. (Eds.), *Integration of Information Flow for Greening Supply Chain Management*. Springer, Cham, pp. 3–17.
- Parente-Laverde, A.M., Rojas-DeFrancisco, L., Martins, I., 2022. Country and Corporate Reputation from an Internationalization Perspective: a Comparative Study of Industries from an Emerging Market. *International Journal of Emerging Markets*, forthcoming.
- Pfeffer, J., Salancik, G.R., 1978. *The External Control of Organizations*. Harper & Row, New York.
- Pinto Arena, M.C., 2022. Portugal's Challenging Relationship with China under Tense US/EU-China Relations. *The International Spectator*, forthcoming.
- Poulsen, R.T., Ponte, S., Sornn-Friese, H., 2018. Environmental upgrading in global value chains: the potential and limitations of ports in the greening of maritime transport. *Geoforum* 89, 83–95.
- Rao, K., Tilt, C., 2016. Board composition and corporate social responsibility: the role of diversity, gender, strategy and decision making. *J. Bus. Ethics* 138 (2), 327–347.
- Rodrigues, V., Russo, M., Sorte, S., Reis, J., Oliveira, K., Dionísio, A.L., Monteiro, A., Lopes, M., 2021. Harmonizing sustainability assessment in seaports: a common framework for reporting environmental performance indicators. *Ocean Coast Manag.* 202, 105514.
- Sánchez, J.M.P., Daamen, T.A., 2020. Using heritage to develop sustainable port-city relationships: Lisbon's shift from object-based to landscape approaches. In: Hein, C. (Ed.), *Adaptive Strategies for Water Heritage*. Springer, pp. 382–399.
- Santos, S., Rodrigues, L.L., Branco, M.C., 2016. Online sustainability communication practices of European seaports. *J. Clean. Prod.* 112 (4), 2935–2942.
- Schrobback, P., Meath, C., 2020. Corporate sustainability governance: insight from the Australian and New Zealand port industry. *J. Clean. Prod.* 255 (3), 120280.
- Song, H.M., Rimmel, G., 2021. Heterogeneity in CSR activities: is CSR investment monotonically associated with earnings quality? *Account. Forum* 45 (1), 1–29.
- Sousa Filho, J.M., Farache, F., 2011. Corporate social strategy and the generation of benefits: case studies in the Brazilian electricity and supermarket industries. *Lat. Am. Bus. Rev.* 12 (2), 99–121.
- Stein, M., Acciaro, M., 2020. Value creation through corporate sustainability in the port sector: a structured literature analysis. *Sustainability* 12 (14), 5504.
- Tan, Z., Liu, H., Shao, S., Liu, J., Chen, J., 2021. Efficiency of Chinese ECA policy on the coastal emission with evasion behavior of ships. *Ocean Coast Manag.* 208, 105635.
- Trujillo, L., Tovar, B., 2007. The European port industry: an analysis of its economic efficiency. *Marit. Econ. Logist.* 9 (2), 148–171.
- UNCTAD, 2020. *Review of Maritime Transport 2020*. United Nations Publications, Geneva.
- Vanelslander, T., 2016. Seaport CSR: innovation for economic, social and environmental objectives. *Soc. Responsib. J.* 12 (2), 382–396.
- Vejvar, M., Lai, K.H., Lo, C.K., Fürst, E.W., 2018. Strategic responses to institutional forces pressuring sustainability practice adoption: case-based evidence from inland port operations. *Transport. Res. Transport Environ.* 61, 274–288.
- Verhoeven, P., 2009. European ports policy: meeting contemporary governance challenges. *Marit. Pol. Manag.* 36 (1), 79–101.
- Wagner, N., 2018. Identification of the most important sustainability topics in seaports. *Logist. Transp.* 2 (34), 79–88.
- Wagner, N., 2019. Sustainability in port cities – a bibliometric approach. *Transport. Res. Procedia* 39, 587–596.
- Xu, L., Di, Z., Chen, J., 2021. Evolutionary game of inland pollution control under government co-supervision. *Mar. Pollut. Bull.* 171, 112730.