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INTEGRATED REPORTING IN STATE-OWNED ENTERPRISES. A COMPARATIVE STUDY

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Integrated Reporting in State-Owned Enterprises. A comparative study

Abstract:
This work analyses to what extent the Spanish State-Owned Enterprises (SOEs) disclose Integrated Reporting (IR), and the drivers of the existing differences between them
The content analysis of the reports of 28 large Spanish SOEs for the year 2018 is carried out against the AECA's IR framework. Cluster and multidimensional scaling analyses are carried out to describe their differences. The Spanish SOEs required are disclosing NFR but with different depth. The SOEs which obtain the best position include information about corporate governance, risk management, customer management and environmental policies, being their NFR closer to the IR. Some SOEs exempted are also reporting non-financial information to legitimate their practices. However, more detailed standards are required for comparability purposes.

Purpose: This work analyses the extent to which Spanish State-Owned Enterprises (SOEs) disclose the information required by the Integrated Reporting (IR) framework, and the drivers of the existing differences between them.
Design: A content analysis of reports from 28 large Spanish SOEs for 2018 was carried out, taking the Key Performance Indicators in the AECA's (Spanish Accounting and Business Administration Association) IR as a benchmark. Cluster and multidimensional scaling analyses are carried out to describe their differences.
Findings: Those Spanish SOEs required to do so disclose non-financial information (NFR) but to different extents. The highest-ranked SOEs include information about corporate governance, risk management, customer management and environmental policies, their NFR being closer to IR. Some exempted SOEs also report non-financial information to legitimate their practices. However, more detailed standards are required for comparability purposes.
Originality / Value: This work adds to an inchoate body of literature studying the content of SOE information disclosed and the implementation of IR.
Practical implications: Although the Spanish SOEs required to do so disclose NFR, there is still room for improvement, especially regarding quantitative information. A reference framework, such as the AECA one, will help them to implement IR and increase their comparability.
The new European Directive and future domestic regulations have the challenge of closing the present gap between theory and practice in the field of NFR, not only in terms of the number of companies required to do so - and SOEs- but also in promoting more comparable reports and promoting IR.

Keywords: Non-financial reporting (NFR), Integrated Reporting (IR), State-Owned Enterprises (SOE), Institutional theory, Stakeholder theory

1. Introduction

According to European Directive 2014/95/EU, 11,700 large companies have to publish reports on the policies they implement in relation to environmental protection, social responsibility and treatment of employees, respect for human rights, anti-corruption and bribery and diversity on company boards. As the European Directive gives organizations considerable discretion over what information to disclose, as well as the format and structure of the information they report, national legislation has specified its requirements. The Spanish Government first adopted this Directive in 2017, complemented by Law 11/2018 to increase and more clearly define the content of Non-Financial Reporting (NFR). Similarly, the Spanish Association of Accounting and Business Administration (AECA) prepared two frameworks for organizations to fulfil the Directive and the Spanish regulation (AECA, 2012, 2018; AECA, Lizcano, Flores, Mora, & Rejón, 2012). The first AECA framework (2012) complied with the International Integrated Reporting Council's (IIRC) Integrated Report (IR), providing key tools for comparability. It was considered a reference in leading to Spanish regulations. After Law 11/2018, AECA issued a second enhanced framework (AECA, 2018), largely increasing the quantitative information to be included.

In the 70s, Standard and Poor's stock market index of the top 500 US listed companies indicated that 80% of a company's market value could be traced through the financial statements, and the IIRC (2011) and the IR initiatives were created in a context where only around 20% of a company's market value could be accounted for through its financial and physical assets (Adams, 2015). IR attempts to encourage mainstream accounting professionals to think and act longer term. The IIRC (2013) defines IR as "a concise communication about how an organization's strategy, governance, performance and prospects, in the context of its external environment, lead to the creation of value over the short, medium and long term".

Gradually, and for different reasons, organizations from both the private and the public sectors have increased the non-financial information they produce and report and different types of reports related to social, sustainability and corporate governance information have emerged with a lack of comparability and homogeneous implementation. Considering this reporting explosion, the IIRC tried to make integrated reporting a new reporting norm (Adams & Larrinaga, 2019; Rinaldi, Unerman, & de Villiers, 2018). IR aims to become a tool that combines traditional financial reporting with the material parts of a corporation's sustainability report, showing the links between the different dimensions of the performance and providing, in one document, information related to financial, environmental, social performance and governance issues (AECA, 2018; Eccles & Youmans, 2015; Manes-Rossi, 2018).

Non-financial information is especially important for public sector entities due to their non-profit approach. IR provides a holistic view, in a single document, of the different issues that affect public institutions and thereby highlight the connectivity that characterises them, helping to increase accountability and transparency (Guthrie, Manes-Rossi, & Orelli, 2017; Manes-Rossi, 2018). One special category of public sector entity is the State-Owned Enterprise (SOE). The SOEs are corporate entities recognized by national law as enterprises, mostly governed by private law, but in which the State controls the majority of the ownership rights, and there is specific governmental supervision. They provide public services or utilities but operate like for-profit commercially-focused companies, sometimes competing with private firms (Kowalski, Büge, Sztajerowska, & Egeland, 2013), and being financed by public and private resources. Due to these characteristics, they are often analysed as hybrid organizations (Argento, Grossi, Persson, & Vingren, 2019; Grossi, Papenfuß, & Tremblay, 2015; Johansson & Vakkuri, 2018).

In practice, this means that SOEs may face higher expectations and stronger stakeholder pressure to discharge accountability, and bigger legitimacy problems when they fail to do so. SOEs are expected to be more committed to social and environmental issues, for which non-financial information is key. This is why SOEs tend to outperform private companies in accountability matters (Amran & Haniffa, 2011; Royo, Yetano, & García-Lacalle, 2019; Tagesson, Klugman, & Ekström, 2013). Our objective is to show how Spanish SOEs are dealing with the enforcement of NFR and to what extent they have implemented IR, as a result of the boost and influence of their recent implementation in private companies. To do this, we carried out a content analysis of the NFR disclosed by the Spanish SOEs. Furthermore, the content and extent of disclosures have been analysed according to institutional and stakeholders theories.

The interest of the Spanish IR field has been justified on the grounds of the number of participants in the IR pilot programme and the prominent position of Spain in non-financial reporting adoption (see Rodríguez-Gutiérrez, Correa, & Larrinaga, 2019). The AECA IR framework , adapted to Spanish Law 11/2018, has been used as the benchmark, because the use or compliance with generally accepted frameworks represents a way to restore an organisation's legitimacy (Beck, Dumay, & Frost, 2017; Manes-Rossi, 2018). This benchmark also helps to identify areas of convergence and divergence between reporting patterns or archetypes (see Rodríguez-Gutiérrez et al., 2019) developed by the SOEs. Moreover, the AECA framework includes both qualitative and quantitative information (KPI), the latter being essential, as the quality of information is greater when more specific quantitative information is provided (Gallery, Cooper, & Sweeting, 2008). This paper acknowledges that IR is not only about accountability and external reporting but also about deploying the integrated thinking notion and transforming decision-making and actions within organisations (Dumay, Bernardi, Guthrie, & Demartini, 2016; Guthrie et al., 2017; Rodríguez-Gutiérrez et al., 2019; Vesty, Ren, & Ji, 2018). Nevertheless, our focus will be on IR, as a tool of accountability.

This paper is structured as follow: After this section, we describe the hybridity of SOEs, which requires them to balance profit-making with social and environmental objectives, as well as the role of the IR in covering demands for financial and non-financial information from SOEs. Then we carry out an examination of the two key theories –institutions and stakeholders- used to explain the main aspects of IR in SOE disclosure. The following section describes the methodology. Finally, an interpretation of the results is provided to support the following discussion section and the concluding remarks.

2. SOE hybridity and Integrated Reporting.

SOEs are engaged in providing public services of general economic and social interest whose performance is of great importance for broad segments of the population (Aharoni, 1981; Grossi et al., 2015; Royo et al., 2019; Tremblay, 2012). SOEs operate at the crossroads of market and political spheres and resemble something of both extremes, but they are also different to both of these (Johansson & Vakkuri, 2018). Combining characteristics of different sectors implies that different logics and ways of doing things are present (Olsen, Solstad, & Torsteinsen, 2017; Royo et al., 2019). These logics hybridize how an organization works, and how employees and clients behave (Skelcher & Smith, 2017), creating specific structures of funding, ownership, goal achievement and control (Johansson & Vakkuri, 2018). As defined in this paper, SOEs are wholly or majority owned or controlled by governmental entities on behalf of the general public - that pays taxes and elects the government - as well as on behalf of other possible minority interest groups (Grossi & Thomasson, 2015). As such, SOEs receive public funds from governments, through budget allocations, and have close (government) and distant (citizens) owners, which may have different information needs. This implies balancing profit-making demands with responsibility for social and environmental objectives (Luke, 2010), its stakeholders requiring both financial and non-financial information.

SOEs' hybridity also refers to the incongruence of the goals they pursue (Argento, Culasso, & Truant, 2016; Johansson & Vakkuri, 2018; Olsen et al., 2017; Thornton, Ocasio, & Lounsbury, 2012). SOEs are commonly regarded as facing an inherent goal ambiguity, as a result of needing to exist as market-based public organizations that have to meet certain societal expectations (Christensen, 2017). They should be able to create financial value for their owners, or at least be financially sustainable, and have a social impact on citizens and society. Conflicts between private profit and public purposes require them to make a reasoned assessment of hybrid performance, a benchmarking exercise involving an assessment of the public value of the actual outputs and outcomes (Vining & Weimer, 2017). SOEs have a social responsibility that plays a leading role in their concerns (Garde Sánchez, Rodríguez Bolívar, & López Hernández, 2017).

Hybrid organizations also show particularities in terms of control (Johansson & Vakkuri, 2018). The price SOEs pay for more managerial freedom than public institutions is to accept greater performance control (Olsen et al., 2017). Thus, an effective reporting regime requires SOEs to abide by the same reporting, control, and audit frameworks as other major corporations or public interest entities and to disclose both financial and non-financial information (Alexius & Cisneros Örnberg, 2015; Ntim, Soobaroyen, & Broad, 2017; OECD, 2015). Public monitoring should not assume that social value can be assessed by profitability, as it can be in undistorted, well-functioning markets (Vining & Weimer, 2017).

Non-financial information is not new. Over the past 50 years many different terms have been used to refer to the reporting of social and environmental information, ranging from social accounting, social and environmental reporting and sustainability reporting to corporate social responsibility (Guthrie et al., 2017). As a result, corporate disclosure studies firstly focused on showing traditional financial reporting's inability to satisfy the information needs of a broad range of stakeholders and more recent studies have focused on different forms of reporting as a mechanism for accountability, legitimacy and to support and promote stakeholder engagement (Dumay et al., 2016; Guthrie et al., 2017), and even as a tool for internal change (see Manes-Rossi, 2018; Rodríguez-Gutiérrez et al., 2019). Non-financial reporting, especially regarding sustainability, has become a widespread practice among organizations. This is evidenced by the proliferation of guidelines, such as the ISO 14000 series, Social Accountability 8000, Environmental Management Accounting (EMA) or the Global Reporting Initiative (GRI), the latter being the most commonly adopted (Lozano & Huisingh, 2011). The EU also expects to have its own sustainability reporting standards for 2023 (European Reporting Lab, 2021).

Despite traditional financial reporting having proven insufficient to satisfy stakeholders' demands (Stacchezzini, Melloni, & Lai, 2016), financial information continues to be a key mechanism in the search for transparency as it ensures a reasoned judgment about the financial position and the allocation and use of funds (Beckett, 2019; Behn, 2001). It has become common for organizations to portray an image of actively pursuing a positive social and environmental agenda, through financial and non-financial reporting (Helfaya, Whittington, & Alawattage, 2019).

This study focusses on patterns for implementing IR at SOEs in order to identify different characteristics of the published reports. IR integrates social, environmental and governance dimensions with traditional financial information to disclose in one report the value creation over time for the benefit of a broad range of stakeholders. IR characteristics postulate it as a potentially useful tool for downward accountability discharging by public sector entities and SOEs, since it can accommodate the compulsory disclosures along with any sustainability-related information considered material within a narrative that is understandable to citizens.

3. Theoretical background for IR in SOEs.

SOEs are placed under broader accountability foci due to their hybrid nature (Ebrahim, Battilana, & Mair, 2014; Mair, Mayer, & Lutz, 2015). On the one hand, financial information will be relevant to enforce accountability relationships with governments. On the other hand, non-financial disclosure represents the content through which accountability for public value enhancement (Moore, 1995; Papi, Bigoni, Bracci, & Deidda Gagliardo, 2018) and societal respect is rendered (Córdoba-Pachón, Garde-Sánchez, & Rodríguez-Bolívar, 2014). Through financial and non-financial reporting, and so by using IR, SOEs may be able to gain legitimacy by answering these various accountability demands.

The European Directive on the disclosure of non-financial and diversity information (2014/95/EU) came into effect for about 11,700 large companies in Europe in the 2017 financial year, with the first reports issued in early 2018. It represented a reporting paradigm change in Europe, because only France, Denmark and the UK had domestic NFR requirements when the Directive negotiations began (Kinderman, 2020). In Spain, after the adoption of the Directive in 2017 - through Royal Decree 18/2017- Law 11/2018 increased the required NFR content and introduced reforms related to its verification. The impact and contents of this Directive continue to be reviewed by the European Commission as part of the strategy of strengthening the foundations for sustainable investment[1]. In fact, in April 2021, a new Directive proposal was issued with the objective of increasing the number of reporting companies and setting up an arena for sustainability reporting standards to ensure that NFR addresses users' needs (European Commission, 2021).

[1] https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/non-financial-reporting_en

Despite both financial and non-financial reporting becoming mandatory for certain big undertakings, combining them in a report as the IR recommends is mostly voluntary and does as a consequence provide an area for research into motivational aspects of disclosure. It is worth analysing to what extent the coming into force of the NFR has made IR implementation easier, or whether expertise in IR still needs to be acquired. Moreover, the extent to which comparability problems are addressed by formal requirements and the links between NFR and IR also deserve attention. Theories based on the concept of legitimacy posit that organizational strategies, including disclosure ones, arise from the perception that organizational members have about what society thinks the organization ought to do (Buchholz & Rosenthal, 2005; Deegan & Blomquist, 2006). Analyzing how hybrid organizations, SOEs for instance, respond to societal expectations through reporting is increasingly relevant (Christensen, 2017; Florio & Fecher, 2011; Olsen et al., 2017). In particular, if we consider that despite the exponential increase in NFR, it has also been considered opportunistic, "green washing", implausible, cosmetic, lacking in stakeholder inclusivity and failing to meet users' expectations (Khan, Bose, Mollik, & Harun, 2020).

In order to understand IR practices in SOEs, this paper uses institutionalism concepts of isomorphism and decoupling. Institutional theory assumes that a primary determinant of organizational structure and behavior is the pressure exerted by external and internal constituencies on the organization for satisfying a set of expectations to gain legitimacy and, so, secure access to vital resources and long-term survival (DiMaggio & Powell, 1983; Meyer & Rowan, 1977). As institutions are increasingly requested to report on their interactions with society, institutional theory proposes that the institutions within society shape organizations, ushering in an organizational change towards convergence with practices that are considered legitimate, such as NFR and IR. Legitimacy is gained through coercive isomorphism, mimetic processes and normative pressures (see DiMaggio & Powell, 1983).

When organizations are exposed to the same accountability pressures, as is the case of the SOEs analysed, differences can be interpreted as a consequence of implementing flexible regulations or recommendations (weak coercive forces), the recentness of the information-disclosure practices adopted (so that mimetic processes have not had time yet to standardize disclosure practices), or the lack of consensus among professionals as to what information to provide (inconsistent normative pressure). Of the authors studying the determinants of IR adoption, some assess all institutional forces, like Arena et al. (2018) or Jensen and Berg (Jensen & Berg, 2012), whereas other authors focus just on mimetic processes (Amran & Haniffa, 2011), or normative pressures (Chen & Bouvain, 2009; Fortanier, Kolk, & Pinkse, 2011)

Decoupling represents a possible response to all organizations facing conflicting goals and expectations (Behnam & MacLean, 2011; Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011). Aiming at responding to such conflicts, decoupling arises as a strategy through which organizations conform to given external structures in a ceremonial fashion (Oliver, 1991; Meyer and Scott, 1992; Scott, 2013). To the extent that organizations are pressured by the transparency myth to gain legitimacy, they may adopt decoupling strategies by disclosing that information that is easier to prepare and will not usually provide a full disclosure if they are not forced to do so (Behnam & MacLean, 2011; Pina, Torres, & Yetano, 2009). This is particularly relevant for SOEs, as they are heavily exposed to tensions and dilemmas created by competing rationalities, values and logics (Alexius and Grossi, 2018) and do not perfectly reproduce a single coherent institutional template to gain legitimacy (Denis, Ferlie, & Van Gestel, 2015; Pache & Santos, 2013). Moreover, organizations wishing to appear supportive of NFR or IR but unwilling to make significant organizational changes are more prone to decoupling (Behnam & MacLean, 2011). Additionally, as monitoring and control is exerted differently by each stakeholder group (Koppell, 2006) and each stakeholder has a certain level of power, SOEs can reap the benefits of adoption through decoupling without really changing their priorities (Jamali, 2010). Thus, decoupling could be adopted to fulfill minimum NFR requirements. Moreover, considering that non-financial reporting criteria are less strict and that including the financial information required by IR is voluntary, organizations can take some license with the contents of NFR disclosures and in deciding whether to move towards IR. Thus, the comparison with the AECA IR framework will provide a more extensive analysis of decoupling practices.

In addition to the institutional theory, this paper also takes into account the stakeholder theory. This identifies stakeholders as special individuals with specific expectations about the organization's conduct, and who will negotiate different social contracts with a given organization (Deegan, 2002). From a normative point of view, the stakeholder theory states that a SOE has to recognize the multiple expectations and provide a full and transparent disclosure of their activities to a wider audience. Stakeholders represent "demanders of accountability" (Ebrahim et al., 2014, p. 91) and their multiplicity creates the problem of satisfying this multiplicity of *accountees* (Bovens, 2007).

Thus, by understanding the contents and types of information that received most attention within the IR may help to identify whether there are specific SOE stakeholders whose demands receive greater attention. Considering that time and resources are limited, it could be argued that organizations may prioritize stakeholders on the basis of their power, their social legitimacy and the urgency of their claims (Ebrahim et al., 2014). Accordingly, the importance that an organization attaches to a specific group of stakeholders may depend on the resources the group provides (Deegan & Blomquist, 2006; Wallace, 1995). As a result, the accountability tools or disclosure mechanisms used to fulfil the needs of each SOE stakeholder may vary. It is expected that the disclosure patterns will firstly address the accountability needs of those groups of stakeholders that control key resources (Lu & Abeysekera, 2014; Thijssens, Bollen, & Hassink, 2015).

As has been shown, there is not only one theory to analyse developments in NFR/IR disclosures at SOEs. In fact, the aforementioned theories offer overlapping perspectives on how the SOE is influenced by and has an influence upon the society in which operates. Finally, SOEs seem to have been overlooked by researchers, which have focused on private sector companies (Dumay et al., 2016): few studies include public sector entities (Guthrie et al., 2017), some include SOEs as part of a sample (like in Amran and Haniffa, 2011; or in Tagesson et al., 2009), but none are entirely devoted to them, as this study is.

5. Methodology

The sample

Law 11/2018 on non-financial and diversity information demands NFR disclosure from large Spanish undertakings that prepare consolidated financial statements[2] and that fulfill the following requirements: 1) they have more than 500 employees (this limit will be 250 from 2021) during the year, and 2) they are either Public Interest Entities[3], or they are companies which fulfil at least 2 of the following limits over two consecutive years at the year-end date: assets greater than 20 million euros, turnover greater than 40 million euros, or more than 250 employees.

[2] This requirement was not included in the RD 18/2017. It was a modification of Law 11/2018.

[3] Royal Decree 1517/2011 Art. 15 Public Interest companies:

1) Companies that have issued securities admitted to trading on official secondary markets, credit institutions and insurance companies that are subject to special monitoring and control by the Bank of Spain, the CNMV (National Stock Market Commission), and the General Office of Insurance and Pension Funds (Dirección General de Seguros y Fondos de Pensiones), organizations at the Autonomous Communities with powers over insurance companies, and organizations belonging to the growing segment of companies that issue securities admitted to trading on the alternative investment market. 2) Collective investment institutions that for two consecutive years have at least 150 participants or shareholders at the year-end date, the management companies that run those investment institutions and the investment services companies. 3) Mutual guarantee societies, payment institutions and electronic money institutions. 4) Pension funds that, for two consecutive years, have at least 500 participants at the year-end date and the management companies of those funds. 5) Those companies, different from the above, whose turnover or employees over the last two consecutive years at the year-end date are over 200 million euros or 1,000 employees, respectively. 5) Any group that includes a company from those named above.

The 203 SOEs included in the central government database (see Invespe, 2018[4]) were analyzed in 2018 to see whether they had to prepare a NFR statement. There were: 20 groups (of those, one was in liquidation and twelve were not obliged to prepare a NFR statement, mainly due to their size), and 23 subgroups that prepare consolidated financial statements (of those, three were in liquidation, two were eliminated from the sample because they are international subgroups based outside Spain and 11 were exempted from NFR). Six big undertakings that do not prepare consolidated financial statements but fulfill the employee and size criteria relating to NFR were also analyzed. The importance of including these companies is that they were obliged to prepare an NFR statement by the previous RD 18/2017.

The websites of the above mentioned SOEs were analyzed to search for NFR. Of those exempted, the six big undertakings, six groups and one subgroup prepare a NFR statement or sustainability report. One of the groups required to do so, INECO, does not disclose NFR statement. So, the final sample contains 28 SOEs (see Table 1 and Table 2).

Table 1: Sample.

INVESPE	**Total analyzed**	Exempted from NFR	Liquidation	International	NFR required companies	Exempted from present NFR[5]
Groups	**20**	12	1		8 (INECO does not disclose information)	6
Subgroups	**23**	11	3	2	7	1
Other big undertakings	**6**	6			6	
	49				**15**	**13**

Table 2: List of companies included in the final sample

	SOE name	Acronym	Selection
1	**Administrador de Infraestructuras Ferroviarias E.P.E**	ADIF	Group
2	**Autoridad Portuaria de Barcelona**	AP Barcelona	Group
3	**Autoridad Portuaria de Gijón**	AP Gijón	Group (exempted from NFR but a sustainability report prepared)
4	**Autoridad Portuaria de Sevilla**	AP Sevilla	Group (exempted from NFR but sustainability report prepared)
5	**Autoridad Portuaria de Valencia**	AP Valencia	Group (exempted from NFR but a sustainability report prepared)
6	**Centro para el Desarrollo Tecnológico Industrial, E.P.E.**	CDTI	Group (exempted from NFR but a sustainability report prepared)
7	**Compañía Española de Seguros de Crédito a la Exportación, S.A.**	CESCE	Group
8	**ENAIRE E.P.E.**	ENARIE	Parent group
9	Aena, S.M.E., S.A.	AENA	Subgroup (listed)

[4] https://www.igae.pap.hacienda.gob.es/sitios/igae/es-ES/BasesDatos/ClnInvespe/paginas/invespe.aspx
[5] 5 out of these 7 companies will have to prepare NFR statement from 2021 as the employee limit will fall from 500 to 250.

	SOE name	Acronym	Selection
10	**Entidad Pública Empresarial Red.es, M.P.**	RED	Parent group (exempted from NFR but sustainability report prepared)
11	**Instituto de Crédito Oficial**	ICO	Parent group
12	**Entidad Pública Empresarial Renfe-Operadora**	RENFE	Parent group
13	**Sociedad Estatal de Participaciones Industriales Y Sociedades Dependientes**	SEPI	Parent group
14	Agencia EFE, S.A., S.M.E.	EFE	Subgroup
15	Equipos Nucleares, S.A., S.M.E.	ENSA	Subgroup
16	Enusa Industrias Avanzadas, S.A., S.M.E.	ENUSA	Subgroup
17	Navantia, S.A., S.M.E.	NAVANTIa	Subgroup
18	Hulleras del Norte, S.A., S.M.E.	HUNOSA	Subgroup
19	SEPI Desarrollo Empresarial, S.A., S.M.E.	SEPI_DE	Subgroup (exempted from NFR but sustainability report prepared)
20	Empresa de Transformación Agraria, S.A., S.M.E., M.P.	TRAGSA	Subgroup
21	Sociedad Estatal Correos y Telégrafos, S.A., S.M.E.	CORREOS	Subgroup
22	*Autoridad Portuaria de Cartagena*	AP Cartajena	Big undertakings
23	*Corporación RTVE*	RTVE	Big undertakings
24	*Ingeniería de Sistemas para la Defensa de España S.A. S.M.E. M.P.*	ISDEFE	Big undertakings
25	*Sociedad Estatal Loterías y Apuestas del Estado, S.M.E., S.A.*	LOTERIA	Big undertakings
26	*Paradores de Turismo de España, S.M.E., S.A*	PARADORES	Big undertakings
27	*Servicios y Estudios para la Navegación Aérea y la Seguridad Aeronáutica, S.M.E., M.P., S.A.*	SENASA	Big undertakings
28	**Ingeniería y Economía del Transporte SME MP SA**	INECO	Group (required but not disclosed)

Source: Inventory of State enterprises and foundations 2018 (IGAE, 2020). In bold, the parent group, in italics, other big undertakings; the rest, subgroups.

For each company, NFR content has been analysed by taking the AECA IR (with financial and non-financial information) as the benchmark, although slightly adapted (see below). We selected this framework due to its reputation because it has been considered as a quality framework by the Spanish Stock Exchange Commission (CNMV) and named by Law 11/2018 as an appropriate framework for IR. Using this IR framework also allows us to see the extent to which SOEs aim to link financial and non-financial reporting. The AECA items are shown in Table 3, but also the adaptations made to it during the analysis process due to the special features of the sample and the difficulties encountered to evaluate the information.

Table 3- Items analyzed in the NFR

AECA Reference	Variable number	Name of the variable	Additional information
BUSINESS MODEL			
Organization and its environment			
CE_II_1	BM_1	Description of the organization	Legal basis, overview of the business, aims of the company, government stake
CE_II_2	BM_2	Description of the organization's environment	Organization, structure, location
CE_II_3	BM_3	Challenges and uncertainties	Main factors and trends that may affect the evolution of the business
CE_II_4	BM_4	Sector-specific uses	Markets, evolution of markets, sector competition
Strategic objectives			
	BM_5	Mission, vision and value	(added) Usually provided by companies.
CE_II_5	BM_6	Objectives and strategies	Long, medium and short-term objectives and strategies
CE_II_6	BM_7	Resource allocations plans	Resources and strategies implemented to achieve the objectives
Business model			
CE_II_10	BM_8	Main products and needs met	Description of the main products and services, as well as sub-products and waste

AECA Reference	Variable number	Name of the variable	Additional information
CE_II_9	BM_9	Description of production processes or of service delivery	Details of the processes to transform inputs into outcomes
CE_II_8	BM_10	Main inputs or supplies	Main inputs used by the organization
DUE DILIGENCE: POLICIES AND THEIR RESULTS			
Policies			
CE_III_1	BM_11	Governing board diversity policy	Details about the selection process for the board, including training, expertise, age, gender and disabilities
CE_III_2	BM_12	Outsourcing and public procurement policies	(adapted) The public sector supply chain is closely linked to outsourcing, bidding and public procurement policies
CE_III_3	BM_13	Environmental policies	Details of the processes and policies followed regarding environmental issues (impact, risks, etc.)
CE_III_4	BM_14	Social and employees related policies	Details of the policies regarding health, safety, training, access, salary gap, etc.
CE_III_5	BM_15	Human rights policies	Due diligence processes related with respect to human rights
CE_III_6	BM_16	Anti-corruption and bribery policies	Policies and actions regarding corruption and bribery, support to foundations and NGOs.
CE_III_7		Other policies	(eliminated) Most of the policies found were in the previous categories
			Main risk
CE_IV_1 and 2	BM_17	Risk management policies (detection and monitoring)	(Merged) Identification of main risk and monitoring processes
CE_IV_3 and 4	BM_18	Risk mitigation actions (taken and planned)	(Merged) Actions taken to mitigate and avoid risk, opportunities identified in the process.
KEY PERFORMANCE INDICATORS			
Economic efficiency			
KPI F1	KPI_F1	Income	
KPI F2	KPI_F2	Supplier expenses	
KPI F3	KPI_F3	Added value	Operating margin (Income - supplier expenses)
KPI F4	KPI_F4	Salaries	
KPI F5	KPI_F5	Gross profit	
KPI F6	KPI_F6	Financial expenses	
KPI F7		Owners remuneration	(Eliminated) It is not common for SOEs
KPI F8	KPI_F8	Income tax	
KPI F9	KPI_F9	Financial contribution to society	Monetary contribution to society at large
KPI F10		Financial contribution to the government	(Eliminated) They are part of the government
KPI F11	KPI_F10	R&D Investment	
KPI F12	KPI_F11	Total Investment	
KPI F13	KPI_F12	Return on Investment/Equity	
KPI F14	KPI_F13	Indebtedness	
KPI F15		Own-shares/Treasury shares	(Eliminated) Not applicable except for AENA
KPI F16	KPI_F14	Grants	
Environmental indicators			
Energy efficiency and emissions			
E1	KPI_E1	Energy consumption	
E2	KPI_E2	Water consumption	
E3	KPI_E3	Emissions Scope 1	
E4	KPI_E4	Emissions Scope 2	
E5		Emissions Scope 3	(Eliminated) It is hardly/not disclosed
E6		Emissions Scope 4	(Eliminated) It is hardly/not disclosed
			Waste management efficiency
E7a	KPI_E5	Waste production	(Divided) Some SOEs provide a full disclosure but others only disclose E7a.
E7b	KPI_E6	Distinction between hazardous and non-hazardous waste	
E8	KPI_E7	Managed waste	
E9	KPI_E8	Reused waste	
Social Indicators			
Human capital			
S1	KPI_S1	Employees	
S2	KPI_S2	Gender diversity among employees	
S3	KPI_S3	Senior management	
S4	KPI_S4	Senior management diversity	
S5	KPI_S5	Employment stability	

AECA Reference	Variable number	Name of the variable	Additional information
S6	KPI_S6	Paternity leave	
S7	KPI_S7	Maternity leave	
S8	KPI_S8	Disabilities	Number of employees with disabilities
S9	KPI_S9	Occupational risks	Workplace accidents
S10	KPI_S10	Absenteeism	
S11	KPI_S11	Employee turnover	Employees that leave the company voluntarily
S12	KPI_S12	Employment growth	Net creation or destruction of employment
S13	KPI_S13	Seniority	Average number of years that employees have worked at the company. More frequently companies disclose the age of the employees. This disclosure has also been considered.
S14	KPI_S14	Training	Hours of training for employees (also taken into account when companies disclose money spent)
S15	KPI_S15	Workers covered by collective bargaining agreements	
Social Capital			
S16	KPI_S16	Customer management	(Adapted) Customer claims, satisfaction surveys. It was difficult to find a common number.
S17	KPI_S17	Responsible procurement and outsourcing	(Adapted) CSR measures for the supply chain, incidents with suppliers. It was difficult to find a common number.
S18		Suppliers, minerals from conflict-affected areas	(Eliminated) Not Applicable
S19	KPI_S18	Supplier payments	Average payment period
S20	KPI_S19	Human rights support	(Adapted) Achievements in the SDG or Global compact
S21	KPI_S20	Actions to support human rights	Actions taken to support Human rights (SDGs)
S22	KPI_S21	Training against corruption and bribery	
S23	KPI_S22	Cases of corruption and bribery	
S24	KPI_S23	Actions regarding cases of corruption and bribery	
Corporate governance indicators			
Good governance			
CG1	KPI_CG1	Board members	
CG2	KPI_CG2	Independent board members	
CG3	KPI_CG3	CSR Board members	
CG4	KPI_CG4	Executive committee	
CG5	KPI_CG5	Audit committee	
CG6	KPI_CG6	Nominations committee	
CG7	KPI_CG7	Board meetings	
CG8	KPI_CG8	Board Remuneration	
CG9	KPI_CG9	Board diversity	
CG10	KPI_CG10	Corruption and bribery (Ethics, good governance and compliance committee)	

Source: Authors' adaptation of AECA Integrated Suite (https://is.aeca.es/suite/#/home; last access July 2020)

We have only considered information in the NFR documents. The NFR statement should be a stand-alone document, as recommended by the IIRC and AECA. As most companies disclose it together with the annual financial report, some of them do not disclose the financial indicators. Trying to complete the financial indicators through the annual financial report makes it more complicated for users to fulfil the objectives of a complete IR.

To assess the reporting practices of Spanish SOEs, we used several dimensionality reduction techniques concerning the quantity of information disclosed. We use Ward's Hierarchical Cluster analysis method (Ward, 1963) to identify groups of SOEs that disclose similar information. We have used Multidimensional Scaling (MDS), which provides a depiction of SOE's practices summarised into a two-dimensional plot. A Pro-Fit analysis has been used to identify key elements that characterized IR disclosure patterns, i.e. to identify the extent to which certain variables were crucial to the positions of the SOEs in the MDS.

6. Analysis of results

All the 15 Spanish SOEs obliged to submit NFR statements by the Law of 2018 do disclose information, except INECO. Additionally, six big undertakings, six groups and one sub-group, not required to prepare them, also submit some type of NFR statement. On average, they disclose 54% of the information recommended by AECA. Thus, besides NFR disclosure, there is still room for improvement to fully include all the demands of the Spanish regulation and the AECA framework.

Qualitative information, the *Business model* and *Due diligence and policies*, is above average and around 60%. As the average for Key Performance Indicators (KPI) is 51%, this suggests that quantitative information -detailed indicators- represents a greater challenge than disclosing qualitative information. With respect to these KPIs, those related to *human capital* amount to almost 70%, while *economic efficiency* at 41%, *social capital* 41% and *waste management* 38% score the lowest. This lack of information could be influenced by various possible reasons. With respect to *economic efficiency*, as the NFR statement is in most cases submitted in conjunction with the annual financial report -or even included in it, less importance is perhaps attached to financial indicators. Relationships with clients and suppliers is included in *social capital*, and the latter in particular is highly regulated for SOEs and may not receive the same attention in NFR as it does in the private sector, as contracting issues have their own legal requirements with respect to disclosure. *Waste management* indicators are still not reported, except for certain SOEs devoted to production. These results suggest that, in many cases, IR is not yet a priority.

Table 4: Scores by section of IR

Variable number	**Category name**	**Items**	**Min (n)**	**Max (n)**	**Average (n)**	**Average (%)**	**Stand. Dev. (n)**
BM_1 to BM_10	**BUSINESS MODEL**	**10**	0	10	6.52	65.19%	2.03
BM_1 to BM_4	*Organization and its environment*	*4*	0	4	3.26	81.48%	0.94
BM_5 to BM_7	*Strategies*	*3*	0	3	1.44	48.15%	1.01
BM_8 to BM_10	*Business model*	*3*	0	3	1.81	60.49%	0.83
BM_11 to BM_18	**DUE DILIGENCE: POLICIES AND THEIR RESULTS**	**8**	0	8	4.81	60.19%	2.73
BM_11 to BM_16	*Policies*	*6*	0	6	3.67	61.11%	1.92
BM_17 to BM_18	*Main risks*	*2*	0	2	1.15	57.41%	0.95
	KEY PERFORMANCE INDICATORS	**55**	6	48	27.81	50.57%	11.44
KPI_F1 to KPI_F14	Economic efficiency	*14*	0	11	5.74	41.01%	3.03
KPI_E1 to KPI_E8	Environmental indicators	8	0	8	3.96	49.54%	2.72
KPI_E1 to KPI_E4	*Energy efficiency and emissions*	*4*	0	4	2.44	61.11%	1.60

KPI_E5 to KPI_E8	*Waste management efficiency*	*4*	0	4	1.52	37.96%	1.48
KPI_S1 to KPI_S23	Social Indicators	23	0	22	13.52	58.78%	6.58
KPI_S1 to KPI_S15	*Human capital*	*15*	0	15	10.22	68.15%	4.59
KPI_S16 KPI_S23	*Social Capital*	*8*	0	7	3.30	41.20%	2.32
KPI_CG1 to KPI_CG10	Corporate governance indicators: Good governance	10	0	8	4.59	45.93%	2.42
TOTAL INDEX		**73**	**8**	**64**	**39.15**	**53.63%**	**15.03**

Source: the authors

Table 5 shows the results by company. As can be seen, 8 SOEs account for 70% or more of the information disclosed (TRAGSA, ENUSA, ADIF, NAVANTIA, AENA, ENSA, LOTERIAS and RENFE), and 7 more companies are above the average (54%) (ICO, ENAIRE, CORREOS, ISDEFE, RTVE, PARADORES and CESCE). Among those that are below the average, 6 are not obliged to submit NFR statements but they are making an effort regarding NFR (AP Valencia, SEPI_DE, CDTI, RED, AP Sevilla and AP Gijón).

In summary, the level of compliance in extended NFR in the first mandatory year, 2018, shows a good performance with respect to qualitative information, the *business model* and *due diligence and policies*. Within this information, the *outcomes* are usually disclosed but less information is found regarding the *inputs* and *specific processes*. Poorer performance is found in general regarding quantitative information (KPIs), which also shows different behaviour depending on the topic. Among KPIs, the highest scores are for *emissions*, *human capital* and, lower but still high, *corporate governance*.

Table 5: Scores (%) by company (arranged from greater to lower in total index)

	Company	CLUSTER	Total Index	B MOD	*Org. and Env..*	*Strategies*	*Business mod.*	DUE DILIG. POLICIES	*Policies*	*Main risks*	KPI	Econ. KPI	Env. KPI	*Emissions*	*Waste*	Social KPI	*Human*	*Social*	CGov
20	TRAGSA	A	**88**	**90**	100	100	67	**88**	83	100	**87**	79	100	100	100	91	93	88	80
16	ENUSA	A	**77**	**90**	100	67	100	**88**	83	100	**73**	43	75	75	75	96	100	88	60
1	ADIF	A	**75**	**70**	100	67	33	**88**	83	100	**75**	64	63	100	25	83	87	75	80
17	NAVANTIA	A	**75**	**60**	100	33	33	**88**	83	100	**76**	71	100	100	100	78	100	38	60
9	AENA	A	**73**	**70**	100	67	33	**88**	83	100	**71**	64	38	75	0	83	100	50	80
15	ENSA	B	**71**	**90**	100	100	67	**88**	83	100	**65**	21	100	100	100	87	87	88	50
25	LOTERIAS	A	**71**	**90**	100	100	67	**75**	83	50	**67**	43	75	75	75	74	93	38	80
12	RENFE	A	**70**	**70**	100	67	33	**88**	83	100	**67**	57	63	75	50	83	100	50	50
11	ICO	A	**68**	**60**	75	33	67	**75**	83	50	**69**	50	63	75	50	78	100	38	80
8	ENAIRE	A	**66**	**100**	100	100	100	**88**	83	100	**56**	57	38	75	0	70	73	63	40
21	CORREOS	B	**64**	**70**	100	33	67	**88**	83	100	**60**	21	50	100	0	83	93	63	70
24	ISDEFE	B	**64**	**70**	75	33	100	**75**	83	50	**62**	29	88	100	75	74	87	50	60
23	RTVE	B	**62**	**80**	100	67	67	**100**	100	100	**53**	0	75	100	50	78	87	63	50
26	PARADORES	B	**60**	**60**	100	33	33	**88**	83	100	**56**	50	13	0	25	83	87	75	40
7	CESCE	B	**58**	**60**	75	33	67	**88**	83	100	**53**	14	50	100	0	78	87	63	50
2	AP Barcelona	C	**49**	**50**	50	33	67	**50**	33	100	**49**	64	75	100	50	39	40	38	30
22	AP Cartagena	C	**47**	**60**	75	67	33	**25**	33	0	**47**	36	75	75	75	57	67	38	20
5	***AP Valencia***	C	**44**	**70**	75	33	100	**50**	67	0	**38**	64	0	0	0	35	47	13	40
14	EFE	B	**44**	**60**	100	33	33	**38**	50	0	**42**	14	63	75	50	52	60	38	40
18	HUNOSA	B	**44**	**50**	50	67	33	**88**	83	100	**36**	21	25	50	0	52	60	38	30
13	SEPI	C	**40**	**50**	75	0	67	**25**	33	0	**40**	43	63	50	75	35	47	13	30
27	SENADA	C	**32**	**40**	75	0	33	**38**	50	0	**29**	43	0	0	0	26	40	0	40
19	***SEPI_DE***	D	**29**	**40**	50	0	67	**13**	17	0	**29**	7	50	50	50	26	40	0	50
6	***CDTI***	C	**25**	**60**	75	0	100	**0**	0	0	**22**	29	0	0	0	22	27	13	30
10	***RED***	D	**23**	**80**	75	100	67	**0**	0	0	**16**	64	0	0	0	0	0	0	0
4	***AP Sevilla***	D	**19**	**70**	75	33	100	**13**	17	0	**11**	43	0	0	0	0	0	0	0
3	***AP Gijón***	D	**11**	**0**	0	0	0	**0**	0	0	**15**	14	0	0	0	26	40	0	0
			53.63	**65.19**	81.48	48.15	60.49	**60.19**	61.11	57.41	**50.57**	41.01	49.54	61.11	37.96	58.78	68.15	41.20	45.93

Source: the authors

Disclosure patterns.

Figure 1 and Figure 2 show the results of the Cluster analysis and Multidimensional Scaling (MDS) carried out to find common patterns of behaviour among the SOEs analysed. Four groups have been identified (see Figure 1) through the cluster analysis, and these groups have been represented in Figure 2 using the MDS analysis. The Mann-Whitney analysis shown in Table 6 compares pairs of groups. It shows that the four groups differ in the quantity of information provided in each of the types of information required by the AECA IR, and that the differences mainly came from Due diligence and Policies information and from KPIs, especially those related to social issues and corporate governance.

Table 6: Comparison of Average and Mann-Whitney among groups.

	Groups				Mann-Whitney*					
Average	A	B	C	D	G 1 - 2	G 1 - 3	G 1 - 4	G 2 - 3	G 2 - 4	G 3 - 3
TOTAL	73.7%	58.4%	39.3%	20,5%	0.001	0	0.003	0.013	0.004	0.019
B MOD	77.8%	67.5%	55.0%	47.5%	0.167	0.008	0.148	0.108	0.461	1
DUE DILIG. POLICIES	84.7%	81.3%	31.3%	6.3%	0.888	0	0.003	0.003	0.004	0.067
KPI	71.3%	53.4%	37,6%	17,7%	0.001	0	0.003	0.02	0.004	0.019
Econ. KPI	58.7%	21.4%	46.4%	32.1%	0	0.145	0.106	0.008	0.808	0.476
Env. KPI	68.1%	57.8%	35.4%	12.5%	0.481	0.181	0.011	0.282	0.028	0.352
Social KPI	81.6%	73.4%	35.5%	13.0%	0.321	0	0.003	0.003	0.004	0.067
CGov KPI	67.8%	48.8%	31.7%	12.5%	0.021	0.001	0.006	0.013	0.048	0.257

* Significance levels to reject the null hypotheses (distributions of the groups are the same) are shown.

The Profit analysis shown in Table 7 identifies the extent to which certain variables were relevant to the position of the SOEs in the MDS graphic. Table 7 shows the items that are significant for the positions of the SOEs regarding Dimension 1 and Dimension 2 of the MDS. Dimension 1 is related to the SOEs' corporate governance, such as executive and audit committees and the remuneration of the boards, key issues of risk management, customer management and environmental policies. All this information is included by the SOEs in group A and most of group B, which are on the positive side, with low levels in other groups. Dimension 2 is related to IR, including financial and non-financial information in NFR, establishing links between strategic objectives and financing, and informing about profitability indebtedness and the executive committee. This dimension shows that most of the SOEs in group A are closer to implementing IR successfully.

Table 7: Pro-Fit regression significant results for Dimensions 1 and 2

Dimension 1	R Narkel	Dim 1	Dim 2	
BM_3	0.806	2.773 0.064	-0.365 0.658	Challenges and uncertainties Main factors and trends that can affect the evolution of the business
BM_13	0.799	3.533 0.086	-4.044 0.105	Environmental policies
BM_18	0.789	2.291 0.085	-1.117 0.373	Risk mitigation actions (taken and planned) Actions taken to mitigate and avoid risk, opportunities identified in the process.
KPI_S11	0.565	1.060 0.016	-0.896 0.146	Absenteeism
KPI_S16	0.577	1.077 0.018	-0.298 0.666	Customer management
KPI_CG4	0.615	1.222 0.041	-2.569 0.039	Executive committee
KPI_CG5	0.877	3.432 0.094	1.747 0.362	Audit committee
KPI_CG8	0.756	2.393 0.042	0.979 0.221	Remuneration of the board
Dimension 2	R Narkel	Dim 1	Dim 2	
BM_7	0.671	0.590 0.231	-1.746 0.056	Resource allocation plans Resources and strategies implemented to achieve objectives
KPI_F12	0.495	0.170 0.741	-1.947 0.060	Return on Investment/Equity
KPI_F13	0.622	0.705 0.312	-1.655 0.085	Indebtedness
KPI_CG4	0.615	1.222 0.041	-2.569 0.039	Executive committee

7. Discussion.

SOEs are answerable to a wider variety of stakeholders as a result of their hybridity. This is why NFR and, especially, IR, are considered key to satisfying the multiple accountability relationships they face to legitimate their actions. This work analyses how Spanish SOEs have dealt with the NFR requirements, and, as a consequence, the extent of IR implementation. Voluntary reporting is also studied as there is a group of SOEs not obliged to do so that submit some non-financial information through sustainability reports. Results show that coercive isomorphism (through legal obligation), mimetic isomorphism (through implementation of best practices) and normative isomorphism (professional practice) are catalysts for the disclosure of new types of information, coercive isomorphism being the most important. Nevertheless, the NFR contents do vary. Enforced reporting shows a great variation, whereas voluntary reporting is kept to a minimum. Spanish regulation is quite demanding, compared to the flexibility of the European directive on non-financial information (Bold, 2017). This suggest that a legal framework with detailed requirements is a necessary but insufficient condition in countries like Spain which have an administrative practice with a legalistic philosophy (Torres, Yetano, & Pina, 2019). As Chelli, Durocher, and Richard (2014) pointed out, regulation prompts organizations to comply with the law to ensure organizational legitimacy. However, regulation often has varying impacts that can be explained through institutional and stakeholder theories. The results of this study have shown that there are four different groups of SOEs in terms of greater to lower disclosure, showing that there are different levels of implementation. Results confirm that there are different speeds or patterns towards non-financial information reporting, and that IR is only approached by best performers, which also excel in corporate governance disclosures.

This variety of results or patterns suggest that there could be a dichotomy between rhetorical and instrumental implementation - decoupling- and/or different ways to perceive isomorphism pressures (Torres et al., 2019) and the needs of the stakeholders. The discourse regarding the importance of this kind of information has permeated SOEs to different extents. SOEs, as hybrid organizations, face contrasting logics as they are halfway between the private and the public sector. This creates the need to legitimate ambiguous goals, both financial and non-financial, to a variety of stakeholders. Our results show that IR is not yet a priority for most SOEs, as economic indicators are among the KPIs that are least disclosed. It seems that SOEs perceive financial reporting and non-financial reporting as addressing different stakeholders' needs, and so KPIs related to financial statements are hardly included together with the non-financial information. The non-profit side of SOEs requests social, environmental and corporate information, which is kept separate from financial information. SOEs awareness of the existence of different stakeholders, as the stakeholder theory states, leads them to prepare separate sets of information. Moreover, results also show that quantitative information within NFR receives less attention than qualitative information. Considering that financial reports are quantitative in nature, SOEs seem to perceive two main ways to legitimate their actions, one quantitative and one qualitative. The existence of a regulation means that rather than prioritize one type of stakeholder over the others to only fulfil the needs of specific stakeholders (Lu & Abeysekera, 2014; Thijssens et al., 2015), SOEs adapt the content of reports to perceived accountability needs. By disclosing financial and non-financial information in separate reports in most cases, SOEs show that IR is not yet a priority in this area.

The EU Directive on NFR has become a "paradigm shift" in reporting by increasing the pressure on NFR. It represented a meaningful step toward integrating financial and non-financial disclosures (Kinderman, 2020). However, new NFR norms or routines create decoupling strategies through which SOEs conform to pressures in a ceremonial fashion (Oliver, 1991; Meyer and Scott, 1992; Scott, 2013). This decoupling could be due to the recent introduction of the regulation or to an attempt to provide less sensitive or easier to prepare information (Pina et al., 2009). As highlighted by the proposal in Directive 2021/0104, the lack of precision of the current EU regulation regarding NFR makes it difficult for organizations to know exactly what information to report (weak coercive pressures). Future studies should complement this study to confirm whether the fact that KPIs, or quantitative information, receive less attention is related to mimetic processes that due to the recent introduction of the legislation have had no time to standardize disclosures. In fact, a close look at indicators such as training shows different measures (hours, money allocated, number of employees trained), suggesting that there could also be decoupling due to a lack of consensus among professionals on the appropriate measures, as well as inconsistent normative pressures, which affect KPIs more directly than qualitative information. The distinction among four different groups of SOEs allows us to shed some light on this decoupling process. The amount of disclosure decreases in all types of information while moving form group A to D.

Groups A and B show good performances, with all the SOES above the average, and they achieve 60% disclosure at least, except one. The scores of the others groups - groups C and D - vary from 11% to 49% of the information. Group A excels in providing the Integrated Report, including both financial and non-financial information. Top performers - groups A and B - provide more information in NFR about corporate governance than the rest, such as executive and audit committees, remuneration of the board and they also give greater attention to risks and customers. It could be argued that a sound corporate governance structure benefits the SOEs in NFR. It is also possible to argue that a sound corporate governance structure is a necessary condition to disclose both financial and non-financial information -group A- but not a sufficient one - group B. Among the poor performers, these are all those that are not required to prepare the NFR, confirming that mimetic isomorphism promotes voluntary reporting practices but it is not enough to really change corporate practices, especially when reforms are recent and without clear requirements.

Finally, a closer look at the KPIs also reflects the NFR priorities of SOEs. KPIs related to human capital and energy efficiency are disclosed to a greater extent. This suggests that the discourses about the importance of protecting diversity and gender equality, and the move towards a more sustainable society, have permeated the legitimacy discourse of SOEs, and so they receive greater attention.

8. Conclusions

As a result of EU Directive 2014/95/EU and Law 11/2018, the Spanish SOEs required to do so submit NFR statements. The highest-ranked SOEs include information about corporate governance, risk management, customer management and environmental policies, their NFR being closer to the IR. Some SOEs that are exempted even report non-financial information, perceiving its importance to legitimate their practices, either rhetorically or instrumentally. However, it has been shown that there is still room for improvement, especially regarding quantitative information. Taking the AECA framework as a benchmark, this comparative study has shown that IR is not yet a priority for many SOEs.

There are different speeds in implementing NFR which, have actually led to the issue of a new EU Directive proposal that addresses some issues highlighted in the paper. Firstly, companies tend to be more focussed on qualitative rather than quantitative information, which reduces the quality and comparability of the information. Secondly, many SOEs report some non-financial information, but not all of them report all the information that is relevant for users (European Commission, 2021). Third, there are different ways of NFR disclosure, either as a separate report or as part of the management report. Thus, there is a need for a list of clearly defined indicators of the information to be reported, and which may be addressed by future sustainability reporting standards. It should also be clarified where NFR has to be disclosed and how it should be linked to financial reports. The existence of a common regulatory framework will help stakeholders by avoiding reliability and comparability problems that usually create impediments to making informed decisions (Khan et al., 2020).

Most SOEs still separate financial and non-financial reporting, suggesting that they perceive that each set of information addresses different stakeholder needs. Our results confirm that besides being important to convince CFOs, obligatory requirements strongly help in fulfilling the new information needs/tendencies of society. Mandatory regulations on the reporting of non-financial performance information has become the dominant approach to promote sustainability practices in both developed and emerging economies (Kinderman, 2020). Mandatory NFR assists external stakeholders' decision-making (Gao, Dong, Ni, & Fu, 2016). However, the quality of the information also depends on a sound corporate governance structure.

Future studies should compare NFR disclosures in countries with lower and greater disclosure flexibility, in order to confirm the capacity of coercive isomorphism to bring about changes and the impact of the cultural background of each country. Additionally, the evolution of this recent reform calls for future studies to see if the disclosure levels shown in this paper are a starting point or reveal the willingness for maximum NFR disclosure by SOEs. Future studies should analyse the importance that SOEs attach to NFR users. The recent nature of the regulation (incipient mimetic practices), the lack of precision in current legal requirements (weak coercion) and the lack of convergent and harmonized sustainability standards (inconsistent normative pressures) are reasons that currently cause, differences in NFR and IR adoption.

Figure 1: Cluster dendrogram

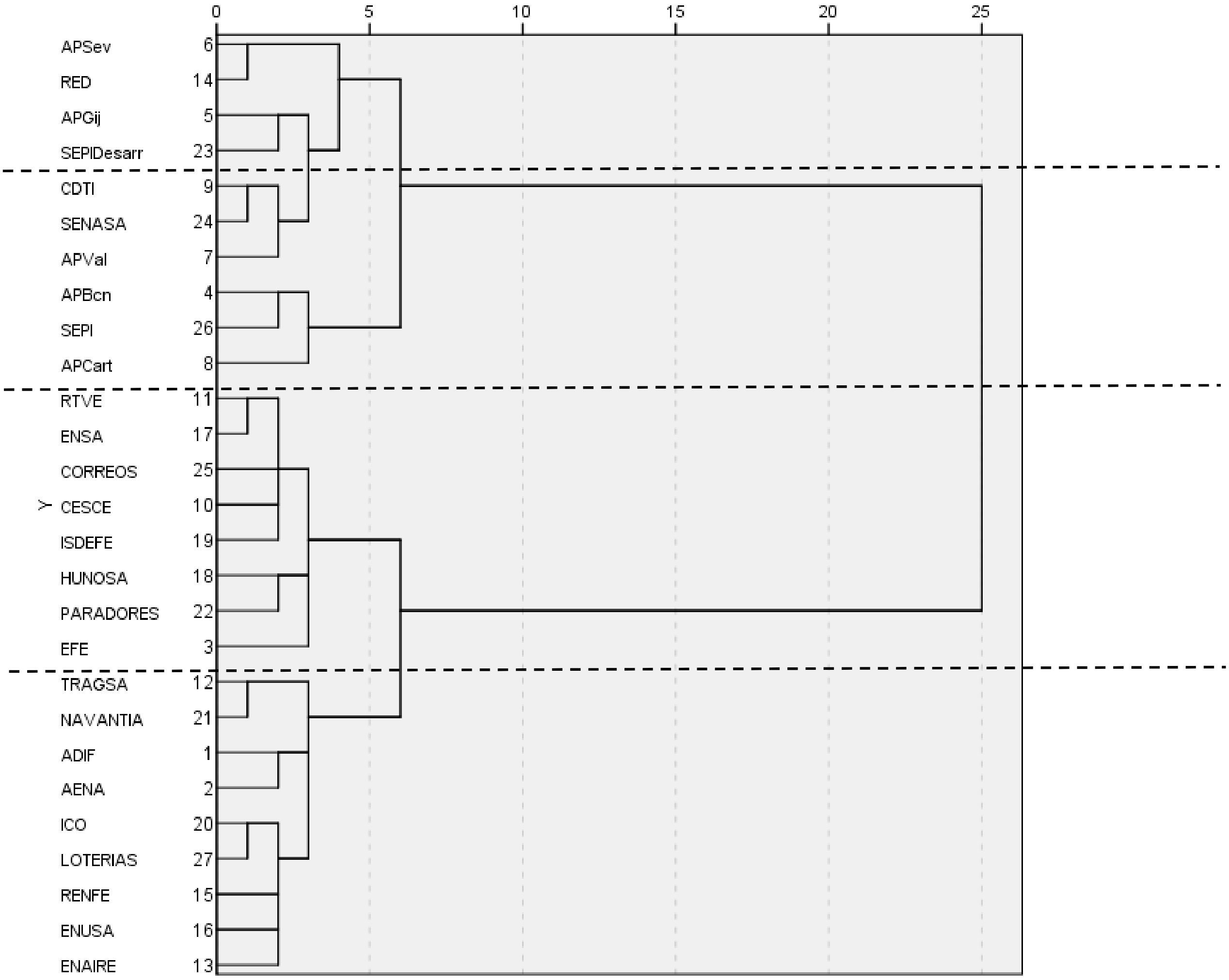


Figure 2: MDS representation

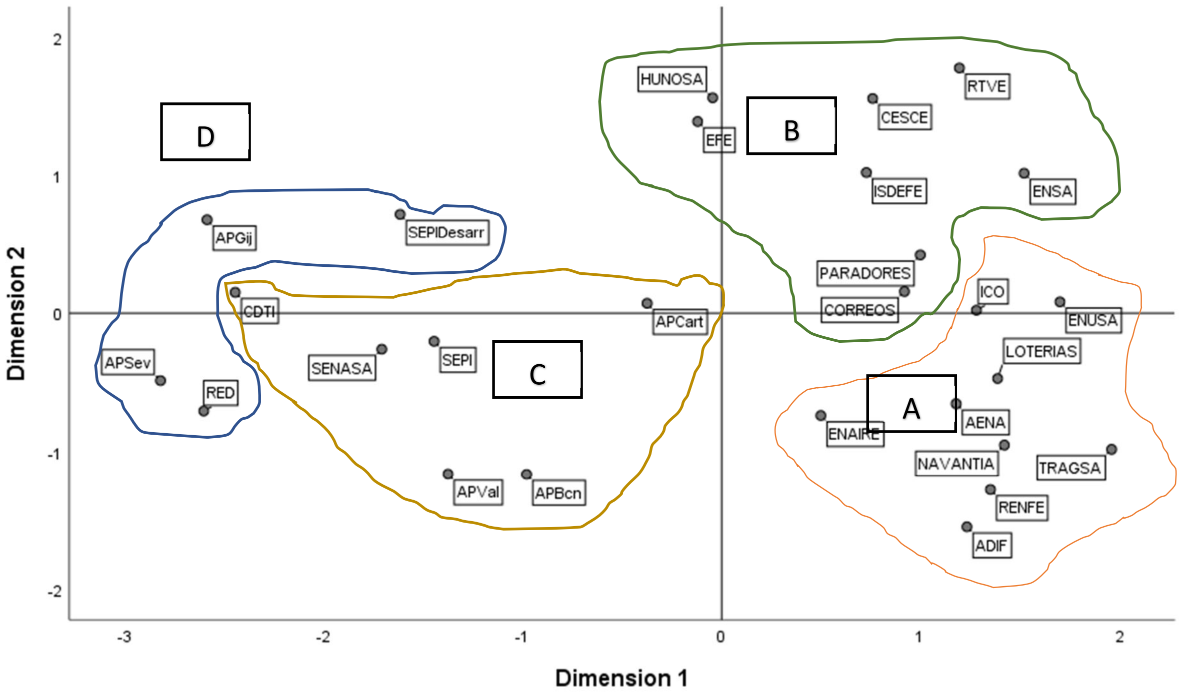
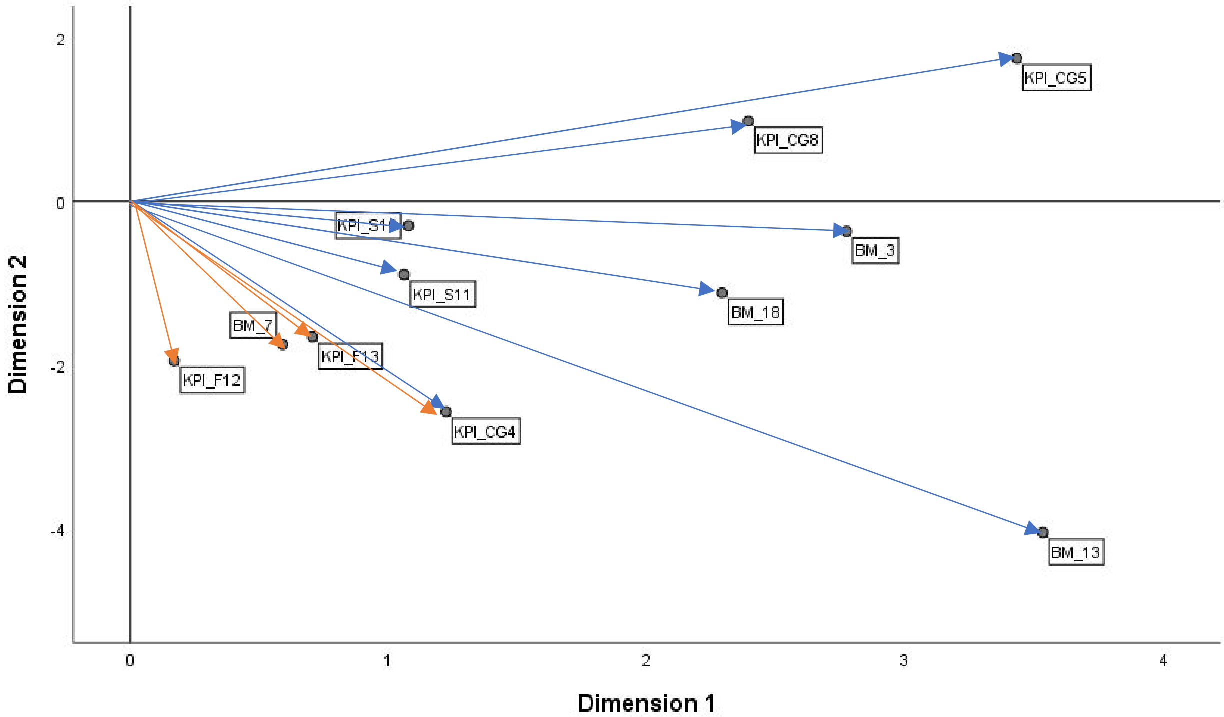


Figure 3: Pro-Fit analysis. Vectors associated with each variable. Dimension 1 and Dimension 2.



Note: In blue, significant for Dimension 1; in orange, significant for Dimension 2.

References

Adams, C. A. (2015). The international integrated reporting council: A call to action. *Critical Perspectives on Accounting*, *27*, 23–28. https://doi.org/10.1016/j.cpa.2014.07.001

Adams, C. A., & Larrinaga, C. (2019). Progress: engaging with organisations in pursuit of improved sustainability accounting and performance. *Accounting, Auditing & Accountability Journal*, *32*(8), 2367–2394. https://doi.org/10.1108/09513570710748535

AECA. (2012). *Integrated Reporting: The Integrated Scoreboard (IS-FESG) and its XBRL Taxonomy*. Madrid: Spanish Association of Accounting and Business Administration (AECA).

AECA. (2018). *Modelo AECA de información integrada para la elaboración del Estado de Información No Financiera Guía ilustrativa del Modelo*. Madrid: Spanish Association of Accounting and Business Administration (AECA).

AECA, Lizcano, J. L., Flores, F., Mora, M., & Rejón, M. (2012). *Integrated Reporting: The Integrated Scoreboard (IS-FESG) and its XBRL Taxonomy*. Madrid: Spanish Association of Accounting and Business Administration (AECA). Retrieved from www.aecareporting.com

Aharoni, Y. (1981). Performance Evaluation of State-Owned Enterprises: A Process Perspective. *Management Science*. INFORMS. https://doi.org/10.2307/2631221

Alexius, S., & Cisneros Örnberg, J. (2015). Mission(s) impossible? Configuring values in the governance of state-owned enterprises. *International Journal of Public Sector Management*, *28*(4–5), 286–306. https://doi.org/10.1108/IJPSM-08-2015-0151

Alexius, S., & Grossi, G. (2018). Decoupling in the age of market-embedded morality: responsible gambling in a hybrid organization. *Journal of Management and Governance*, *22*(2), 285–313. https://doi.org/10.1007/s10997-017-9387-3

Amran, A., & Haniffa, R. (2011). Evidence in development of sustainability reporting: A case of a developing country. *Business Strategy and the Environment*, *20*(3), 141–156. https://doi.org/10.1002/bse.672

Arena, C., Liong, R., & Vourvachis, P. (2018). Carrot or stick: CSR disclosures by Southeast Asian companies. *Sustainability Accounting, Management and Policy Journal*, *9*(4), 422–454. https://doi.org/10.1108/SAMPJ-06-2016-0037

Argento, D., Culasso, F., & Truant, E. (2016). Competing logics in the expansion of public service corporations. *Utilities Policy*, *40*, 125–133. https://doi.org/10.1016/J.JUP.2016.02.007

Argento, D., Grossi, G., Persson, K., & Vingren, T. (2019). Sustainability disclosures of hybrid organizations: Swedish state-owned enterprises. *Meditari Accountancy Research*, *27*(4), 505–533. https://doi.org/10.1108/MEDAR-07-2018-0362

Beck, C., Dumay, J., & Frost, G. (2017). In Pursuit of a 'Single Source of Truth': from Threatened Legitimacy to Integrated Reporting. *Journal of Business Ethics*, *141*(1), 191–205. https://doi.org/10.1007/s10551-014-2423-1

Beckett, P. (2019). *Ownership, Financial Accountability and the Law: Transparency Strategies and Counter-initiatives.* Routledge.

Behn, R. D. (2001). *Rethinking Democratic Accountability*. Washington, DC, DC: Brookings Institution Press.

Behnam, M., & MacLean, T. L. (2011). Where Is the Accountability in International Accountability Standards?: A Decoupling Perspective. *Business Ethics Quarterly*, *21*(1), 45–72. https://doi.org/10.5840/beq20112113

Bold, F. (2017). *Compliance and reporting under the EU Non-Financial Reporting Directive. Requirements and opportunities*. Brussels, Belgium.

Bovens, M. (2007). *Public Accountability*. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199226443.003.0009

Buchholz, R. A., & Rosenthal, S. B. (2005). Toward a contemporary conceptual framework for stakeholder theory. *Journal of Business Ethics*, *58*(1), 137–148. https://doi.org/10.1007/s10551-005-1393-8

Chelli, M., Richard, J., Durocher, S., & Richard, J. (2014). France's new economic regulations: Insights from institutional legitimacy theory. *Accounting, Auditing and Accountability Journal*, *27*(2), 283–316. https://doi.org/10.1108/AAAJ-07-2013-1415

Chen, S., & Bouvain, P. (2009). Is corporate responsibility converging? a comparison of corporate responsibility reporting in the USA, UK, Australia, and Germany. In *Journal of Business Ethics* (Vol. 87, pp. 299–317). https://doi.org/10.1007/s10551-008-9794-0

Christensen, L. T. (2017). How hybridity has evolved in the governance of state-owned enterprises: evidence from Danish and Swedish passenger rail services from 1990 to 2015. *Public Money and Management*, *37*(6), 401–408. https://doi.org/10.1080/09540962.2017.1344016

Córdoba-Pachón, J.-R., Garde-Sánchez, R., & Rodríguez-Bolívar, M.-P. (2014). A Systemic View of Corporate Social Responsibility (CSR) in State-Owned Enterprises (SOEs). *Knowledge and Process Management*, *21*(3), 206–219. https://doi.org/10.1002/kpm.1453

Deegan, C. (2002). *Introduction: The legitimising effect of social and environmental disclosures – a theoretical foundation*. *Accounting, Auditing & Accountability Journal* (Vol. 15). https://doi.org/10.1108/09513570210435852

Deegan, C., & Blomquist, C. (2006). Stakeholder influence on corporate reporting: An exploration of the interaction between WWF-Australia and the Australian minerals industry. *Accounting, Organizations and Society*, *31*(4–5), 343–372. https://doi.org/10.1016/j.aos.2005.04.001

Denis, J.-L., Ferlie, E., & Van Gestel, N. (2015). Understanding Hybridity in public organizations. *Public Administration*, *93*(2), 273–289. https://doi.org/10.1111/padm.12175

DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, *48*(2), 147–160. https://doi.org/Article

Dumay, J., Bernardi, C., Guthrie, J., & Demartini, P. (2016). Integrated reporting: A structured literature review. *Accounting Forum*, *40*(3), 166–185. https://doi.org/10.1016/j.accfor.2016.06.001

Ebrahim, A., Battilana, J., & Mair, J. (2014). The governance of social enterprises: Mission drift and accountability challenges in hybrid organizations. *Research in Organizational Behavior*, *34*, 81–100. https://doi.org/10.1016/j.riob.2014.09.001

Eccles, R. G., & Youmans, T. (2015). Implied Materiality and Material Disclosures of Credit Ratings. *Harvard Business School General Management- Working Paper*, 15–79.

European Commission. (2021). *Proposal for a Directive amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting* (Vol. 0104).

European Reporting Lab. (2021). *Proposals for a Relevant and Dynamic Eu Sustainability Reporting Standard-Setting*.

Florio, M., & Fecher, F. (2011). The Future of Public Enterprises: Contributions to a New Discourse. *Annals of Public and Cooperative Economics*, *82*(4), 361–373. https://doi.org/10.1111/j.1467-8292.2011.00445.x

Fortanier, F., Kolk, A., & Pinkse, J. (2011). Harmonization in CSR Reporting: MNEs and Global CSR Standards. *Management International Review*, *51*(5), 665–696. https://doi.org/10.1007/s11575-011-0089-9

Gallery, G., Cooper, E., & Sweeting, J. (2008). Corporate disclosure quality: Lessons from Australian companies on the impact of adopting international financial reporting standards. *Australian Accounting Review*, *18*(3), 257–273. https://doi.org/10.1111/j.1835-2561.2008.0030.x

Gao, F., Dong, Y., Ni, C., & Fu, R. (2016). Determinants and Economic Consequences of Non-financial Disclosure Quality. *European Accounting Review*, *25*(2), 287–317. https://doi.org/10.1080/09638180.2015.1013049

Garde Sánchez, R., Rodríguez Bolívar, M. P., & López Hernández, A. M. (2017). Corporate and managerial characteristics as drivers of social responsibility disclosure by state-owned enterprises. *Review of Managerial Science*, *11*(3), 633–659. https://doi.org/10.1007/s11846-016-0199-7

Greenwood, R., Raynard, M., Kodeih, F., Micelotta, E. R., & Lounsbury, M. (2011). Institutional Complexity and Organizational Responses. *Academy of Management Annals*, *5*(1), 317–371. https://doi.org/10.5465/19416520.2011.590299

Grossi, G., Papenfuß, U., & Tremblay, M.-S. (2015). Corporate governance and accountability of state-owned enterprises. *International Journal of Public Sector Management*, *28*(4/5), 274–285. https://doi.org/10.1108/IJPSM-09-2015-0166

Grossi, G., & Thomasson, A. (2015). Bridging the accountability gap in hybrid organizations: The case of Copenhagen Malmö Port. *International Review of Administrative Sciences*, *81*(3), 604–620. https://doi.org/10.1177/0020852314548151

Guthrie, J., Manes-Rossi, F., & Orelli, R. L. (2017). Integrated reporting and integrated thinking in Italian public sector organizations. *Meditari Accountancy Research*, *25*(4), 553–573. https://doi.org/10.1108/MEDAR-06-2017-0155

Helfaya, A., Whittington, M., & Alawattage, C. (2019). Exploring the quality of corporate environmental reporting: Surveying preparers' and users' perceptions. *Accounting, Auditing and Accountability Journal*, *32*(1), 163–193. https://doi.org/10.1108/AAAJ-04-2015-2023

Jamali, D. (2010). MNCs and international accountability standards through an institutional lens: Evidence of symbolic conformity or decoupling. *Journal of Business Ethics*, *95*(4), 617–640. https://doi.org/10.1007/s10551-010-0443-z

Jensen, J. C., & Berg, N. (2012). Determinants of Traditional Sustainability Reporting Versus Integrated Reporting. An Institutionalist Approach. *Business Strategy and the Environment*, *21*(5), 299–316. https://doi.org/10.1002/bse.740

Johansson, J. E., & Vakkuri, J. (2018). *Governing Hybrid Organizations. Exploring Diversity of Institutional Life*. New York: Routledge.

Khan, H. Z., Bose, S., Mollik, A. T., & Harun, H. (2020). "Green washing" or "authentic effort"? An empirical investigation of the quality of sustainability reporting by banks. *Accounting, Auditing and Accountability Journal*, *34*(2), 338–369. https://doi.org/10.1108/AAAJ-01-2018-3330

Kinderman, D. (2020). The challenges of upward regulatory harmonization: The case of sustainability reporting in the European Union. *Regulation and Governance*, *14*(4), 674–697. https://doi.org/10.1111/rego.12240

Koppell, J. G. S. (2006). *The politics of quasi-government: Hybrid organizations and the dynamics of bureaucratic control*. Cambridge, UK: Cambridge University Press.

Kowalski, P., Büge, M., Sztajerowska, M., & Egeland, M. (2013). State-Owned Enterprises. Trade Effects and Policy implications. *OECD Trade Policy Papers*, (147). https://doi.org/http://dx.doi.org/10.1787/5k4869ckqk7l-en

Lozano, R., & Huisingh, D. (2011). Inter-linking issues and dimensions in sustainability reporting. *Journal of Cleaner Production*, *19*(2–3), 99–107. https://doi.org/10.1016/j.jclepro.2010.01.004

Lu, Y., & Abeysekera, I. (2014). Stakeholders' power, corporate characteristics, and social and environmental disclosure: evidence from China. *Journal of Cleaner Production*, *64*, 426–436. https://doi.org/10.1016/J.JCLEPRO.2013.10.005

Luke, B. (2010). Examining accountability dimensions in state-owned enterprises. *Financial Accountability and Management*, *26*(May), 134–162. https://doi.org/10.1111/j.1468-0408.2010.00496.x

Mair, J., Mayer, J., & Lutz, E. (2015). Navigating Institutional Plurality: Organizational Governance in Hybrid Organizations. *Organization Studies*, *36*(6), 713–739. https://doi.org/10.1177/0170840615580007

Manes-Rossi, F. (2018). Is integrated reporting a new challenge for public sector entities? *African Journal of Business Management*, *12*(7), 172–187. https://doi.org/10.5897/ajbm2018.8498

Meyer, J. W., & Rowan, B. (1977). Institutionalized Organizations : Formal Structure as Myth and Ceremony. *American Journal of Sociology*, *83*(2), 340–363. https://doi.org/10.1086/226550

Meyer, J. W., & Scott, W. R. (1992). *Organizational Environments, Ritual and Rationality*. London: Sage.

Moore, M. H. (1995). *Creating Public Value. Strategic Management in Government*. Harvard University Press.

Ntim, C. G., Soobaroyen, T., & Broad, M. J. (2017). Governance structures, voluntary disclosures and public accountability: The case of UK higher education institutions. *Accounting, Auditing and Accountability Journal*, *30*(1), 65–118. https://doi.org/10.1108/AAAJ-10-2014-1842

OECD. (2015). *OECD Guidelines on Corporate Governance of State-Owned Enterprises, 2015 Edition*. Paris: OECD Publishing. https://doi.org/http://dx.doi.org/10.1787/9789264244160-en

Olsen, T. H., Solstad, E., & Torsteinsen, H. (2017). The meaning of institutional logics for performance assessment in boards of municipal companies. *Public Money and Management*, *37*(6), 393–400. https://doi.org/10.1080/09540962.2017.1344015

Pache, A.-C., & Santos, F. (2013). Inside the Hybrid Organization: Selective Coupling as a Response to Competing Institutional Logics. *Academy of Management Journal*, *56*(4), 972–1001. https://doi.org/10.5465/amj.2011.0405

Papi, L., Bigoni, M., Bracci, E., & Deidda Gagliardo, E. (2018). Measuring public value: a conceptual and applied contribution to the debate. *Public Money & Management*, *38*(7), 503–510. https://doi.org/10.1080/09540962.2018.1439154

Pina, V., Torres, L., & Yetano, A. (2009). Accrual accounting in EU local governments: One method, several approaches. *European Accounting Review*, *18*(4). https://doi.org/10.1080/09638180903118694

Rinaldi, L., Unerman, J., & de Villiers, C. (2018). Evaluating the integrated reporting journey: insights, gaps and agendas for future research. *Accounting, Auditing & Accountability Journal*, *31*(5), 1294–1318. https://doi.org/10.1108/AAAJ-04-2018-3446

Rodríguez-Gutiérrez, P., Correa, C., & Larrinaga, C. (2019). Is integrated reporting transformative?: An exploratory study of non-financial reporting archetypes. *Sustainability Accounting, Management and Policy Journal*, *10*(3), 617–644. https://doi.org/10.1108/SAMPJ-12-2017-0156

Royo, S., Yetano, A., & García-Lacalle, J. (2019). Accountability Styles in State-Owned enterprises : The good , the bad , the ugly ... And the pretty. *Revista de Contabilidad-Spanish Accounting Review*, *22*(2), 156–170. https://doi.org/10.6018/rcsar.382231

Scott, W. R. (2013). *Institutions and organizations : ideas, interests, and identities*. Retrieved from https://books.google.es/books/about/Institutions_and_Organizations.html?id=NbQgAQAAQBAJ&redir_esc=y

Skelcher, C., & Smith, S. R. (2017). New development: Performance promises and pitfalls in hybrid organizations—five challenges for managers and researchers. *Public Money and Management*, *37*(6), 425–430. https://doi.org/10.1080/09540962.2017.1344023

Stacchezzini, R., Melloni, G., & Lai, A. (2016). Sustainability management and reporting: the role of integrated reporting for communicating corporate sustainability management. *Journal of Cleaner Production*, *136*, 102–110. https://doi.org/10.1016/j.jclepro.2016.01.109

Tagesson, T., Klugman, M., & Ekström, M. L. (2013). What explains the extent and content of social disclosures in Swedish municipalities' annual reports. *Journal of Management and Governance*, *17*(2), 217–235. https://doi.org/10.1007/s10997-011-9174-5

Thijssens, T., Bollen, L., & Hassink, H. (2015). Secondary Stakeholder Influence on CSR Disclosure: An Application of Stakeholder Salience Theory. *Journal of Business Ethics*, *132*(4), 873–891. https://doi.org/10.1007/s10551-015-2623-3

Thornton, P. H., Ocasio, W., & Lounsbury, M. (2012). *The Institutional Logics Perspective: A New Approach to Culture, Structure and Process*. Oxford, UK: Oxford University Press.

Torres, L., Yetano, A., & Pina, V. (2019). Are Performance Audits Useful? A Comparison of EU Practices. *Administration and Society*, *51*(3). https://doi.org/10.1177/0095399716658500

Tremblay, M.-S. (2012). Illusions of Control? The Extension of New Public Management Through Corporate Governance Regulation. *Financial Accountability & Management*, *28*(4), 395–416. https://doi.org/10.1111/j.1468-0408.2012.00553.x

Vesty, G. M., Ren, C., & Ji, S. (2018). Integrated reporting as a test of worth: A conversation with the chairman of an integrated reporting pilot organisation. *Accounting, Auditing and Accountability Journal*, *31*(5), 1406–1434. https://doi.org/10.1108/AAAJ-08-2016-2684

Vining, A. R., & Weimer, D. L. (2017). Debate: Adam Smith was skeptical of hybrids—should we be less so? *Public Money and Management*, *37*(6), 387–388. https://doi.org/10.1080/09540962.2017.1344008

Wallace, G. W. (1995). Balancing Conflicting Stakeholder Requirements. *The Journal for Quality and Participation*, *18*(2), 84–89.