How compliant are state-owned enterprises in Austria and Slovenia with regard to their sustainability reports?

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Abstract

In recent years, the integration of corporate, environmental and social factors into the management of business has been intensively promoted. Our paper focuses on the quality of the sustainability reports (SR) of state-owned enterprises (SOEs). The methodological approach is based on the framework for content analysis provided by Global Reporting Initiative (GRI) standards and Sustainable Development Goals (SDGs) disclosure in non-financial/SR, using the translation table for linking SDGs and GRI Standards to evaluate the status of SDG compliance. The results reveal that companies in both countries generally report most intensively in the economic segment, as far as GRI standards and SDGs are concerned, exposing the economic value in the Benington (2011) theoretical model. Comparatively, Slovenian SOEs' SRs disclose on average a lower percentage of GRI standards in all four segments (general, economic, environmental, and social) than Austrian SOEs, while more than 70% of SDG 4 is reported in Slovenia.

Keywords: sustainability reporting, SDG reporting, state-owned enterprises, public value theory, Slovenia, Austria

1 INTRODUCTION

SOEs[1] are by no means a thing of the past. Emerging crises in the last couple of years (financial crisis, Covid-19, and now the Ukraine war) have put the state at the heart of the strategies for public and private sector problem resolution. The importance of the state to the economy increased greatly throughout the 20th century despite the intermediate trend of privatisation in the 1980s. Today's SOEs operate in a very different world – one in which they have a public mission, although they are often profitable and have new governance mechanisms. Consequently, they contribute 5 to 10% of the world's GDP, with an even greater share of asset value and investment, employing more than 60 million people globally. Of the top 500 giant corporations in the world, 25% are SOEs. In EU member countries, there is a long tradition of SOEs (Bernier, Bance and Florio, 2020).

The OECD (2015) defines SOEs as "enterprises where the state, regional governments, or cities have significant control, through full, majority, or significant minority ownership". Holding a major part of the subscribed capital, controlling the majority of the votes, or having the ability to appoint more than half of the managerial or supervisory body members implies the dominant influence of public authorities on the organization, regardless of its public or private legal form (European Commission, 2012). Governance, whether political, administrative, or economic, includes different meanings and perceptions. From corporate governance, which refers to systems by which companies are directed and controlled, to public governance, which concerns accountability in relation to specific public goals, such as service delivery or the impact of public policies on society. Public governance concerns accountability, as highlighted in the 11 Principles of Effective

[1] The definition of SOEs might be very simple "those that are wholly or partially owned and controlled by the state" (OECD, 2015; Peng et al., 2016) or quite complex organizations a) directly producing public services, either through liberalized market arrangements or under franchised monopoly, b) ultimately owned or de facto controlled by public sector entities, c) with public missions, d) whose ownership in principle can be shifted to the private sector, e) with budgetary autonomy and managerial discretion (Bernier with CIRIEC, 2015).

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Governance for Sustainable Development by UNCEPA (2018). These principles emphasize effectiveness, accountability and inclusiveness and align with the goal of SDG 16 to create effective, accountable, and inclusive public institutions. The issues of corporate and public governance have recently been integrated with an emerging trend, hybrid governance, which seems to be market-oriented, providing public services with public funding, and politically governed, although those hybrid organisations can differ from one another in terms of financing, ownership, and organisational structure (Grossi, Papenfuß and Tremblay, 2015).

All the references resented above prove that SOEs have adapted to modern business models, consequently facing several socio-economic challenges assembled under the umbrella of sustainable development (SD). The SD concept has evolved through several phases, documented from the Brundtland Report in 1987 to the 2030 Agenda for Sustainable Development in 2015 with its 17 SDGs (UN, 2015; 2017). Even more, the operationalization of the SD idea has embraced numerous legal and other acts (Acquis Communautaire) including the Non-Financial Information Directive (NFI Directive 2014/95/EU), under which 3,000 public SOEs are required to prepare non-financial reports on economic, environmental, and human resources issues, among others. Most SOEs are lagging in their SR practices compared to large stock-exchange-listed, shareholder-orientated, for-profit enterprises. Studies confirmed that if SOEs are providing sustainability reports or integrated reports (IR), this is mostly done on a voluntary basis (Uyar, Kuzey and Kilic, 2021). With this slow adoption (Goswami and Lodhia, 2014; Greiling, Traxler and Stötzer, 2015), SOEs are wasting the chance to report in a concise way on the triple bottom line dimensions in line with their public missions. Consequently, their key stakeholders and society at large are not sufficiently informed about their public value (PV) creation (Traxler and Greiling, 2018).

In the context of insufficient awareness of PV creation and the reporting of it, our paper focuses on the SR of the SOEs in Austria and Slovenia managed by umbrella organisations. In Slovenia this is the Slovenian State Holding (SDH – Slovenski državni holding) and in Austria the ÖBAG (Österreichische Beteiligungs – AG), which share similarities in their portfolios, including strategic companies in which public ownership varies between 30% and 100%. In exploring SD reporting, our paper addresses two main research questions: (1) How intensively do the public companies of the SDH and the ÖBAG comply with GRI standards? and (2) to what extent do these companies report on their contributions to sustainable development goals (SDG)? In addition, the article reviews the degree to which companies follow the reporting guidelines to preserve and disseminate PV, gain legitimacy and support from stakeholders, and build operational capacity in their reporting.

This paper is divided into the following sections: after the Introduction, the section 2 presents a systematic review of academic papers considering sustainability and SDG reporting and explain the conceptual background as well as the theoretical focus of the paper. The section 3 focuses on Slovenian and Austrian SOEs and their reporting requirements. The final section is dedicated to the presentation of results, while the sixth section focuses on the discussion and conclusion.

2 PRIOR RESEARCH, CONCEPTUAL BACKGROUND AND THEORETICAL DISCOURSE

2.1 PRIOR RESEARCH

While sustainability is now a widely discussed topic in academia, the focus on non-financial/SR in Slovenia and Austria is limited. In Slovenia, Ermenc, Klemenčič and Rejc Buhovac (2017) investigated the relationship between SR and financial performance, and Redmayne, Vašiček and Čičak (2022) compared the SR of SOEs in Slovenia, Croatia and Serbia. For Austria, Greiling and Grüb (2014) and Greiling, Traxler and Stötzer (2015) examined the SR of the public sector, while Slacik and Greiling (2019) and Lebelhuber and Greiling (2022) focused on the sustainability reports of the Austrian electricity sector.

Recent studies on SR practices (Fusco and Ricci, 2019; Manes-Rossi, Nicolò and Argento, 2020) indicate a growing interest in SR, although the topic has not yet been sufficiently researched scientifically. The quantity and quality of SOE reporting have improved over the last decade (e.g., Manes-Rossi et al., 2021; Montecalvo, Farneti and Villiers, 2018). The main drivers for disclosure vary, with size (Andrades Pena and Jorge, 2019; Argento et al., 2019) and years of operation (Garde Sánchez, Rodríguez Bolívar and López Hernández, 2017; Orazalin and Mahmood, 2018) being important and isomorphism prevailing in the literature. Stakeholder pressure (De Lima Voss, Wanderley and Bernardi, 2013; Garde Sánchez, Rodríguez Bolívar and López Hernández, 2017; Masoud and Vij, 2021) and legislative pressure (Larrinaga-Gonzélez, Luque-Vilchez and Fernández, 2018), particularly through the GRI and the IR standard, are referred to as normative isomorphism. In addition, the pressure on SOEs from private, profit-oriented organizations, internal dynamics and different leadership styles of executives or sustainability managers have also been highlighted (Kumasaka et al., 2022; Domingues et al., 2017).

Studies show the predominance of the GRI Standards and the IR Framework (Cohen and Karatzimas, 2015; Manes-Rossi, 2019). Several authors (Manes-Rossi et al., 2021; Massoud and Vij, 2021; Traxler and Greiling, 2018) report a global acceptance of the GRI Standards, some in a pan-European context (Badia, Bracci and Tallaki, 2020; Slacik and Greiling, 2020; Traxler and Greiling, 2018), others in specific countries (Greiling and Grüb, 2014; Greiling, Traxler and Stötzer, 2015; Nicolò et al., 2021) or individual countries (Badia, Bracci and Tallaki, 2020; Braga, Da Silva and Dos Santos, 2014). The IR Framework, which is less researched (Manes-Rossi, 2019; Montecalvo, Farneti and Villiers, 2018; Nicolò et al., 2020), is promoted for SOEs (Manes-Rossi, 2019; Montecalvo, Farneti and Villiers, 2018). This framework supports better legitimization and disclosure of social issues (Farneti and Dumay, 2014; Montecalvo, Farneti and Villiers, 2018; Nicolò et al., 2021).

SDG reporting is a topic that is just emerging and developing within the SR practice of SOEs, and is not uniform (Bauer and Greiling, 2023; Krantz and Gustafsson, 2021; Kumasaka et al., 2022; Manes-Rossi et al., 2021; Nicolò et al., 2020).

The overall assessment is that the potential of SR or IR for stakeholder communication and legitimation purposes could be used much more by SOEs then it actually is (e.g., Greiling, Traxler and Stötzer, 2015; Montecalvo, Farneti and Villiers, 2018, Manes-Rossi et al., 2021). Traxler and Greiling (2018) have exposed a contradictory effect of SD reporting on public sector organisations, which are expected to report more intensively regarding the sector specifics, but the reporting rates are significantly lower than those for private sector organisations.

2.2 CONCEPTUAL BACKGROUND

SOEs have a crucial role in the provision and development of utilities and infrastructural industries (energy, transport, and telecommunications) (Chen, 2016; OECD, 2015). Their organisational profile is considered a mixture of public and private sector elements (Greiling, Traxler and Stötzer, 2015; Swiatczak, Morner and Finkbeiner, 2015), classifying SOEs as hybrid organisations[2] (Grossi, Papenfuß and Tremblay, 2015). SOEs are often related to the terms "public mission" and "PV" (Bernier and CIRIEC, 2015; Moore, 2013), and even "sustainable value" (Dumay, Guthrie and Farneti, 2010), which refer to the contribution of organisations to sustainability (Farneti and Dumay, 2014: 377). The accountability of public sector organisations (stakeholder theory) is different to the accountability of private companies (agency and legitimacy theory). Public organisations are accountable to a great number and wide variety of stakeholders (citizens), whose involvement is strongly associated with SD. Consequently, the implementation of socially and environmentally responsible practices, as well as the reporting of them, is of high importance (Uyar, Kuzey and Kilic, 2021; Hege, Brimont and Pagnon, 2019). Moreover, with reference to the public policy cycle, which consists of five stages (Howlett and Godwin, 2009), namely: a) agenda-setting, b) public policy formulation, c) public policy decision-making, d) public policy implementation, and e) public policy evaluation – SR is the foundation of the fifth stage, providing a feedback loop to public policy makers and national political bodies.

2.3 THEORETICAL DISCOURSE

This paper uses PV theory (Moore, 2013), as PV is created by the managers of public sector organisations for the citizens (Hartley et al., 2017), while government bodies have the role of PV authorising agencies. Regardless of the widespread policy trend of privatising services of public interest in recent decades in many countries, SOEs are intensively used for public services and PV delivery. Due to the fact that the measurement, conceptualization, and reporting of PV has been neglected in the scientific research (Meynhardt and Bäro, 2019), and because

[2] A hybrid organisation is said to be market-oriented and operates in a business-like manner to provide public services with public funding, and is politically governed (Grossi, Papenfuß and Tremblay, 2015: 275).

public utilities contribute considerably to economic development in coordination with social and environmental needs (Valenza and Daminao, 2023), the aim of our paper is to fill this gap by evaluating the sustainability reports of Austrian and Slovenian SOEs according to GRI standards and SDG goals, and translating the results into the Public Value Account framework as a practical and useful framework for measuring PV performance.

SOEs create the PV connected to the capability of activating production processes able to satisfy individual and collective needs at the same time. Since they are expected to meet the accountability demands of a broader set of stakeholders, financial information alone is no longer sufficient. Since SOEs' performance (or survival) deeply depends on the quality of corporate governance, which is measured by the satisfaction (or dissatisfaction) of the stakeholders (Bruton and Peng, 2015; Umar et al., 2018), SR provides information on this performance, which is measured and communicated from economic, environmental and social perspectives (Tommasetti et al., 2020).

Table 1
Methodological and theoretical framework

Theoretical framework	Pillars	Research purposes – to understand how SOEs
	Defining PV outcomes	Preserve and disseminate PV
Strategic Triangle of PV	Gaining authorisation	Gain legitimacy and support from stakeholders
	Building operational capacity	Build operational capacity

Source: Adopted according to Valenza and Damiano (2023).

3 SUSTAINABILITY REPORTING REQUIREMENTS IN AUSTRIA AND SLOVENIA

A GRI & CSR Europe (2017) working paper presented a comprehensive overview of how member states have implemented the "groundbreaking" EU Directive on Non-financial and Diversity Information in their national legislation since 6 December 2016. The Non-Financial-Information (NFI) Directive (2014/95/EU) requires that public-interest entities with at least 500 employees include in their management reports a non-financial statement containing the performance, position, and impact of its activities relating to environmental, social and employee matters, as well as matters of respect for human rights, anti-corruption, and bribery. It lists the obligatory components as well stating that if the company does not pursue policies in relation to one or more of the listed matters, the non-financial statement must provide a clear and reasoned explanation for not doing so. The obligation of non-financial reporting refers also to those public-interest entities which are part of a large group and fulfil, on a consolidated basis, the criterion of an average number of 500 employees.

The NFI Directive has been implemented in Slovenian legislation within general statutory law, which enacted the Non-financial Reporting in Companies Act (Article 70c). The transposition into Slovenian national law is very direct, using the same terminology and conceptual ideas outlined in the NFI Directive. The definition of the companies included in obligatory non-financial reporting in Slovenian law corresponds to that in the NFI Directive, explicitly excluding mandatory reporting for those companies that are included in the consolidated business report of a parent company, or other company that needs to prepare a non-financial report. The definition of a public-interest entity in Slovene legislation is a company listed on the stock exchange, a credit institution, insurance company, or a pension company. A public-interest entity is also a medium or large company in which the state or municipalities, jointly or independently, directly or indirectly, have a majority ownership share. The reporting requirements can be disclosed in a consolidated business report, or a separate report published alongside the business report or within 6 months of the balance sheet date, made available on the company's website and referenced in the business report.

In Austria, NFID was implemented by the Sustainability and Diversity Improvement Act (NaDiVeG, Act 257/ME). The transposition is also quite direct, and mandatory reporting can be fulfilled either within the annual management report or in a separate sustainability report. According to a study by the Vienna Chamber of Labour (2019), which evaluated the implementation of the NaDiVeG, half of Austrian companies report in the form of a separate sustainability report, while another half publish integrated non-financial reports. This study also revealed that between 80 and 100 companies are required to report according to the NFI Directive.

There are also a few very important regulations that must be fully implemented in the coming years, although in all likelihood there are already rudiments of their implementation in current sustainability reports. EU Taxonomy entered into force on 12 July 2020, and its individual articles are thereby applicable from 2022 or 2023. It establishes a classification system for environmentally sustainable economic activities with the aims of increasing sustainable investments and combating greenwashing. Companies complying with the NFI Directive are required to disclose certain indicators of their business activities' environmental sustainability. The EU Parliament recently adopted the Corporate Sustainability Reporting Directive (CSRD) in November 2022. From 2025, it will also cover large SOEs that meet two of the following criteria: 250 employees, EUR 20 million turnover or EUR 40 million balance sheet total.

4 METHODOLOGY

4.1 DOCUMENTARY ANALYSES

Our paper presents a qualitative exploratory study directed from the theoretical perspective of addressing, comprehending, and communicating the PV of two countries' strategic SOEs through SR. The main objective of this study was to uncover the PV creation conceptualized by Moore (1995) using information from

the sustainability reports of SOEs and to support the findings with four expert interviews. Our research methodology framework was developed with reference to Moore's (2013) strategic triangle for imagining and testing PV propositions. Since GRI Standards "enable an organization to publicly disclose its most significant impacts on the economy, environment, and people" and that "this enhances transparency on the organization's impacts and increases organizational accountability" (GRI Standards, 2020: 4), we have adapted the foundations of PV theory to SR compliance according to the elaboration of Valenza and Damiano (2023).

The paper employs a qualitative content analysis method based on the GRI standards. Sixty-four reports from 2018-2021 were examined, i.e. 32 reports from 8 SOEs in Austria and 32 reports from 8 SOEs in Slovenia. Each SR is scored 0, 1, or 2 for each standard. The assessment involves a two-step review of non-financial/sustainability reports: first, evaluating the general structure and GRI content table, and second, assessing the content. Reporting compliance scores are: 0 for no/almost no disclosure, 1 for partial disclosure, and 2 for more than partial disclosure.

In order to identify the status of SDG reporting, the translation table "Linking SDGs and GRI Standards" (2021) is used. In this linkage table, the 17 SDGs are assigned to the respective topic-related GRI indicators (table 2) by assuming that all GRI indicators are equally weighted.

Table 2
Linking table GRI & SDGs

SDG	GRI
1	202-1, 203-2, 207-1, 2, 3, 4, 413-2
2	411-1, 413-2
3	203-2, 305-1, 2, 3, 6, 7, 306-1, 2, 3, 4, 5, 401-2, 403-6, 9, 10
4	404-1
5	102-22, 24, 202-1, 203-1, 401-1, 2, 3, 4041, 3, 405-1, 2, 406-1, 408-1, 409-1, 414-1, 2
6	303-1, 2, 3, 4, 5, 304-1, 2, 3, 4, 306-1, 2, 5
7	302-1, 2, 3, 4, 5
8	102-8, 41, 201-1, 202-1, 2, 203-2, 204-1, 301-1, 2, 3, 302-1, 2, 3, 4, 5, 306-2, 401-1, 2, 3, 402-1, 403-1, 2, 3, 4, 5, 7, 403-8, 9, 10, 404-1, 2, 3, 405-2, 408-1, 409-1, 414-1, 2
9	201-1, 203-1
10	102-8, 207-1, 2, 3, 4, 401-1, 404-1, 404-3, 405-2
11	203-1, 306-1, 2, 3, 4, 5
12	301-1, 2, 3, 302-1, 2, 3, 4, 5, 303-1, 305-1, 2, 3, 6, 7, 306-1, 2, 3, 4, 5, 417-1
13	201-2, 302-1, 2, 3, 4, 5, 305-1, 2, 3, 4, 5
14	304-1, 2, 3, 4, 305-1, 2, 3, 4, 5, 7
15	304-1, 2, 3, 4, 306-3, 5, 305-1, 2, 3, 4, 5, 7
16	102-16, 17, 21, 22, 23, 24, 25, 29, 37, 205-1, 2, 3, 206-1, 307-1, 403-4, 9, 10, 408-1, 410-1, 414-1, 414-2, 415-1, 416-2, 417-2, 417-3, 418-1, 419-1
17	207-1, 2, 3, 4

Source: Linking the SDGs and the GRI Standards, 2021.

4.2 SAMPLE

The analysis includes the 8 largest Slovenian companies owned by the state and managed under the SDH, and the 8 largest Austrian federal-owned SOEs, 6 of which are managed by ÖBAG. Among the eight Austrian companies, two (Verbund and Casino) did not prepare a separate sustainability report, while for Slovenia only three (among ten) did prepare separate sustainability reports.

In order to provide a more comprehensive and clearer overview of the sample, table 3 for Slovenia and table 4 for Austria present company-specific information such as the type of company, the percentage of state ownership, the book value and the share of the total investment portfolio held by SDH or ÖBAG.

Table 3

The eight largest SOEs of the Republic of Austria

Company/Holding	Business	State ownership (in %)	Book value of ownership interest (in mn)*	Share in total portfolio (in %)
Verbund AG (A1)	Energy	51.00	17,523	50.52
OMG AG (A2)	Energy	31.50	5,149	14.84
A1 Telekom Austria AG (A3)	Telecommunications	28.42	1,439	4.15
Post AG (A4)	Traffic	52.85	1,349	3.89
Bundesimmobiliengesellschaft (BIG) (A5)	Infrastructure	100.00	9,054	26.10
Casinos Austria (A6)	Gambling	33.24	135	0.39
ÖBAG total			**34,649**	**99.89**
Autobahnen- und Schnellstraßen-Finanzierungs-AG (A7)	Traffic	100.00	24,267	–
Österreichische Bundesbahnen (ÖBB) (A8)	Traffic	100.00	2,528	–

* *In terms of book value of ownership share (on 31 December 2022).*

Source: Own, 2023 (according to ÖBAG webpage).

Table 4
The eight largest SOEs of the Republic of Slovenia

Company/Holding	Business	State ownership (in %)	Book value of ownership interest (in mn)*	Share in total portfolio (in %)
Dars d.d. (S1)	Traffic	100.00	3,042	29.6
GEN energija d.o.o. (S2)	Energy	100.00	1,005	9.8
HSE d.o.o. (S3)	Energy	100.00	830	8.1
Zavarovalnica Triglav d.d. (S4)	Finance	63.53	584	5.7
Slovenske železnice d.o.o. (S5)	Traffic	100.00	576	5.6
Telekom Slovenije d.d. (S6)	Telecommunications	72.89	399	3.9
Pošta Slovenije (S7)	Traffic	100.00	341	3.3
Krka d.d. (S8)	Pharmacy	29.87	311	3.0
Total			**8**	**79.2**

* *In terms of book value of ownership share (on 31 December 2022).*
Source: Own, 2023 (according to SDH webpage).

4.3 INTERVIEWS

In addition to the document analysis elaborated above, four interviews, with four companies of the sample, were conducted to gain insights into the current focus on SDGs. Two interviews were held with representatives from Austria (A1, A2) and two from Slovenia (S1, S5). The interview guide contained open-ended questions that primarily focused on how the companies preserve and disseminate PV, gain legitimacy and support from stakeholders, and build operational capacity, based on table 1. The interview questions are as follows:

1. How does your company preserve and disseminate public value?
2. How do your company gain legitimacy and support from stakeholders?
3. How does your company build operational capacity?

The interviews, which were conducted via zoom in German and Slovenian, lasted between 20-30 minutes. These sessions were recorded and transcribed. According to exact and relatively short answers, the complete content was translated into English and presented in the results.

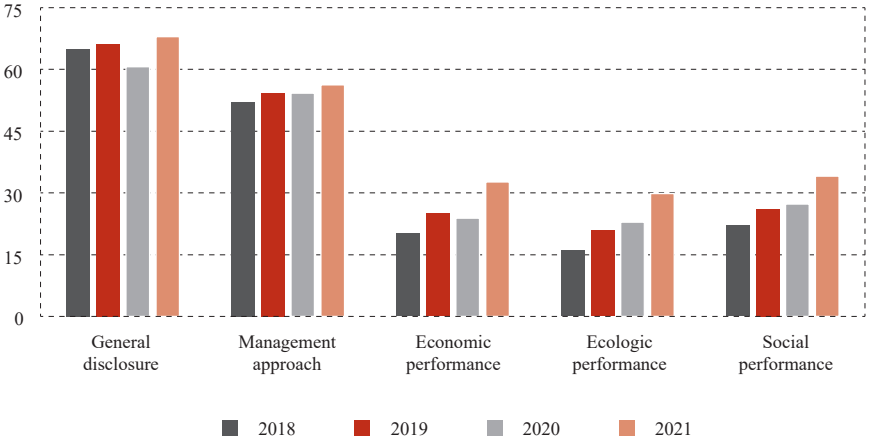
5 FINDINGS

5.1 REPORTING ACCORDING TO GRI STANDARDS

The results of the analysis have revealed that there has been definite development during the four-year period, as far as the range and the quality of SR according to GRI standards are concerned. In Austria (graph 1), the companies in our sample have increased the reporting quality of ecological performance (14 percent points), economic performance (almost 13 percent points), and social performance (almost 12 percent points) standards in the largest percentages.

Graph 1

Share of the entire disclosure of the SR of Austrian companies, 2018-2021 (in %)

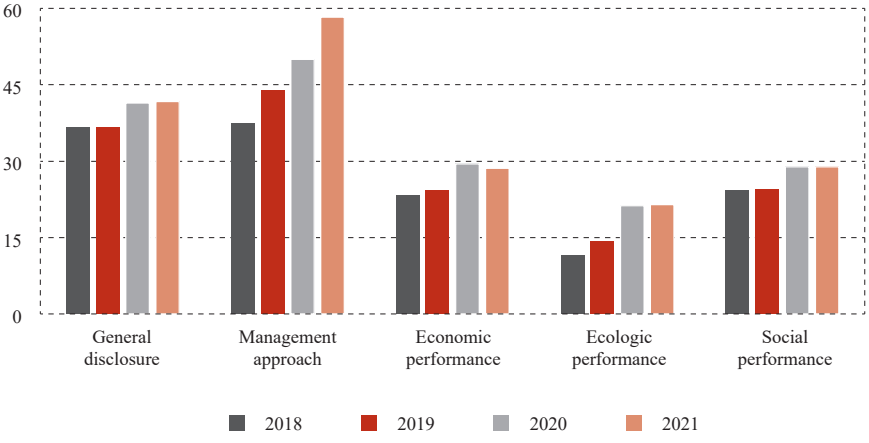


Source: Own, 2023.

The findings are different for the Slovenian sample. Comparison of the two countries reveals that the share of reported GRI standards in the general disclosures part is much smaller than that of the Austrian companies, although the share in Slovenia has significantly increased during the observed period. The other three reporting parts (economic, ecological, and social) were not much better reported, according to shares of around 25%, with slightly higher share for Austrian companies.

Graph 2

Share of the entire disclosure of the SR of Slovenian companies, 2018-2021 (in %)



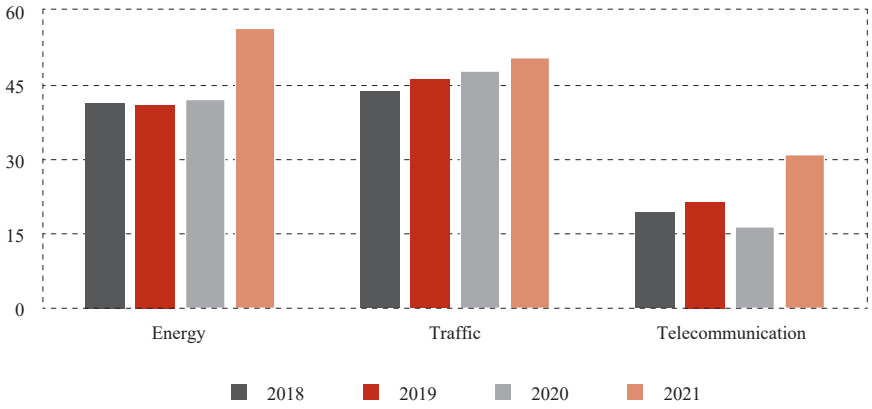
Source: Own, 2023.

The comparison of the countries' results according to the economic activity reveals that the average share of reported GRI standards for companies in energy

and traffic business is much smaller in Slovenian than in Austrian companies except for telecommunication company (graphs 3 and 4). Nevertheless, the Slovenian companies in energy and traffic business have significantly improved their SR in the years 2020 and 2021 since the years 2018 and 2019.

Graph 3

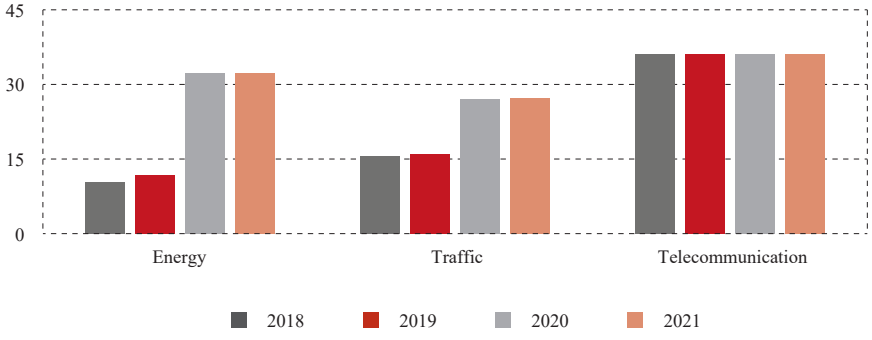
Share of the entire disclosure of the SR of Austrian companies according to economic activity, 2018-2021 (in %)



Source: Own, 2023.

Graph 4

Share of the entire disclosure of the SR of Slovenian companies according to economic activity, 2018-2021 (in %)



Source: Own, 2023.

5.2 FINDINGS ON GRI SUB-INDICATORS

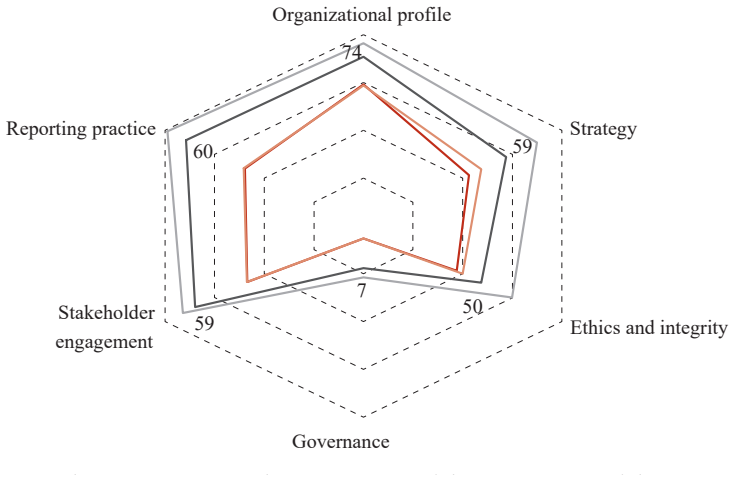
Since each of the main GRI standards consists of several sub-indicators an in-depth analysis has been conducted. The results reveal several differences between the two countries. Due to the large amount of data collected, and for the sake of clarity, the following graphs 5 to 8 show data for the last two years (2020 and 2021).

Content analysis of the aforementioned SOE reports, based on evaluation framework results, confirmed that Slovenian SOEs disclose on average, for the years 2020 and 2021, a lower percentage of sustainability issues (26.7%) than Austrian SOEs (37.3%), as far as all GRI standards are concerned. A breakdown of the main indicators (excluding management approach) into the sub-indicators is presented in graphs 5 to 8, which reveal that there are definite differences, on average, between the two different countries in all four categories.

Within the main indicator of general disclosures (graph 5), it can be seen that in all sub-indicators, Austrian SOEs comply on average much more (higher %) than Slovenian SOEs. Additionally, the biggest differences between the countries can be observed for indicators covering "reporting practices" and "stakeholder engagement".

Graph 5

Percentage of general disclosures for Austria and Slovenia (2020 and 2021)



Source: Own, 2023.

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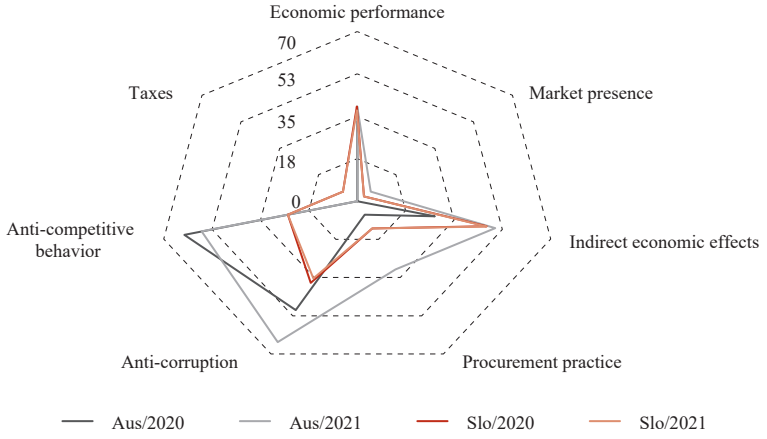
Graph 6

Percentage of economic performance disclosures for Austria and Slovenia (2020 and 2021)

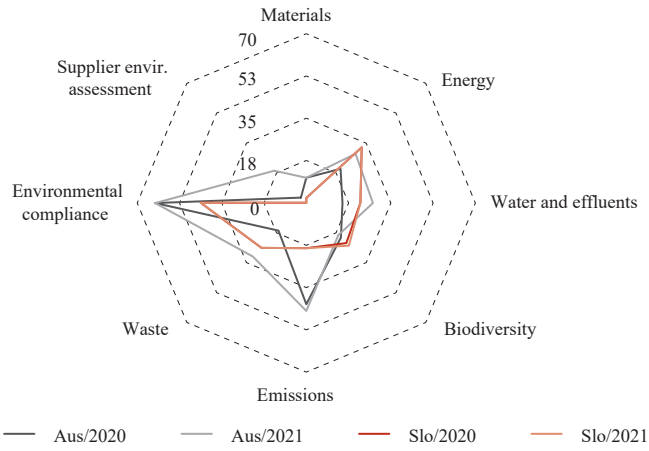


Source: Own, 2023.

Graph 6 shows the percentage of all GRI standards in the economic performance subsection that Slovenian and Austrian SOEs comply with in their reports for the years 2020 and 2021. The fact is that in both countries, those disclosures (considering economic performance) are on average less compliant than those for general disclosures. Additionally, graph 6 shows that the differences between the countries are negligible. Nevertheless, the anti-competitive behaviour and anti-corruption categories are much better reported in the Austrian reports than in the Slovenian reports.

Graph 7

Percentage of ecological performance disclosures for Austria and Slovenia (2020 and 2021)

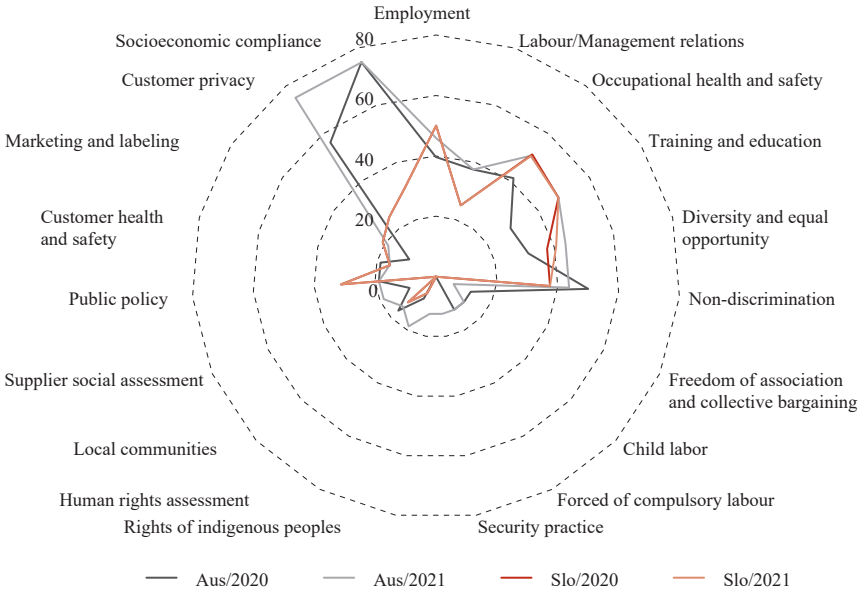


Source: Own, 2023.

Very similar observations can be made for graph 7, which reveals the percentage of all GRI sub-standards in the ecological performance that Slovenian and Austrian SOEs comply with in their reports for the years 2020 and 2021. The ecological performance GRI standards on average for both countries were complied with at a similar percentage as for economic performance. Interestingly, the GRI 302 – Energy standard is on average much better complied with by Slovenian companies than by Austrian companies, while the inverse situation hold true as far as GRI 305 – Emissions standard is concerned.

GRAPH 8

Percentage of social performance disclosures for Austria and Slovenia (2020 and 2021)



Source: Own, 2023.

Finally, graph 8 reveals the percentage of social performance disclosures on average. It can be observed that except for a few GRI sub-standards, the compliance in this subsection does not exceed 40%, and that there are some differences between countries. Slovenian SOEs better comply with the "Occupational Health and Safety" standard (GRI 403), as well as with the "Training and Education" standard (GRI 404), while Austrian SOEs are on average almost 80% compliant with the "Socioeconomic" standard (GRI 419).

5.3 REPORTING ACCORDING TO THE SDGs

Besides GRI standards compliance, the purpose of the paper has been to analyse the SDGs compliance of companies in the sample. In this manner, the translation table "Linking SDGs and GRI Standards" (2021) has been used. The results are presented in table 5.

Table 5

SDG compliance of Austrian and Slovenian SOEs in the period 2018-2021 (in %)

	Austria				Slovenia			
	2018	**2019**	**2020**	**2021**	**2018**	**2019**	**2020**	**2021**
SDG 1	4.46	7.14	4.46	8.04	4.02	3.57	3.57	3.57
SDG 2	12.50	6.25	6.25	9.38	3.52	3.13	3.13	3.13
SDG 3	19.64	28.13	36.61	42.86	16.19	19.17	26.67	26.67
SDG 4	0.00	0.00	0.00	0.00	75.00	75.00	81.25	81.25
SDG 5	26.95	28.91	25.78	34.38	26.17	26.95	30.47	30.86
SDG 6	9.13	16.35	17.79	26.92	9.62	15.87	25.00	25.48
SDG 7	23.75	27.50	20.00	28.75	26.25	26.25	32.50	32.50
SDG 8	24.34	29.77	27.63	38.49	28.62	29.11	33.88	33.72
SDG 9	43.75	62.50	53.13	78.13	78.13	78.13	84.38	81.25
SDG 10	18.75	25.00	20.14	27.78	25.69	26.39	29.86	29.86
SDG 11	11.46	14.58	19.79	36.46	21.88	23.96	36.46	36.46
SDG 12	16.25	20.00	24.06	30.94	15.94	17.19	23.44	23.44
SDG 13	26.14	30.11	35.80	40.91	21.59	22.16	26.70	26.70
SDG 14	19.38	28.13	36.25	38.13	15.00	17.50	22.50	23.13
SDG 15	19.27	26.56	32.81	36.46	13.02	16.15	24.48	25.00
SDG 16	34.26	35.42	34.49	41.67	15.74	16.44	22.69	22.69
SDG 17	0.00	0.00	0.00	1.56	0.00	0.00	1.56	1.56

Source: Own, 2023.

With SDG compliance rates for 2021 divided into three groups: (1) Lowest intensity up to 30%, (2) Medium intensity up to 60%, and (3) Highest intensity over 60%) it can be seen that SDG 1, 2, 6, 10 and 17 fall into the first group, while SDG 3, 4, 5, 7, 8, 11, 12, 13, 14, 15 and 16 fall into the second. In both countries, the highest average level of SDG compliance is for SDG 9, while SDG 4 is reported on average very intensively in Slovenia (from 75% in 2018 to 81.25% in 2021), but not in Austria. SDG 17 (which regards global partnership) is reported the least intensively for both countries in this period.

5.4 INTERVIEWS

5.4.1 PRESERVING AND DISSEMINATING PUBLIC VALUE

In Austria, there are two SOEs (A1; A2) that actively preserve and disseminate PV through strategic measures. Ensuring the development and maintenance of high-quality road infrastructure is crucial for economic development, regional connectivity, and public safety (A1). By investing in sustainable technologies and practices, environmental impacts are minimized and environmentally friendly transportation solutions are promoted. In addition, advances in traffic management systems improve road safety and traffic efficiency by providing real-time traffic information and automated control measures, contributing to a reliable, safe and

sustainable transportation network that benefits the Austrian population. Sustainability is also being addressed in energy production, with a focus on renewable energy sources to reduce carbon emissions and protect the environment (A2). In addition, community programs and transparent communication will promote energy efficiency and align operations with societal needs and expectations, fostering a culture of responsibility and innovation in the preservation and dissemination of public values (A2). A major focus is the integration of the SDGs into the organization's sustainability strategy, particularly SDG 7 (clean energy), SDG 13 (climate action), and SDG 15 (life on land). These goals are central to their strategy, as reflected in their annual reports (A1). Another organization has also embedded sustainability and the SDGs into its corporate strategy and policy, aiming for CO_2-neutral usage of their network and promoting multimodality and sustainability (A2).

Both Slovenian state-owned companies (S11, S5) are 100% state-owned and provide strategic infrastructure capacities for the Republic of Slovenia, one in the field of motorways and the other in the field of rail transport. As such, they are directly committed to creating public value. In fulfilling its public interest mission, the company (S1) places a strong emphasis on energy efficiency and environmental protection where public value is concerned, which is why one of its strategic objectives is to develop sustainable infrastructure and a circular economy. The monitoring of the latter is based on the indicator of reducing energy consumption by 9% per kilometre of the motorway network by 2025 compared to 2019, and reducing CO_2 emissions per kilometre of the motorway network by 15% by 2025 compared to 2019. Company (S5) also provides strategic infrastructure capacity for the country. As one of its key founding objectives, the company has set itself the strategic goal of creating a multimodal offer of mobility services at the national level by linking and building on the State's activities in establishing a unified, accessible, and efficient public passenger transport and the development of railway stations and stop areas by integrating different modes of transport and accompanying transport services into a range of mobility services.

5.4.2 LEGITIMACY AND STAKEHOLDER SUPPORT

The main stakeholder groups include employees, customers, suppliers, residents, environmental NGOs, authorities, investors, political stakeholders, regulators, as well as district administrators and mayors (A1; A2). SOEs gain legitimacy and support from stakeholders by prioritizing transparency, ethical practices, and responsiveness (A1; A2), safety, efficiency, and sustainability (A2). They engage stakeholders through open communication channels, intranet or workshops, actively seeking feedback and addressing concerns (A1; A2). Demonstrating a commitment to sustainability and social responsibility fosters credibility, especially among environmentally conscious stakeholders. Investing in community development and fostering partnerships further solidifies support. By aligning corporate actions with stakeholder values and consistently delivering on promises, organizations build trust and legitimacy, earning support from investors,

customers, employees, and the broader public (A1). Additionally, prioritizing customer satisfaction through smooth traffic flow and quality services builds trust (A2). One organization has developed various levels and structures aligned with international standards like the GRI standards, facilitating successful integration of sustainability practices (A1). Another organization's commitment to sustainability dates back to 2006, with their first sustainability report, followed by annual reports from 2010, including the SDGs, to gain legitimacy (A2).

In Slovenia, the company (S1) is aware of its responsibility towards people, the environment and society. As a result, it pursues social responsibility in a sustainable manner in all projects and long-term plans and at all levels. Ambitious and clearly defined objectives ensure that the public recognises the company as a responsible and forward-looking company. In this way, the company engages with its stakeholders in a fair and balanced way, communicating with them in a two-way manner and, above all, identifying and monitoring stakeholder needs and interests through a web of interactions at both strategic and operational levels. The company's stakeholders (S1) are identified and defined on the basis of one of the EFQM self-assessment measures. Stakeholder involvement and management is based on the impact that a particular stakeholder has on the company and the impact that the company has on a particular group of stakeholders. For company (S5), the implementation of sustainable business is crucial for long-term success and socially responsible operations. Additionally, the company (S5) has started to develop a sustainable business strategy that will include a sustainable vision, mission and values, an analysis of the internal and external environment, strategic goals and priorities, sustainable business models and activities for the company, as well as performance indicators and plans for monitoring and reporting. The objective is to ensure sustainable financial performance while taking into account the environmental, social and economic aspects of sustainability. Integrated, strategic and effective sustainability management is key to managing sustainability risks, identifying sustainability impacts, and detecting sustainability trends and opportunities for responsible management of the natural and social environment and for coherent and transparent corporate governance. Therefore, the company is committed to spreading the principles of socially responsible behaviour in the business and social environment it actively co-creates. It participates in the development of professional solutions in the field of mobility and logistics, and raises environmental awareness of rail transport as the most sustainable mode of passenger and freight transport. It also supports the activities of various organisations. The support is not limited to professional organisations but is extended to a wider range of stakeholders who have an impact on the development and on the progress of society as a whole.

5.4.3 OPERATIONAL CAPACITY

In Austria, two SOEs are expanding their operational capacity through strategic investments in infrastructure, technology, and employees (A1; A2). The freeways and expressways are continuously modernized to increase efficiency and safety,

using state-of-the-art construction methods and materials (A1). One SOE is continuously modernizing its power generation facilities, relying on innovative technologies such as hydropower and renewable energy sources to increase efficiency and sustainability (A2). The integration of technologies, such as intelligent traffic management systems and digital communication platforms, optimizes operations and facilitates real-time monitoring (A1). The integration of advanced monitoring systems and digital solutions optimizes operational processes and ensures a reliable supply of electricity (A2). Furthermore, the focus is on the development of employees, offering training programs and fostering a culture of innovation and collaboration (A1; A2). Efforts to promote sustainability within corporate culture include updates through intranet and social media, sustainable training sessions, and initiatives like Climate Ranger training to educate and engage employees (A2).

The company (S5) will strengthen its operational capacity by investing in infrastructure, technology and employees. The development of mobility coincides with planned investments in the purchase of new passenger trains and locomotives and other machinery with the aim of reducing transport bottlenecks and increasing the throughput of the rail network. In addition, digitisation will increase the operational capacity and efficiency of the company. All the measures are linked to compliance with legal regulations on environmental protection and efficient use of energy on the one hand and their implementation in practice on the other (efficient use of energy and other natural resources, prevention of pollution of the natural environment, achieving appropriate technical and technological solutions to reduce environmental pollution). Operational performance is described by the company (S1) with three key strategic orientations, namely (1) long-term business stability and environmental sustainability, (2) ensuring safety, fluidity, and reliable and timely services for users on the motorway network, and (3) committed and competent employees.

5.4.4 COMPARISON BETWEEN AUSTRIA AND SLOVENIA

The comparison of the interview results has revealed that the PV concepts in the SOEs of both countries are very similarly treated. The sample of two companies in the energy sector (Austria) and two companies in the transportation sector (Slovenia) has shown that PV is being reflected in energy production, which is focusing mainly on renewable sources and environmentally friendly transportation. The companies have emphasized the importance of aligning corporate projects with stakeholder attitudes towards sustainability, which builds trust and from investors, customers, employees, and the broader public, enhancing legitimacy. The operational capacity should increase the PV based on innovative technologies, renewable energy sources and digitalization.

6 DISCUSSION

The scarcity of exploratory literature on SOE governance and SR motivated our research, which evaluates the contribution of SOEs, as hybrid organisations, to PV creation. The reason for the lack and fragmentation of literature in the field might be found in the hybridity of SOEs, but also in the ambivalence surrounding notions of governance (Grossi, Papenfuß and Tremblay, 2015). Although the SR process seems a very narrow or partial segment of the concept of sustainability, its function is invaluable. On the one hand, a precisely structured and comprehensively defined reporting concept provides clear development directions for SOEs, and on the other hand, it can be included in the monitoring of progress in the achievement of SDG goals for stakeholders, decision-makers, and political institutions that support PV creation for society. Since the main objective of our research has been to explore the SR compliance of the 16 largest SOEs in two adjacent countries during the period between 2018 and 2021, 64 SRs have been evaluated according to GRI standards. Although an upward trend in reporting on sustainability issues has been confirmed in both countries during the observed period, there are some differences in certain segments (social, environmental and economic). These differences could be explained from the historical point of view that has determined economic and social policy. Austria belonged to the Western capitalistic bloc following World War II, while Slovenia was part of Yugoslavia, with its socialist system dictating common social ownership. Since the year 1991 and its declaration of independence, Slovenia has gone through an intensive process of transition, during which much social property has been privatised. Still, some property has not been privatised, which is why in both countries (Austria and Slovenia) companies with public missions and strategic business (like telecommunications, traffic, energy, etc.) are at least 25% under state ownership. The results of our content analysis study revealed that Slovenian SOE sustainability or integrated reports comply on average with the GRI standards at a lower percentage than those of Austrian SOEs regarding general disclosures, economic disclosures and ecological disclosures. A more mixed picture emerges regarding the many items of the social disclosures.

Based on the theoretical perspective of public value theory, our results should be evaluated according to the framework proposed by Valenza and Damiano (2023) and Coffey (2021), which emphasize economic, social and cultural, political, and ecological aspects and dimensions. SRs are considered a critical managerial tool in understanding organisations' attitudes regarding sustainability issues (Geerts and Dooms, 2020). It might be concluded that our results mainly refer to the definition of PV outcomes, predominantly the economic value (consumer privacy, socioeconomic compliance), although ecological and social value is also created to a certain extent (referring to GRI standards compliance). SOEs' preservation and dissemination of PV can be observed in the general disclosure (graph 5) of the SOEs in our sample, where there is intensive reporting on stakeholder engagement (in defining materiality topics), ethics and integrity (explaining the high moral values of the company), anti-competitive behaviour and anti-corruption

(reporting the firm's internal rules and statistics), and finally consumer privacy and socioeconomic compliance (reporting mainly on the protection of consumer privacy and other social issues) for both countries.

As far as SDGs are concerned, the SDG 9 (industry, innovation and infrastructure) result supports the predominance of economic value creation (more than 70% compliant) and the limited creation of social and ecologic value under GRI. Since SOEs are governmentally influenced (Bernier, Bance and Florio, 2020), their PV is cocreated along with the government interventions that make functional operations possible, especially in capital-intensive industries essential to the economy, investment in which requires long gestation, imported equipment, and large lump-sum funding that cannot be achieved by the market alone. On the other hand, governments see SOEs as the second best way to maintain social stability, and without them economies cannot function properly (when social stability is low, SOEs are useful for hiring excess labour and for the investment of people's retirement benefits, while privatised firms have a reduced number of employees after privatisation) (Lin et al., 2020). Those findings were confirmed by the interview methodology. The interview results emphasize the operational capacity with a strong focus on the sustainability aspect of investments in infrastructure and technology. The reason for this could be in the fact that SOEs are of direct importance to the national development agenda and for PV creation since they play an important role in a country's infrastructure, industry and innovation sectors.

Studies indicate that ownership concentration impairs corporate transparency in SOEs (Argento et al., 2019; Khlif, Ahmed and Souissi, 2017; Raimo et al., 2020). Slovenian SOEs have a higher level of state ownership than Austrian. The research interest lies in investigating SOEs' motivation for disclosure, which is inversely related to state ownership (Dragomir, Dumitru and Feleaga, 2022). The results show that compliance is significantly higher for highway operators (Asfinag and Dars) and large hydropower plants (Verbund and Gen Energija) in both countries, while compliance is very different for railroad companies. In Austria, ÖBB is more than 27 percentage points more compliant than Slovenian railways (Slovenske železnice). Further research into the motivations for disclosure is warranted, as certain sectors are important drivers of sustainability disclosure (Uyar, Kuzey and Kilic, 2021; Garde Sánchez, Rodríguez Bolívar and López Hernández, 2017).

The hybridity of SOEs in our sample indicates a spill-over effect in the dissemination of societal information and underlines the importance of the transparency and accountability of the public sector in sustainability issues (Raffer, Scheller and Peters, 2022). Hybrid organizations manage stakeholder expectations through sustainability reporting (Christensen, 2017). Institutional pressure leads to the adoption of different disclosure tools, reflecting isomorphic processes (Nicolo et al., 2021; Maine, Florin Samuelsson and Uman, 2022; Shabana, Buchholtz and Carroll, 2017).

7 CONCLUSION

Our results demonstrated a slightly better SR practice in Austrian SOEs than in their Slovenian counterparts. Although there has been an upward trend in the disclosure practices of both countries, the situation of a less than 50% compliance with all GRI standards is unsatisfactory. Companies in our sample are far from being well-prepared for the much broader reporting focus of the CSRD and EU Taxonomy. The transition to a greener and more sustainable economy has become a priority for the EU; not just from an operational perspective, but also from that of financial resources. The EU is influencing financial markets by promoting and including ESG factors in market operations, which might be very challenging for financial supervisors and regulators. It is clear that the EU needs a firmer legislative framework as far as sustainability issues are concerned, while the current situation has been described as "problematic" (The ATVP, 2021).

There are some limitations of our paper, as with many studies on SR practice. Firstly, there might be some subjectivity in the compliance assessment of companies in our sample. Secondly, the assessment has been made on documentary analysis excluding any other data-obtaining strategy. As the upcoming CSRD includes elements from the GRI and IR frameworks, both major existing non-financial reporting standards need to be adjusted to be aligned with the requirements of European Sustainability Reporting Guidelines (ESRS) requirements. As the next step, the requirements of the sector-agnostic ESRS could serve as an input for constructing an ESG-disclosure index.

Disclosure statement

The authors have no potential conflict of interest to report.

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