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Public Administration Accountability on the Social Pillar of Sustainable Procurement: A Documentary Analysis

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Abstract

This research analyses public administration accountability practices relating to the social pillar of sustainable public procurement. To that end, we carry out a content analysis of the social criteria (and the indicators applied to report on compliance therewith) incorporated into the procurement files produced by a Spanish regional government between 2017 and 2019, containing over 9,300 pages of contractual content. The results show a significant disconnect between current accountability practices and the promotion of sustainability. Worth noting in this sense is the confusion between criteria and indicators, the use of mere legal compliance unrelated to sustainable public procurement as “indicators”, and the fact that the few genuine sustainable public procurement indicators identified do not provide relevant information to determine compliance with the criteria. In this scenario, accounting misses an opportunity to play a mediating role in the implementation of sustainable practices such as those prescribed by the SDGs.

Keywords: social accounting; public procurement/purchasing; SDGs; procurement records; indicators; content analysis

Subject classification codes: H83, M41, M48

Introduction

Public procurement¹, as an instrument at the service of political powers (Gimeno Feliú, 2017), plays a key role in achieving sustainability goals (Mazzucato, 2020), and is one of the targets of the Sustainable Development Goal (SDG) 12; namely, target 12.7 on sustainable consumption and production (United Nations, 2015). More generally, it has an impact on many of the other SDGs established in the 2030 Agenda for Sustainable Development. The potential attributed to public procurement as a driver of sustainability is based on the fact that public procurement accounts for 10-15% of global GDP (World Trade Organization, 2020), with European public authorities spending around 19% of GDP on public procurement (European Commission, 2017a). Additionally, public procurement plays a key role in the vision and strategy of private companies (Harland et al., 2019), as most public authorities procure from industries that are relevant to sustainability, such as energy, transport, waste management, social protection or the provision of education and health services (European Commission, 2019). Hence, different European initiatives (Directives 2014/23/EU², 2014/24/EU³ of the European Parliament and of the Council) have promoted strategic, responsible public procurement that will allow for the development of social and environmental policies.

Against this backdrop, there is a need to examine whether and how public administrations are taking this sustainable and strategic approach into consideration in their

¹ In this paper, the terms public procurement and public purchasing are used interchangeably. According to the literature and legislation on the subject, both concepts refer to the entire contractual procedure, from the moment the need arises in an administrative body to contract the provision of a good (or service) for the public, until the contract related to that need has been awarded.

² Directive 2014/23/EU of the European Parliament and of the Council of February 26, 2014, on the award of concession contracts.

³ Directive 2014/24/EU of the European Parliament and of the Council of February 26, 2014, on public procurement and repealing Directive 2004/18/CE.

procurement practices. Public institutions can include social and environmental criteria⁴ in procurement files to ensure sustainable performance in the procurement of goods and services (Brammer & Walker, 2011; Chiarini et al., 2017; Gelderman et al., 2017). However, numerous difficulties arise from the uncertainty about how to include these criteria into contract award procedures (Bergman & Lundberg, 2013; Dimitri, 2013; Falagario et al., 2012) and from a lack of objective methods to assess the criteria (Ruparathna & Hewage, 2015). These difficulties have a more severe impact on the social pillar of sustainability procurement (Akenroye, 2013; Montalbán-Domingo et al., 2018).

In light of the above, the main aim of this paper is to explore how social criteria—which to date have been less extensively studied than environmental criteria—are incorporated in the public procurement process. Social criteria are the conditions set out in contracts to promote and guarantee social policy objectives such as job stability and labour market integration, gender equality and occupational risk prevention, among others. Specifically, this paper examines how the effectiveness of these criteria is assessed through the use of indicators⁵, which are the key instruments of accountability in the public sphere (Bonneto y & Armijo, 2005). Though it remains underexplored in the literature, this is an important issue, as it is through accountability that public procurement can play a mediating role in the implementation of sustainable practices (Lapsley et al., 2010; Larrinaga et al., 2018) such as those set out in the SDGs (Bebbington & Unerman, 2018; Malolitneva & Ruslan Dzhabrailov, 2019), and thus become strategic in nature (e.g., Glas et al., 2017; McCrudden, 2004; Sarter, 2020).

⁴ Under contract law, the term criteria is used to refer to the parameters that assess the performance of the subject under study (the bidder in this case) concerning different aspects (Medina-Arnáiz, 2017) such as the processes, strategies and goals the subject under study is trying to achieve. These criteria are included in contract clauses (Medina-Arnáiz, 2017).

⁵ “Quantitative or qualitative factor(s) or variable(s) that provide a simple and reliable means to measure achievement, to reflect changes related to an intervention, or to help assess the performance of a development actor” (Parsons et al., 2013, p.5).

To address this research objective, after examining the concept of public procurement as a process, this paper reviews the concept of accountability to build a perspective that incorporates the different areas (dimensions) of accountability in sustainable public procurement, focusing on the ethical dimension (as it is directly related to sustainable public procurement) and on the characteristics of the information used to assess accountability in this regard. To explore the accountability on the effectiveness of these criteria, a content analysis was carried out on procurement files, which represent the unit formed by a series of administrative actions aimed at entering into a public contract, and within which the different stages of the procurement process can be identified. They are made up of a set of standardised documents (tender notices, specific administrative clauses, technical specifications, contract award notices) (Article 116 of Law 9/2017).⁶

Specifically, the analysis focuses on the procurement files produced during the period 2017-2019 by entities of the entire public sector of a Spanish autonomous community (Castilla y León). This autonomous community was affected by the transposition of European directives promoting sustainable public procurement through Law 9/2017, which came into force on 8 November 2018⁷. Some of the articles of said law mandate the inclusion of social and environmental criteria linked to the object of contracts⁸ and cover the possibility of incorporating these criteria at different stages of the public procurement

⁶ These documents set out the necessary steps to produce the content of the public contract, as an expression of the essential general principles that govern the relations between the contracting authority and the contractor (Supreme Court ruling of 19th March 2001, of 8th June 1984 or the ruling of 13th May 1982).

⁷ Law 9/2017, of 8 November, on Public Sector Contracts, transposing Directives of the European Parliament and of the Council 2014/23/EU and 2014/24/EU, of 26 February 2014, into the Spanish legal system.

⁸ Article 202 of Law 9/2017 requires the introduction of at least one of the special performance conditions. These may relate to economic, innovation, environmental or social considerations. Furthermore, Article 147 offers the possibility of including tie-breaking aspects in cases where, following the evaluation of bidders' tenders, there is a tie between two or more of them. In the absence of any provisions, the tie shall be resolved by applying, in order, social aspects specified in Article 147.2.

process. Until that point, there had only been European and national recommendations and plans to promote sustainable public procurement. Therefore, analysing this period also allows us to shed light on the effects of said law on current procurement practices.

Regarding the specific contributions made by this paper, it is worth noting the contribution to research exploring the implementation of social procurement policies (e.g., McCrudden, 2004; Sarter, 2020; Walker and Brammer, 2012), and particularly to the still limited understanding of public administration procedures relating to this matter (Sarter, 2020). Previous studies analysing this issue in relation to the social pillar of sustainable public procurement are limited to examining criteria (e.g., Akenroye, 2013; Neto, 2020; Nissinen et al., 2009; Prier et al., 2016) but do not analyse compliance with said criteria.

Furthermore, the cross-sectional exploration (considering all stages of the procurement process referred to in the procurement file) of the social pillar of public procurement carried out in this study complements previous literature focusing on the study of particular stages, especially the second stage (supplier selection) (e.g., Akenroye, 2013; Bergman & Lundberg, 2013; Falagario et al., 2012; Lindholm et al., 2019; Watt et al., 2009); the third stage (contract execution) remains understudied (Nygård et al., 2019) despite the importance of this final stage in the public procurement process, as it is here where the indicators that have been designed in earlier stages of the public procurement process should be implemented (Nygård et al., 2019). Moreover, the literature that has explored the social pillar of public procurement mainly relies on the use of questionnaires (Akenroye, 2013; Brammer and Walker, 2011; Chiarini et al., 2017; Prier et al., 2016), and to a lesser extent, interviews (Holma et al., 2020; Selviaridis et al., 2011). The present study draws on the literature that points to content analysis of procurement files as a suitable way to explore the inclusion of evaluation criteria in the public procurement process (Montalbán-

Domingo et al., 2018). Furthermore, it enriches said literature by analysing all the documents that make up procurement files. Previous literature mainly focuses on the analysis of the information contained in just one of these documents (tender notices) (e.g., Braulio-Gonzalo & Bovea, 2020; Montalbán-Domingo et al., 2018; Nissinen et al., 2009). In theoretical terms, this article aims to contribute to the development of accountability in the area of public procurement, an aspect on which previous literature has called for more reflection (e.g., Diggs and Roman, 2012; Fox and Morris, 2015). It does so by translating the concept of accountability as used in other fields such as non-profit entities (Andreas and Costa, 2014) to the sustainability public procurement field.

The rest of this paper is structured as follows. The theoretical approach informing the analysis is presented in the second section. The research method is described in the third section and the empirical results of the study are detailed in the fourth section. Finally, the results and the main conclusions and implications of this work are discussed, as well as the main limitations and future lines of research that could be developed to overcome these limitations.

Accountability in the sustainable public procurement process

The presentation of the theoretical framework of this study is organised into two subsections. The first provides a general description of the public procurement process and a characterisation of each of its stages, which is relevant for a comprehensive study of this process. The second subsection reviews the concept of accountability to build a perspective of how the different areas (dimensions) of accountability in the sustainable public procurement process are structured, taking into account the importance of the characteristics of the information presented for proper accountability.

Public procurement as a process

Public procurement is a process that starts at the moment public entities detect a need for a good or service (Grandia, 2015; Patrucco et al., 2017; Tikkanen & Kaleva, 2011) and ends with the delivery of that good or service under the terms set out in a contract. Legal literature (Patrucco et al., 2017; Tikkanen & Kaleva, 2011) points to the need to break down this process into stages to analyse how public entities incorporate into their procurement practices the criteria by which the bidder's performance is assessed throughout the entire procurement process. In particular, Tikkanen and Kaleva (2011) summarise this process in four stages: 1) stage 1 "identification of the need"; 2) stage 2 "selection"; 3) stage 3 "execution"; and 4) stage 4 "termination and assessment".

In stage 1, the goal to be achieved through public procurement is defined (Holma et al., 2020; Patrucco et al., 2017; Selviaridis et al., 2011). This involves specifying the service that needs to be covered and its planning, technical specifications, economic cost, qualification of the characteristics required of suppliers wishing to tender and the procedures for organising the tasks to be carried out in the delivery of the service.

Stage 2 entails the selection of the bid submitted by the tenderer that will execute the contract, taking into account parameters determined by the priorities of the public purchaser (Lindholm et al., 2019; Watt et al., 2009), without this implying any restrictions on competition. These priorities should combine price with aspects that determine the quality of the subject of the procurement (Kiiver & Kodym, 2015). Furthermore, in the particular case of Europe, the social and environmental aspects set out in Directives 2014/23/EU and 2014/24/EU should inform the priorities.

Stage 3 is the actual execution of the contract by the supplier selected in the previous stage (Nygård et al., 2019; Racca et al., 2011). Public entities must always make sure that, notwithstanding any unforeseen events that may arise by chance, the contract is

fulfilled as stipulated (Fox & Morris, 2015; Racca et al., 2011). Moreover, they must always bear in mind that the actual execution of the contract must meet the needs of its beneficiaries (Racca et al., 2011).

Stage 4 involves the assessment of whether the intended goals of the contract have been achieved (Flynn & Davis, 2014; Murray, 2014). This assessment should break down, on the one hand, whether the public body's approach to the contract has been appropriate to the goals to be achieved and, on the other hand, how well the contractor has performed (Fox & Morris, 2015). This stage is essential to account for how funds provided by the public have been invested in contracts (Murray, 2014).

An approach to the concept of accountability in the sustainable public procurement process

Although the concept of accountability has been widely discussed in the academic literature (e.g., Ebrahim, 2003, 2005; Gray et al., 1996; Romzek & Dubnick, 2018), it warrants further analysis given its complexity, especially with regard to the field of public procurement (Diggs & Roman, 2012; Fox & Morris, 2015; Schapper et al., 2006). There has been a diversity of academic approaches to the concept of accountability, and there is no single unified approach to this concept in the field of public administration. In the particular case of accountability in public procurement, most academic efforts focus on the study of efficiency (in business or legal terms) and/or the development of anti-corruption mechanisms (e.g., Broadment, 2013; Ibrahim et al., 2017; Kling, 2008; Thai, 2015), but there is limited literature addressing broader theoretical aspects. However, there is a relatively high degree of consensus on the basic questions of accountability that are essential in the public sphere: who is accountable and to whom? (Gray et al., 1996). Thus, a considerable number of authors have used these questions in their studies of accountability in the public sphere (Bovens, 2005, 2007; Romzek & Dubnick, 2018; Tello

et al., 2016), and to a lesser extent in the specific area of public procurement (Diggs & Roman, 2012; Fox & Morris, 2015; Raymond, 2008). The emphasis has been on certain specific characteristics of this concept in the public sector, such as the multiple stakeholders in accountability and the numerous public actors involved (Bovens, 2005; Diggs & Roman, 2012; Tello et al., 2016).

However, there is another question that has begun to attract increasing attention from scholars interested in the study of accountability: the “for what” of accountability (see, for example, Andreaus & Costa, 2014, in the case of non-profit organisations). These authors argue that accountability in the case of non-profit organisation must go beyond a focus on purely economic and financial aspects, suggesting that accountability cannot be assessed within traditional hierarchical approaches (Acar et al., 2008; Bardach & Lesser, 1996). It should also take into account aspects alluding to the relationship between an organisation's actions and its mission, and an organisation's relationship with its stakeholders. Based on these ideas, Andreaus and Costa developed a Model of Integrated Accountability, taking into consideration three dimensions (areas) of accountability: (i) the economic and financial dimension, which covers the aspects of organisations' financing and resource allocation to ensure their survival, (ii) a dimension relating to the mission of organisations, referencing the relationship between the actions carried out by organisations and their "raison d'être", and (iii) the social dimension, which covers the relationship between organisations and their stakeholders. Thus, this model conceives accountability as a multidimensional responsibility and underlines ideas discussed in previous literature on the difficulty of considering a single dimension of accountability in organisations that are faced with widely diverging expectations (Acar et al., 2008; Whitaker et al., 2004).

As is the case with non-profit organisations, the responsibility of public administrations when engaging in sustainable public procurement must reflect their

mission; in other words, they must address the purpose that this type of public procurement seeks to fulfil. This entails ensuring that the execution of the public procurement process is aligned with the goals and objectives established in public contracts (Broadment, 2013; Flynn & Davis, 2014; Kamann, 2007; Prier et al., 2016; Vörösmarty & Tátrai, 2019).

In the case of sustainable public procurement, the question "what for?" would refer to the set of dimensions that must be developed to achieve said mission. Dimensions can be established in this area both for reasons of regulatory compliance (Directives 2014/23/EU and 2014/24/EU) and democratic control (Bovens, 2005), with the latter being understood as subjecting government actions to citizen evaluation (Tello et al., 2016). Drawing on the legal and public procurement literature, we can identify the following dimensions related to the regulatory pillar: (1) the legal dimension, implying that administrative action is subject to the law (Fox & Morris, 2015); (2) the economic dimension, presuming that the achievement of the objective of public services is related to appropriate efforts to achieve efficiency in the management of public funds (Balduş & Hatton, 2020; Raymond, 2008); (3) the equity dimension, assuming the promotion of equal opportunities and access for participating bidders in the process of choosing a public provider (D'Hollander & Marx, 2014). The dimensions related to democratic control would be as follows: (4) the ethical dimension, involving the professional action of the public sector from a moral and exemplary perspective (Raymond, 2008), incorporating concerns about social and environmental aspects (Brammer & Walker, 2011; McCrudden, 2004; Preuss, 2009) that go beyond legal obligations (Medina-Arnaiz, 2017); and (5) a mission-related dimension (Mazzucato, 2020), referring to the execution of the procurement process in accordance with the goals and objectives established in public contracts by public entities (Preuss, 2009; Thomson & Jackson, 2007; Prier et al., 2016; Walker & Brammer, 2009). This paper studies the social pillar of the public procurement process; as

such, it is focused on the ethical dimension since this is the dimension that is directly related to the social pillar, as described above. However, it is important to emphasise the interrelationship between this dimension and the other dimensions (economic, legal, equity) when it comes to achieving the mission. Nevertheless, in order to assess the accountability on the said dimension, the contracts must have finished, as it is only at this point that it becomes possible to determine whether the public service required has been satisfactorily provided.

In the public process, indicators are considered as reference instruments for accountability (Bonney & Armijo, 2005). In an effort to ensure the proper accountability of the public sector, both the academic literature (Tello, 2016) and the public administration itself (Bonney & Armijo, 2005; Casillas et al., 2015) have pointed out a series of qualitative characteristics that the information disclosed (and therefore, contained in the indicators) should have. These characteristics include relevance, timeliness, reliability, transparency, comprehensibility and comparability. Of these, and following the conceptual framework for financial reporting (Asociación Española de Contabilidad y Administración de empresas (AECA, 1999)), the most important is relevance, as it relates to the usefulness of said information for accountability. In the specific case of public procurement, relevance would be related to the usefulness of the information provided by an indicator for deciding whether a criterion or goal is being achieved. Another key characteristic for the analysis of accountability in the public procurement process is timeliness. This characteristic implies having information readily available at the right place and at the right time for the assessment of a goal (AECA, 1999). Thus, in the case of public procurement, timeliness assumes that an indicator is used in the stage of the procurement process that is most appropriate for the achievement of a criterion or goal.

Research design

As mentioned in the introduction, in order to analyse the practice of accountability regarding the social aspects of public procurement, this study takes Castilla y León as a reference. Specifically, a content analysis is conducted of the criteria and indicators included in the procurement files produced in this autonomous community. Below we further describe the framing of the empirical setting and the sample of files analysed, and detail the data analysis process.

Empirical setting and sample of files

A sample of procurement files produced by the regional government of Castilla y León during the period 2017-2019 was selected. One benefit of analysing this Autonomous Community was the fact that the lead author of this article had first-hand knowledge of the public procurement process there. This played a crucial role in overcoming the difficulty of accessing the information to be examined and analysing it. On the other hand, this Autonomous Community is representative of national trends in public procurement as its salient procurement data (total monetary amount of tenders: €1,017,196,240.71€; total number of tenders: 2,315) lie close to the regional average (total monetary amount of tenders: €1,149,741,803.56; total number of tenders: 1,746.25) (OIReScon, 2020). It is noteworthy that in 2012 the legislation for the Autonomous Community of Castilla y León already established the incorporation of social clauses (Bragado-López et al., 2019), while the current 2030 Agenda for this Community sets binding rules for the incorporation of social aspects in public procurement (Junta de Castilla y León, 2018). We agree with studies such as that by Rodríguez et al. (2019) that by focusing the analysis on a specific case study the results may not be fully generalizable to other cases. On the contrary, it can constitute a first step (Rodríguez et al., 2019) in the exploration of accountability in the

public procurement process, fostering theoretical generalization (Lukka and Kasanen, 1995) emerging explanations that can be tested in other studies (Lukka and Kasanen, 1995).

Regarding the selection of the sample of contracts to be analysed, a three-step procedure was carried out. The first step involved identifying all the contracting authorities (departments) that formed part of the government structure of Castilla y León in March 2019, as well as their share of the total budget of the Autonomous Community (see Appendix 1). In the second step, given the various types of contracts that can be entered into by public administrations (Section 1 of Chapter II of Law 9/2017), the types of contracts most commonly used in the existing departments (contracts for public works, services and supply) were taken as the focus of analysis by accessing the Public Register of Contracts of Castilla y León⁹. In 2019, these types of contract represented 97.8% of the total. In the third step, the online procurement platforms were accessed¹⁰ (in the period April-August 2019) to select the procurement files for each of the contracts. For each of the analysed departments and for each one of the analysed years (2017, 2018, 2019), between three (min.) and five (max.) procurement files were randomly selected, following studies such as Bragado-López et al. (2019). It was conducted depending on availability, covering the most common types of contracts mentioned above. The minimum value established (3 procurement files for each of the analysed departments and for each one of the analysed years) ensured the representativeness of each of the most common types of contracts for each of the departments.

⁹ Registro de Contratos de Castilla y León (<https://contratacion.jcyl.es/web/es/registro-contratos.html>)

¹⁰ Until 16.04.2018, the Procurement Platform of Castilla y León (<https://contratacion.jcyl.es/web/es/contratacion-administrativa.html>), and after that date the National Procurement Platform (<https://contrataciondelestado.es/wps/portal/plataforma>).

As a result of this process, a total of 121 procurement files were identified. Of those files, 45 corresponded to 2017, 40 to 2018 and 36 to 2019. The files have an average length of 77 pages, totalling 9,360 pages for all the contractual documentation used in this study.

Data analysis

To examine the criteria and indicators contained in the different documents that make up the procurement files, an exploratory research approach (see, for example, Larrinaga et al., 2020) was used, which is essential when investigating an emerging practice such as sustainable public procurement. In particular, a content analysis (Abbott & Monsen, 1979) of the documents obtained was carried out. Content analysis can be defined as an observational method in which the researcher analyses communications produced by an entity to understand its behaviour (Abbott & Monsen, 1979; Gray et al., 1995). A similar approach has been applied in the previous literature (Montalbán-Domingo et al., 2018).

The analysis process took place in two stages starting from selected categories of information to be identified in the data (Hsieh & Shannon, 2005). The first stage involved identifying and examining the social criteria (objectives established in the contract) included in all documents that made up the analysed files, which, following a similar approach that studies such as that by Montalbán et al. (2018), were tabulated according to the four variables (contracting entity, base tender budget, duration of contracts, and reason for including a criterion (solvency, award or performance criterion)). In the second stage, having identified the social criteria, it was checked whether there were indicators to provide information about the criterion in question (basing the determination on the concept of indicator referred to in the introduction of this article, footnote 5). In cases where such indicators were found, they were studied in detail. Information was collected on the following aspects:

1) Verification that the indicators respond to the ethical dimension of public procurement, which, as discussed in section 2 of this paper, is representative of a social aspect beyond legal compliance.

2) In the case of indicators that do not correspond to the aforementioned ethical dimension, we analyze what they represent (i.e., whether they are indicators that correspond to other dimensions of sustainable public procurement).

3) In the case of indicators that do correspond to the ethical dimension, the following aspects were analysed:

3.1) Stage of the procurement process ("identification of the need", "selection", "execution", "termination and evaluation") in which each indicator is introduced.

3.2) Characteristics of the information it provides (relevance and timeliness). The analysis of the relevance was based on whether the information provided by the indicator was *helpful* in terms of deciding if the criterion was being met. Timeliness refers to the fact that an indicator is used at the most appropriate stage of the procurement process.

Following recommendations from the literature (Berg & Lune, 2012), two researchers worked on analysing the data between February 2020 and May 2021, employing an iterative process for the appropriate classification of the data. All the procurement files were coded by one of the authors and one research assistant. To ensure the reliability of the coding process (O'Connor & Joffe, 2020), the researchers periodically compared their coding.

Public procurement accountability practices in Castilla y León

This section presents the main findings from the analysis of the accountability practices relating to the social pillar of sustainable public procurement in the autonomous community of Castilla y León for the period under study (2017-2019).

Confusion surrounding the desired objective (criterion) and its assessment (indicator)

One of the first key findings on accountability practices is the identification of certain patterns where there is no distinction made between public procurement goals (criteria) and the instruments used for their assessment (indicators); what are referred to in this paper as criteria are used for both establishing goals and for assessing public procurement goals. Looking at the information presented in Table 1 and Table 2 (column “Indicators’ characteristics”), it can be seen that this confusion occurs with 6 out of 25 indicators (24%) identified in procurement files.

[Table 1 to be inserted here]

[Table 2 to be inserted here]

These practices are even more noteworthy if we take into account that some of these "false indicators" appear in the majority of analysed files, as is the case with "Compliance with labour regulations" and "Compliance with social regulations" (indicators 1 and 2, Table 2). These "indicators" are the ones that appear most frequently ($87.50\% < \text{frequency} < 100\%$) in analysed procurement files (see Table 2, column “Number of procurement files (%)”), with no differences identified according to the variables used to tabulate the information mentioned in section 3 of this study.

The confusion surrounding the concepts of criteria and indicators leads to inadequate accountability for a significant share of the public procurement goals, since these "false indicators" yield no useful information for determining whether the criterion associated with each goal was actually met. This confusion inhibits the ability of public procurement to play a mediating role in the achievement of the SDG targets pertaining to these "false indicators", such as those relating to SDG 8 (decent work and economic growth) in which reference is made to the protection of labour rights and safe working environments (see Table 2, column "SDGs", for more details on other SDGs affected by this confusion).

The entry into force of Law 9/2017 did not do anything to resolve this confusion between criteria and indicators; indeed, in some cases, it was even counterproductive (see indicators 1, 24 and 25 in Table 2, columns "Number of procurement files (absolute value)" and "Number of procurement files (%)").

Indicators that represent mere legal compliance with laws not related to public procurement

A second key finding on public procurement practices is the use of certain regulatory provisions from a social jurisdiction (occupational risk prevention, disability, etc.) as social indicators of sustainable public procurement. This occurs in 7 out of 25 indicators identified (28%) (Table 2, column "Indicators' characteristics"). For example, indicator 13 on having people with disabilities represent at least 2% of employees (see Table 2) refers to compliance with Article 42 of Royal Legislative Decree 1/2013 on the rights of people with disabilities. Another example is indicator 21 on gender equality plans, in compliance with Article 45 of Royal Decree-Law 6/2019. The use of certain legal standards as indicators is in line with other research which, in another context (companies' response to regulations on the information contained in sustainability reports), suggests that in the face

of regulatory pressure organisations use the tactic of "simulation" (Criado-Jiménez et al., 2008) "making insubstantial disclosures that do not meet the demands of stakeholders at all, but, instead, give the impression that the firm is complying with the regulation" (p.250).

In these cases, public administrations, obliged to use indicators to achieve sustainable and strategic procurement, display apparent compliance by using legal standards that simulate indicators. This appearance of using indicators, which in the examples used would pertain to SDGs 5 (gender equality), 8 (decent work and economic growth) and 10 (reduction of inequalities) (see Table 2, column "SDGs"), limits the potential of public procurement as a tool for ensuring social sustainability in line with the aforementioned SDGs.

This type of practice occurs throughout the entire period under study (2017-2019) (see Table 2, columns "Number of procurement files (absolute value)" and "Number of procurement files (%)"), and no difference was found with respect to the four variables selected for the tabulation of the information. A relevant observation in this context is the emphasis on the use of "indicators" derived from legal norms outside the scope of public procurement is even amplified with the entry into force of a new procurement law. Thus, looking at the examples under study, the frequency of use of indicator 13 ranges between 53.33% (2017) and 75% (2019), while indicator 21 ranges between 0% and 2.5% in the same years (Table 2). Given these results, it could be said that the law has a counterproductive effect on adequate accountability, which is necessary for the development of sustainable and responsible public purchasing.

Indicators with an ethical dimension of accountability in public contracts

If we exclude the 13 indicators referring to mere legal compliance or to what have been

termed "criteria" in this paper, only 12 of the 25 indicators identified in this study (48% of the total) are social indicators that have an ethical dimension of accountability (see table 2, column "Indicators' characteristics"). Examples of these indicators with an ethical dimension are indicators 16 and 17 (see Table 2). The first is an example of an indicator with an ethical dimension as it promotes the policy relating to the labour market integration of certain groups of people with diverse abilities and socioeconomic challenges, without there being a law mandating it. Nor is there a specific legal obligation regarding indefinite-term contracts in companies, as referenced in the second indicator.

As discussed in section 2 of this paper, to ensure adequate accountability, these indicators must yield data that is relevant to the assessment of the goal in question. However, this is generally not the case for the indicators identified. Of all the indicators with an ethical dimension, 75% of them (9 out of 12) yield irrelevant data (see Table 2, column "Indicators' characteristics"), with no differences identified considering the variables applied in the tabulation of the information mentioned in section 3 of this research.

For example, data contained in indicators 8 and 10 (which are also derived from Art.147 of Law 9/2017) are not useful when it comes to determining whether the labour market integration goal to which these indicators refer is being achieved (see Table 2). There are several reasons for this: their calculation is not limited to a specific period;¹¹ the context of their application is not taken into consideration;¹² and the required percentage of salaried workers with disabilities (in companies that are obliged to comply) is below the national average (2.2%) (Instituto Nacional de Estadística, 2020). When an indicator lacks

¹¹ Resolutions No 192 and No 286/2020 of the Central Administrative Tribunal for Contractual Appeals

¹² Administrative Tribunal for Public Procurement of the Community of Madrid

relevance, this negates the potential of other important qualitative characteristics for accountability in the procurement process, such as timeliness, since the other characteristics help improve the relevance of the indicator (AECA, 1999). Another example of lack of relevance can be found in indicators 17 and 18. The information yielded by these indicators (17 and 18) is not useful for determining whether the criterion it refers to (job stability) is being achieved, as it stipulates a percentage of permanent workers that is well below the national and regional averages: 73.9% and 74.5%, respectively (Instituto Nacional de Estadística, 2019). It is interesting to note that all nine indicators identified as providing non-relevant information (see Table 2, “Indicators’ characteristics”) are taken from legal provisions that mandatorily apply in stages 2 (selection) and 3 (implementation) (Table 3).

[Table 3 to be inserted here]

These results suggest that bureaucratically motivated legal compliance (Gimeno Feliu, 2020) overrides the promotion of a strategic and responsible vision that is necessary to achieve the related SDGs. In the specific case of the examples cited in this study, the use of these indicators inhibits the potential mediating role of public procurement in working towards SDGs 8 (decent work and economic growth) and 10 (reduction of inequalities). Given their subject matter, the remaining indicators identified as yielding non-relevant information could also be included in said SDGs (see Table 2).

It has been found that only 25% of indicators (3 out of 12) identified as having an ethical dimension yield relevant information, and that these indicators were present in only eight of the contracts under study (Table 2, “Indicators’ characteristics”). Of these, indicators 14 and 15, pertaining to the employment of people with disabilities, provide

useful information for assessing the intended criterion (labour market integration). The information contained in these indicators is also timely. Thus, they appear in stage 1, which is when the objective of the contract is determined, limited in this case to companies that are inclusive in terms of their workplace¹³ (see Table 3). In addition, they appear in stage 3, limiting the execution of the contract to said inclusive companies and thus ensuring compliance with the labour market integration criterion (Table 3).

Finally, indicator 19 also yields useful information for assessing the desired criterion; in this case, gender equality. Even though the relevance of the information it contains is not initially as obvious as with previous indicators, it should be borne in mind that, based on this information, it is the company itself that is responsible for complying with the gender equality criterion within its workforce. Moreover, these commitments have legal consequences that could lead to exclusion from the tender and being barred from entering into future contracts with the public administration (Art. 71 of Law 9/2017), so companies would not make such statements if they did not really intend to comply with the commitments. In addition, the information contained in the indicator is timely because when used during stage 2 (selection) (Table 3) it encourages a positive evaluation of the commitment to gender equality when selecting the best offer for the bidder to execute the contract.

The three indicators that were found to provide relevant and timely information would help ensure the achievement of SDGs 5, 8 and 10 (Table 2, column “SDGs”). Taking a comprehensive approach, it is worth noting the strategic vision of indicators pertaining to SDGs 8 and 10, as they can be employed during the two critical stages of the

¹³ These special employment centres are considered to be inclusive companies as their main purpose is to promote the employment of workers with disabilities; they are regulated by Royal Decree-Law 2273/1985, of 4 December.

process to achieve these goals. However, as stated above, these types of indicators appear in very few contracts, limiting the potential for responsible public procurement to play a part in the achievement of the SDGs.

The analysis of the indicators accounting for the aforementioned ethical dimension shows that when Law 9/2017 makes the use of indicators compulsory (Articles 147 and 202), they do not provide relevant information. Conversely, in cases where indicators are not introduced to fulfil legal requirements, they do yield information that is relevant for meeting the criteria to which they relate. It is important to note that legally stipulating the use of indicators leads to a standardised use of indicators with information that is not relevant, as is the case with indicator 18, whose frequency increases from 6.67% in 2017 to 30.56% in 2019 (Table 2, column “Number of procurement files (%)”). This finding is consistent with those from similar research in another context (the response of organisations to regulation of information) suggesting that organisations, when facing national and international legal pressures, may resort to formal structures and automatic responses to give an appearance of compliance (Bozanic et al., 2012; Gilad, 2014).

Where indicators are used voluntarily, they yield relevant information. This can be seen in Table 2 (column “Number of procurement files (%)”), where indicator 14 goes from being used in 2.2% of cases from 2017 to 2.8% of cases in 2019. Conversely, indicator 15 is used in 2.2% of files from 2017 but is no longer used in 2019. Moreover, whereas it is not used at all in 2017, indicator 19 is used in 2.8% of files in 2019.

Conclusions, discussion and implications

The paradigm shift towards sustainable and strategic public procurement promoted in the new European directives, which have been transposed into national legislation through Law 9/2017, offers an opportunity for accounting research to investigate an area (public procurement) with huge social implications. However, there is a lack of accounting studies

in this area. Relevant in this regard is the call by Farag and McDermott (2015, see also Sarter, 2020) for studies that analyse public procurement practices to obtain evidence that facilitates the effective implementation of social values and thus initiatives such as the SDGs, as well as enabling the long-term perspective needed for a socio-economic transformation (Malolitneva and Ruslan Dzhabrailov, 2019; Nyeck, 2015). In this context, the present research explores accountability practices relating to the social pillar of sustainable public procurement in the case of the regional government of the autonomous community of Castilla y León.

To explore accountability on the effectiveness of the criteria representing the social pillar of sustainable public procurement, this study carries out a cross-sectional examination of accountability drawing on all the documents that form part of the analysed procurement files. In particular, a content analysis is conducted of the criteria and indicators contained in the procurement files produced in the 2017-2019 period by the contracting authorities of the aforementioned autonomous community. As has been noted throughout this article, some articles of Law 9/2017 mandate the inclusion of social and environmental criteria linked to the object of contracts and the possibility of incorporating these criteria at different stages of the public procurement process.

The results of this analysis show that there is some confusion between criteria and indicators, even in the presence of Law 9/2017. This fact may be supported by studies which point out that, compared to environmental aspects, social aspects are not commonplace (D'Hollander and Marx, 2014; Hassel and Helmerich, 2016; McCrudden, 2004). This becomes even more relevant if we take into account the fact that in the autonomous community analysed, when the 2030 Agenda was implemented only

environmental indicators were recognised, as the tool to facilitate the implementation of SDG12 (Junta de Castilla y León, 2018). The social pillar of public procurement was overlooked. This makes sense considering that although since 2012 efforts have been made to incorporate such clauses in contracts (Bragado-López et al., 2019), no indicators have been established to measure the extent to which these criteria are met. This situation is reinforced by the European scenario, where sustainable public procurement practices still show a clear bias towards the environmental pillar of public procurement (Andhov et al., 2020).

As for the practice of using certain legal standards as indicators (Arrowsmith, 2010) to evaluate the achievement of social criteria related to SDGs such as 5, 8 or 10, as discussed in the previous section, this could reflect the “simulation” tactic described by Criado-Jiménez et al. (2008). An initial explanation for this behaviour can be found in the fact that regulation exerts pressure to include ethical indicators and at the same time restricts how and when they should be included (Sarter, 2020; Sarter and Thomsom, 2020). An example of these restrictions is in Law 9/2017 itself, which promotes the incorporation of ethical aspects in the contract, but stipulates that only those linked to the subject of the contract can be included. For example, a procurement file for “The refurbishment of a municipal building using social and workplace integration processes through employment and training” allows for the inclusion of social indicators related to that aim. However, if the subject of the contract is “The refurbishment of a municipal building”, the use of social indicators will be restricted. Another explanation for this practice can be found in the ambiguity of Law 9/2017 when it refers to different types of indicators that go beyond legal standards, with misleading concepts that subsequently give rise to legal uncertainty (Arrowsmith, 2010; Sarter et al., 2014). For example, one ambiguity in Law 9/2017 lies in

its reference to the use of ethical, social and environmental aspects, without specifying the difference between these (Art. 202). These results are in line with the literature on the green pillar of sustainable procurement that points to the ambiguity of the legal requirements in the area of public procurement as one of the main obstacles to implementing sustainable procurement (Adjei-Bamfo and Maloreh-Nyamekye, 2019; Thomson and Jackson, 2007; Vejaratnam et al., 2020). In the specific context of the Community of Castilla y León, one explanation for this “simulation”, which in the examples mentioned in section 4 of this article relate to SDGs 5, 8 and 10, lies in the Autonomous Community's insufficiently positive attitude and lack of commitment to these goals (Sarter, 2020). Indeed, the low prioritization of gender equality policies in this Community, as reflected in the gender balance in Castilla y León (SDG 5) (see Junta de Castilla y León, 2021), is behind the lack of ethical indicators in public procurement related to this issue, with only legal compliance used as indicators.

On the other hand, this analysis shows that, having cleared up the confusion between criteria and indicators and discarding cases where indicators represent mere legal compliance with laws not related to public procurement, most of the remaining genuine public procurement indicators do not provide relevant (or timely) information in the stage or stages in which the established criteria are to be met. As such, this finding as explained below suggests that the administration resorts to formal structures and automated answers to give the impression of compliance (Bozanic et al., 2012; Gilad, 2014). This type of response encourages the use of vague criteria (Sarter, 2020) that do not allow for indicators capturing specific relevant information, as revealed in this study. In light of this result, it can be seen that the idea that regulations promote sustainable public procurement needs to be approached with caution (Brammer and Walker, 2011). Furthermore, this finding is in

line with studies in the field of public procurement showing that legal obligation did not lead to an improvement in the value for money of the services offered (Ibrahim et al., 2017; see also studies such as Larrinaga et al., 2018), demonstrating the limited effect of the law on the disclosure of information by Spanish public sector companies in sustainability reports). These practices, therefore, do not yield solutions to long-standing problems in public procurement, such as the lack of objective methods to assess the criteria established in public policies (Ruparathna & Hewage, 2015).

The results presented in this paper deserve to be taken seriously since, according to Potoski (2008), procurement is "one of state and local governments' most important jobs" (p.58). The lack of objective methods means that accounting misses an opportunity to play a mediating role in the implementation of sustainable practices (Lapsley et al., 2010; Larrinaga et al., 2018) such as those proposed in the SDGs, denoting a lack of exemplary action by the public administration (Broadment, 2013; Raymond, 2008) as a promoter of the policies that represent the 2030 Agenda. This behaviour leads to missed chances to detect and assess both the sustainability and unsustainability of the practices of institutions (Larrinaga et al., 2019), and more specifically, the transformative nature of public procurement (Bengo, 2018; Selviaridis et al, 2011; Murray, 2014), due to the resulting information gaps (Kauppi and Van Raaij, 2014).

In light of the above, the results of this research underscore the need to design policies that contribute to the development of sustainable strategies beyond those established in legal frameworks. Only in this way can accountability be fostered in line with the conceptual framework set out in section 2 of this research, where "legal compliance" is just one dimension of public contracting authorities' responsibility, and one which should be interlinked with all the other dimensions (economic, ethical, equity) to achieve the *mission*

(Mazzucato, 2020) of procurement. For this to occur, public contracting authorities' must be committed to making *genuine* efforts to promote sustainability (Andhov et al., 2020; Fisher, 2013; Sarter, 2020). Elements demonstrating such a commitment can be found not only in initiatives such as allocating resources to training on issues of accountability in public procurement for sustainable development (Erridge and Hennigan, 2012), but also in the creation of professional bodies with technical skills in this area (European Commission, 2017b; Mazzucato, 2020) to advise on how to incorporate sustainable public procurement considerations to make such practices part the culture of the organization (Erridge and Hennigan, 2012; van Berkel and Schotanus, 2021). The results of this study also have important implications in terms of management. For example, poorly defined (and assessed) criteria make it difficult for tenderers to prepare their bids. At the same time, it makes it impossible for the technical staff of the administration to evaluate the bids, and hampers the consequent monitoring and control needed to ensure their successful completion.

Finally, it is important to note that this study is not without limitations.

First of all, this research has only explored a single case study within a public sector setting in Spain. While other autonomous communities can be expected to face similar challenges, further research is needed to explore sustainable public procurement within this setting.

The findings of this paper that seem to show the limits of the strategic potential of public procurement may not be directly generalizable to all autonomous communities, although they could point the way for future studies.

A second limitation of this work may be related to its exploratory nature. Thus, this study shows that public administrations are not considering this sustainable and strategic approach in their public procurement accountability practices. More progress still needs to

be made in understanding the process preventing current public procurement practices from applying such an approach. For example, more should be known about the difficulty of defining indicators or the still insufficient mechanisms and methodologies for their implementation. (see, for example, Farag and McDermott, 2015). Future studies could also seek to enrich this research by studying accountability on dimensions other than those described in this conceptual framework. A possible limitation of this study is its focus on a specific dimension (ethics). Last, it would be useful to carry out studies that address the connection between the application of environmental and social indicators by public administrations in procurement practices and those used by private companies in their non-financial reports: this is essential to standardise sustainability practices and to easily identify sustainable private companies with which to engage in public procurement.

References

- Abbott, W. F., & Monsen, R. J. (1979). On the measurement of corporate social responsibility: Self-reported disclosures as a method of measuring corporate social involvement. *Academy of Management Journal*, 22(3), 501-515. <https://doi.org/10.5465/255740>
- Acar, M., Guo, C., & Yang, K. (2008). Accountability when hierarchical authority is absent: Views from public private partnership practitioners. *American Review of Public Administration*, 38(1), 3-23. <https://doi.org/10.1177/0275074007299481>
- Adjei-Bamfo, P., & Maloreh-Nyamekye, T. (2019). The “baby steps” in mainstreaming sustainable public procurement in Ghana: A “double-agency” perspective. *Journal of Public Affairs*, 19(1), 1-16. <https://doi: 10.1002/pa.1902>.
- Akenroye, T. O. (2013). An Appraisal of the use of social criteria in public procurement in Nigeria. *Journal of Public Procurement*, 1(3), 364-397. <https://doi.org/10.1108/JOPP-13-03-2013-B005>
- Andhov, M., Caranta, R., Stoffel, T., Grandia, J., Janssen, W. A., Vornicu, R., . . . Wiesbrock, A. (2020). Sustainability through public procurement: the way forward - Reform Proposals. https://www.researchgate.net/profile/Roberto_Caranta/publication/3411692

49_Sustainability_Through_Public_Procurement_The_Way_Forward_-_Reform_Proposals/links/5eb7d587a6fdcc1f1dcb3698/

Andreaus, M., & Costa, E. (2014). Toward an integrated accountability model for nonprofit organizations. In E. Costa, L. Parker & M. Andreaus (Eds.), *Accountability and social accounting for social and non-profit organizations* (pp. 153-176). Emerald Group Publishing Limited.

Arrowsmith, S. (2010). Horizontal policies in public procurement: a taxonomy. *Journal of Public Procurement*, 10(2), 149-186. <https://doi.org/10.1108/JOPP-10-02-2010-B001>

Asociación Española de Contabilidad y Administración de empresas (AECA) (1999, September). Marco conceptual para la información financiera. Documento de Principios Contables, AECA, Comisión de principios y normas de contabilidad, España.

Baldus, B. J., & Hatton, L. (2020). US chief procurement officers' perspectives on public procurement. *Journal of Purchasing and Supply Management*, 26(1), 100538. <https://doi.org/10.1016/j.pursup.2019.05.003>

Bardach, E., & Lesser, C. (1996). Accountability in human services collaboratives: For what? And to whom? *Journal of Public Administration Research and Theory*, 6, 197-224. <https://doi.org/10.1093/oxfordjournals.jpart.a024307>

Bebbington, J., & Unerman, J. (2018). Achieving the United Nations Sustainable Development Goals: an enabling role for accounting research. *Accounting, Auditing & Accountability Journal*, 31(1), 2-24. <https://doi.org/10.1108/AAAJ-05-2017-2929>

Bengo, I. (2018). Debate: Impact measurement and social public procurement. *Public Money & Management*, 38(5), 391-392. <https://doi.org/10.1080/09540962.2018.1471817>

Berg, B. L., & Lune, H. (2012). *Qualitative research methods for the social sciences* (8th ed.) Pearson.

Bergman, M. A., & Lundberg, S. (2013). Tender evaluation and supplier selection methods in public procurement. *Journal of Purchasing and Supply Management*, 19(2), 73-83. <https://doi.org/10.1016/j.pursup.2013.02.003>

Bonnefoy, J. C., & Armijo, M. (2005). Indicadores de desempeño en el sector público. Instituto Latinoamericano y del Caribe de Planificación Económica y Social and Comisión Económica para América Latina y el Caribe de las Naciones Unidas.

Bovens, M. (2005). Public accountability. In E. Ferlie, L. Lynne, & C. Pollitt (Eds), *The Oxford Handbook of Public Management* (pp. 182-208). Oxford University Press, Oxford.

- Bovens, M. (2007). Analysing and assessing accountability: A conceptual framework 1. *European Law Journal*, 13(4), 447-468. <https://doi.org/10.1111/j.1468-0386.2007.00378.x>
- Bozanic, Z., Dirsmith, M. W., & Huddart, S. (2012). The social constitution of regulation: The endogenization of insider trading laws. *Accounting, Organizations and Society*, 37(7), 461-481. <https://doi.org/10.1016/j.aos.2012.06.003>
- Bragado-López, V. B., del Moral, N. M., & de Yzaguirre, V. E. (2019). Contratación pública responsable. El caso de la Junta de Castilla y León. *CIRIEC-España, Revista Jurídica de Economía social y cooperativa*, (35), 253-282.
- Brammer, S., & Walker, H. (2011). Sustainable procurement in the public sector: an international comparative study. *International Journal of Operations & Production Management*, 31(4), 452-476. <https://doi.org/10.1108/01443571111119551>
- Braulio-Gonzalo, M., & Bovea, M. D. (2020). Criteria analysis of green public procurement in the Spanish furniture sector. *Journal of Cleaner Production*, 258, 120704. <https://doi.org/10.1016/j.jclepro.2020.120704>
- Broadment, J. (2013). Editorial: Reclaiming the ideal of public service. *Public Money and Management*, 33(6), 391-394. <https://doi.org/10.1080/09540962.2013.835992>
- Casillas, C., Macía, M., Merino, M., Paja, M., Rico, J., & Ruiz, A. (2015). *Guía práctica para el diseño y la realización de evaluaciones de políticas públicas*. Agencia Estatal de Evaluación de las Políticas Públicas y la Calidad de los Servicios, Ministerio de Hacienda y Administraciones Públicas.
- Chiarini, A., Opoku, A., & Vagnoni, E. (2017). Public healthcare practices and criteria for a sustainable procurement: A comparative study between UK and Italy. *Journal of Cleaner Production*, 162, 391-399. <https://doi.org/10.1016/j.jclepro.2017.06.027>
- Criado-Jiménez, I., Fernández-Chulián, M., Larrinaga-González, C., & Husillos-Carqués, F. J. (2008). Compliance with mandatory environmental reporting in financial statements: The case of Spain (2001–2003). *Journal of Business Ethics*, 79 (3), 245-262. <https://doi.org/10.1007/s10551-007-9375-7>
- D'Hollander, D., & Marx, A. (2014). Strengthening private certification systems through public regulation. *Sustainability Accounting, Management and Policy Journal*, 5(1), 2-21. <https://doi.org/10.1108/SAMPJ-04-2013-0016>
- Diggs, S. N., & Roman, A. V. (2012). Understanding and tracing accountability in the public procurement process: Interpretations, performance measurements, and the possibility of

developing public-private partnerships. *Public Performance & Management Review*, 36(2), 290-315. <https://doi.org/10.2753/PMR1530-9576360207>

Dimitri, N. (2013). "Best value for money" in procurement. *Journal of Public Procurement*, 13(2), 149-175. <https://doi.org/10.1108/JOPP-13-02-2013-B001>

Ebrahim, A. (2003). Making sense of accountability: Conceptual perspectives for northern and southern nonprofits. *Nonprofit Management & Leadership*, 14(2), 191-212. <https://doi.org/10.1002/nml.29>

Ebrahim, A. (2005). Accountability myopia: Losing sight of organizational learning. *Nonprofit and Voluntary Sector Quarterly*, 34(1), 56-87. <https://doi.org/10.1177/0899764004269430>

Erridge, A. & Hennigan, S. (2012) Sustainable procurement in health and social care in Northern Ireland. *Public Money & Management*, 32(5), 363-370. <https://doi.org/10.1080/09540962.2012.703422>

European Commission (2017a). Fichas temáticas del semestre europeo. Contratación pública. https://ec.europa.eu/info/sites/default/files/file_import/european-semester_thematic-factsheet_public-procurement_es.pdf.

European Commission (2017b). Recomendación (UE) 2017/1805 de la Comisión de 3 de octubre de 2017 sobre la profesionalización de la contratación pública. Construir una arquitectura para la profesionalización de la contratación pública.

European Commission (2019). Comunicación de la Comisión al Parlamento Europeo, al Consejo Europeo, Al Consejo, Al Consejo Europeo, al Comité económico y social europeo y al Comité de las Regiones. El Pacto Verde. Bruselas, 11.12.2019. COM(2019) 640 final. <https://eur-lex.europa.eu/legal-content/ES/TXT/?uri=CELEX:52019DC0640>.

Falagario, M., Sciancalepore, F., Costantino, N., & Pietroforte, R. (2012). Using a DEA-cross efficiency approach in public procurement tenders. *European Journal of Operational Research*, 218(2), 523-529. 10.1016/j.ejor.2011.10.031

Farag, F. F., & McDermott, P. (2015). Using soft system methodology to approach social value outcomes in public procurement [Unpublished manuscript]. School of the Built Environment, University of Salford.

Fisher, E. (2013). The Power of Purchase. *European Procurement & Public Private Partnership Law Review*, 8(1), 2-7. <https://doi.org/10.21552/EPPPL/2013/1/157>

Flynn, A., & Davis, P. (2014). Theory in public procurement research. *Journal of Public Procurement*, 14(2), 139-180. <https://doi.org/10.1108/JOPP-14-02-2014-B001>

Fox, D., & Morris, J. C. (2015). The role of accountability in federal acquisition: A search for context. *Journal of Public Procurement*, 15(4), 514-536. <https://doi.org/10.1108/JOPP-15-04-2015-B005>

Gelderman, C. J., Semeijn, J. & Vluggen, R. (2017). Development of sustainability in public sector procurement. *Public Money & Management*, 37(6), 435-442. <https://doi.org/10.1080/09540962.2017.1344027>

Gilad, S. (2014). Beyond endogeneity: how firms and regulators co-construct the meaning of regulation, *Law & Policy*, 36(2), 134-164. <https://doi.org/10.1111/lapo.12017>

Gimeno Feliú, J. M. (2017). Hacia una nueva Ley de Contratos del Sector Público. ¿Una nueva oportunidad perdida? *Revista Española de Derecho Administrativo*, 182, 181-221.

Gimeno Feliú, J. M. (2020). La visión estratégica en la contratación pública en la LCSP: hacia una contratación socialmente responsable y de calidad. *Economía industrial*, 415, 89-97.

Glas, A. H., Schaupp, M. & Essig, M. (2017). An Organizational Perspective on the Implementation of Strategic Goals in Public Procurement. *Journal of Public Procurement*, 17 (4), 572–605. <https://doi:10.1108/JOPP-17-04-2017-B004>.

Grandia, J. (2015). The role of change agents in sustainable public procurement projects. *Public Money & Management*, 35(2), 119-126. <https://doi.org/10.1080/09540962.2015.1007706>

Gray, R., Adams, C., & Owen, D. (1996). *Accounting and accountability: Changes and challenges in corporate social and environmental reporting*. Prentice Hall.

Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting. *Accounting, Auditing & Accountability Journal*, 8(2), 47-77. <https://doi.org/10.1108/0951357951014699>

Harland, C., Telgen, J., Callender, G., Grimm, R., & Patrucco, A. (2019). Implementing government policy in supply chains: an international coproduction study of public procurement. *Journal of Supply Chain Management*, 55(2), 6-25. <https://doi.org/10.1111/jscm.12197>

Hassel, A., & Helmerich, N. (2016). Institutional change in transnational labour governance: Implementing social standards in public procurement and export credit guarantees. In Y.

Dahan, H. Lerner, & F. Milman-Sivan (Eds.), *Global justice and international labour rights* (pp. 239–265). Cambridge University Press.

Holma, A. M., Vesalainen, J., Söderman, A., & Sammalmaa, J. (2020). Service specification in pre-tender phase of public procurement-A triadic model of meaningful involvement. *Journal of Purchasing and Supply Management*, 26(1), 100580. <https://doi.org/10.1016/j.pursup.2019.100580>

Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research*, 15(9), 1277-1288. <https://doi.org/10.1177/1049732305276687>

Ibrahim, M., Bawole, J. N., Obuobisa-Darko, T., Abubakar, A. B., & Kumasey, A. S. (2017). The legal regime and the compliance façade in public procurement in Ghana. *International Journal of Public Sector Management*, 30(4), 370–390. <https://doi.org/10.1108/IJPSM-09-2016-0156>

Instituto Nacional de Estadística (2019). Asalariados por tipo de contrato o relación laboral, sexo y comunidad autónoma. Valores absolutos y porcentajes respecto del total de cada comunidad. <https://www.ine.es/jaxiT3/Tabla.htm?t=4241&L=0> (accessed on 12/11/2021)

Instituto Nacional de Estadística (2020). El empleo de las personas con discapacidad. Año 2020. https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=estadistica_C&cid=1254736055502&menu=ultiDatos&idp=1254735976595 (accessed on 12/11/2021)

Junta de Castilla y León (2018). Directrices para la implementación de la Agenda 2030 en Castilla y León. <https://www.jcyl.es/web/es/administracionpublica/agenda-2030/directrices-implementacion-agenda-2030.html>

Junta de Castilla y León (2021). Plan Estratégico de Igualdad de Género 2021-2025. <https://transparencia.jcyl.es/participacion/Participaci%C3%B3n%20Familia%20e%20I.O/Plan%20Estrat%C3%A9gico%20Igualdad%20de%20g%C3%A9nero%20%202021-2025%20.pdf>

Kamann, D. J. F. (2007). Organizational design in public procurement: A stakeholder approach. *Journal of Purchasing and Supply Management*, 13(2), 127-136. <https://doi.org/10.1016/j.pursup.2007.05.002>

Kauppi, K., & Van Raaij, E. M. (2014). Opportunism and honest incompetence—Seeking explanations for noncompliance in public procurement. *Journal of Public Administration Research and Theory*, 25(3), 953–979. <https://doi.org/10.1093/jopart/mut081>

- Kiiver, P., & Kodym, J. (2015). Price-quality ratios in value-for-money awards. *Journal of Public Procurement*, 3, 275-290. <https://doi.org/10.1108/JOPP-15-03-2015-B001>
- Kling, R. (2008, August 28-30). Taxpayers are fighting back: Transparency and accountability does not mean inefficiency. [Paper presentation]. Third International Public Procurement Conference, Amsterdam, Netherlands.
- Lapsley, I., Miller, P., Panozzo, F., Kornberger, M., & Carter, C. (2010). Manufacturing competition: how accounting practices shape strategy making in cities. *Accounting, Auditing & Accountability Journal*, 23(3), 325-349. <https://doi.org/10.1108/09513571011034325>
- Larrinaga, C., Luque-Vilchez, M., & Fernández, R. (2018). Sustainability accounting regulation in Spanish public sector organizations. *Public Money & Management*, 38 (5), 345-354. <https://doi.org/10.1080/09540962.2018.1477669>
- Larrinaga, C., Moneva, J. M., & Ortas, E. (2019). Veinticinco años de Contabilidad Social y Medioambiental en España: pasado, presente y futuro. *Spanish Journal of Finance and Accounting*, 48(4), 387-405. <https://doi.org/10.1080/02102412.2019.1632020>
- Larrinaga, C., Rossi, A., Luque-Vilchez, M., & Núñez-Nickel, M. (2020). Institutionalization of the contents of sustainability assurance services: A comparison between Italy and United States. *Journal of Business Ethics*, 163(1), 67-83. <https://doi.org/10.1007/s10551-018-4014-z>
- Lindholm, A., Korhonen, T., Laine, T., & Suomala, P. (2019). Engaging the economic facts and valuations underlying value for money in public procurement. *Public Money & Management*, 39(3), 216-223. <https://doi.org/10.1080/09540962.2018.1535049>.
- Lukka, K. & Kasanen, E. (1995). The problem of generalizability: anecdotes and evidence in accounting research. *Accounting, Auditing & Accountability Journal*, 8(5), 71-90. <https://doi.org/10.1108/09513579510147733>
- Malolitneva, V. & Dzhabrailov, R. (2019). Strategic Public Procurement: Facilitating Sustainable Development in Ukraine. *European Journal of Sustainable Development*, 8(2), 91-100. <https://doi.org/10.14207/ejsd.2019.v8n2p91>
- Mazzucato, M. (2020). Mission-oriented public procurement: lessons from international examples. (Report No. IIPP WP 2020-20). UCL Institute for Innovation and Public Purpose.
- McCrudden, C. (2004). Using public procurement to achieve societal outcomes. *Natural Resource Forum*, 28(4), 257-267. <https://doi.org/10.1111/j.1477-8947.2004.00099.x>

Medina-Arnáiz, T. M. (2017). Las cláusulas sociales en la contratación pública: su consolidación en el ordenamiento jurídico español tras el impulso europeo. In B. García-Romero & M. Pardo-López (Eds.), *Innovación social en la contratación administrativa: las cláusulas sociales* (pp. 55-80). Aranzadi.

Montalbán-Domingo, L., García-Segura, T., Sanz, M. A., & Pellicer, E. (2018). Social sustainability criteria in public-work procurement: An international perspective. *Journal of Cleaner Production*, 198, 1355-1371. <https://doi.org/10.1016/j.jclepro.2018.07.083>

Murray, J. G. (2014). Debate: Public procurement needs outcome evaluations. *Public Money & Management*, 34(2), 141-143. <https://doi.org/10.1080/09540962.2014.887548>

Neto, B. (2020). Analysis of sustainability criteria from European public procurement schemes for foodservices. *Science of the Total Environment*, 704, 135-300. <https://doi.org/10.1016/j.scitotenv.2019.135300>

Nissinen, A., Parikka-Alhola, K., & Rita, H. (2009). Environmental criteria in the public purchases above the EU threshold values by three Nordic countries: 2003 and 2005. *Ecological Economics*, 68(6), 1838-1849. <https://doi.org/10.1016/j.ecolecon.2008.12.005>

Nyeck, S. (2015). (Out)Bidding Women: Public Procurement Reform Diffusion and Gender Equality in Africa. SSRN: <https://ssrn.com/abstract=2736031>

Nygård, E. F., Wondimu, P., & Lædre, O. (2019) Best value procurement-experiences from the execution phase. In C. Pasquire and F.R. Hamzeh (Eds.), *Proceedings of 27th Annual Conference of the International* (pp. 109-120). Dublin, Ireland.

O'Connor C, Joffe H. (2020). Intercoder Reliability in Qualitative Research: Debates and Practical Guidelines. *International Journal of Qualitative Methods*, 19, 1-13 <https://doi:10.1177/1609406919899220>

Oficina Independiente de Regulación y Supervisión de la Contratación (OIReScon) (2020). Informe Anual de Supervisión de la Contratación Pública de España. <https://www.hacienda.gob.es/RSC/OIReScon/informe-anual-supervision-2020/ias-2020.pdf>

Parsons, J., Gokey, C., & Thornton, M. (2013). Indicators of inputs, activities, outputs, outcomes and impacts in security and justice programming. Vera Institute of Justice.

Patrucco, A. S., Luzzini, D., & Ronchi, S. (2017). Research perspectives on public procurement: content analysis of 14 years of publications in the journal of public procurement. *Journal of Public Procurement*, 17(2), 229-269. <https://doi.org/10.1108/JOPP-17-02-2017-B003>

Potoski, M. (2008). State and Local Government and the Winter Commission. *Public Administration Review*, 68(S1), S58–69. <https://doi.org/10.1111/j.1540-6210.2008.00979.x>

Preuss, L. (2009). Addressing sustainable development through public procurement: the case of local government. *Supply Chain Management: An International Journal*, 14(3), 213-223. <https://doi.org/10.1108/13598540910954557>

Prier, E., Schwerin, E., & McCue, C. P. (2016). Implementation of sustainable public procurement practices and policies: A sorting framework. *Journal of Public Procurement*, 16(3), 312-346. <https://doi.org/10.1108/JOPP-16-03-2016-B004>

Racca, G. M., Perin, R. C., & Albano, G. L. (2011). Competition in the execution phase of public procurement. *Public Contract Law Journal*, 41(1), 89-108. <https://doi.org/10.4335/16.2.361-378>

Raymond, J. (2008). Benchmarking in public procurement. *Benchmarking: An International Journal*, 15(6), 782-793. <https://doi.org/10.1108/14635770810915940>

Rodríguez-Gutiérrez, P., Correa, C. and 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>

Romzek, B. S., & Dubnick, M. J. (2018). Accountability in the public sector: Lessons from the Challenger tragedy. In B.S. Romzek, J. M. J. Dubnick (Eds.), *Democracy, Bureaucracy, and the Study of Administration* (pp. 182-204). Routledge.

Ruparathna, R., & Hewage, K. (2015). Sustainable procurement in the Canadian construction industry: current practices, drivers and opportunities. *Journal of Cleaner Production*, 109, 305-314. <https://doi.org/10.1016/j.jclepro.2015.07.007>

Sarter, E.K., Sack, D. & Fuchs, S. (2014). Public procurement as social policy? An introduction to social criteria in public procurement in Germany. www.unibielefeld.de/soz/powi/pdf/WPCG01_Sarter_Sack_Fuchs_Public_Procurement_Aug14.pdf

Sarter, E. K. (2020). The Development and Implementation of Gender Equality Considerations in Public Procurement in Germany. *Feminist Economics*, 26(3), 66-89. <https://doi.org/10.1080/13545701.2020.1718731>

Sarter, E. K., & Thomson, E. (2020). Fulfilling its promise? Strategic public procurement and the impact of equality considerations on employers' behaviour in Scotland. *Public Money & Management*, 40(6), 437-445. <https://doi.org/10.1080/09540962.2019.1684615>

Schapper, P. R., Malta, J. N. V., & Gilbert, D. L. (2006). An analytical framework for the management and reform of public procurement. *Journal of Public Procurement*, 6 (1/2), 1-26. <https://doi.org/10.1108/JOPP-06-01-02-2006-B001>

Selviaridis, K., Agndal, H., & Axelsson, B. (2011). Business services 'in the making': (De) Stabilisation of service definitions during the sourcing process. *Journal of Purchasing and Supply Management*, 17(2), 73-86. <https://doi.org/10.1016/j.pursup.2010.08.001>

Tello, E., Hazelton, J., & Cummings, L. (2016). Potential users' perceptions of general purpose water accounting reports. *Accounting, Auditing & Accountability Journal*, 29(1), 80-110. <https://doi.org/10.1108/AAAJ-12-2013-1552>

Thai, K. V. (2015). International Public Procurement: Innovation and Knowledge Sharing. In K. V Thai (Ed.), *International Public Procurement* (pp. 1-10). Springer, Cham.

Thomson, J., & Jackson, T. (2007). Sustainable procurement in practice: lessons from local government. *Journal of Environmental Planning and Management*, 50(3), 421-444. <https://doi.org/10.1080/09640560701261695>

Tikkanen, I., & Kaleva, H. (2011). Contract award procedures and award criteria in the catering services in Finland. *British Food Journal*, 113(8), 952-964. <https://doi.org/10.1108/00070701111153805>

United Nations (2015, December 10). Goal 12. Ensure sustainable consumption and production patterns. United Nations. <https://www.un.org/sustainabledevelopment/sustainable-consumption-production/>

van Berkel, J. R. J., & Schotanus, F. (2021). The impact of "procurement with impact": measuring the short-term effects of sustainable public procurement policy on the environmental friendliness of tenders. *Journal of Public Procurement*, 21(3), 300-317. <https://doi.org/10.1108/JOPP-10-2020-0070>

Vejaratnam, N., Mohamad, Z.F., & Chenayah, S. (2020). A systematic review of barriers impeding the implementation of government green procurement. *Journal of Public Procurement*, 20(4), 451-471. <https://doi.org/10.1108/JOPP-02-2020-0013>

Vörösmarty, G., & Tátrai, T. (2019). Green supply management in the public and private sector in Hungary. *International Journal of Procurement Management*, 12(1), 41-55. <https://doi.org/10.1504/IJPM.2019.096996>

Walker, H., & Brammer, S. (2009), Sustainable procurement in the United Kingdom public sector. *Supply Chain Management: An International Journal*, 14(2), 128-137. <https://doi.org/10.1108/13598540910941993>

Walker, H., & Brammer, S. (2012). The relationship between sustainable procurement and e-procurement in the public sector. *International Journal of Production Economics*, 140(1), 256–268. <https://doi.org/10.1016/j.ijpe.2012.01.008>

Watt, D. J., Kayis, B., & Willey, K. (2009). Identifying key factors in the evaluation of tenders for projects and services. *International Journal of Project Management*, 27(3), 250-260. <https://doi.org/10.1016/j.ijproman.2008.03.002>

Whitaker, G., Altman-Sauer, L., & Henderson, M. (2004). Mutual accountability between governments and nonprofits. *The American Review of Public Administration*, 34, 115-133. <https://doi.org/10.1177/0275074004264091>

World Trade Organization (2020, November 10) La OMC y la contratación pública. World Trade Organization. https://www.wto.org/spanish/tratop_s/gproc_s/gproc_s.htm

Tables

Table 1. Criteria in procurement files.

Criteria	Procurement files in which the criterion appears (absolute value)	Procurement files in which the criterion appears (%)
(1)- Compliance with labour legislation	115	95.04
(2)- Compliance with social legislation	114	94.21
(3)- Prevention of Occupational Hazards	121	100
(4)- Labour market integration	121	100
(5)- Job Stability	43	35.54
(6)- Gender Equality	40	33.06
(7)- Compliance with all laws relating to contracts*	12	9.92
(8)- Means to allow accessibility for the disabled are in place	1	0.83
(9)- Compliance with the collective labour agreement of the area	1	0.83
(10)- Companies must draw up Training Plans for employees	1	0.83
(11)- Certificate of absence of sexual offences issued by the Central Register of sex offenders	1	0.83

Source: Own elaboration

* Full description of the criterion: *"contractors expressly submit to the regulations in force regarding taxation, labour and social security, equal opportunities, non-discrimination, accessibility and removal of barriers, safety, occupational hazards and hygiene in the workplace, subcontracting in the construction sector, as well as to all other regulations whose nature directly or indirectly affect this contract"*.

Table 2: Indicators, related criteria, SDGs, procurement files where indicators are used.

Indicator	Related Criteria	Indicators' characteristics*	SDGs	Number of procurement files (absolute value)			Number of procurement files (%)		
				2017	2018	2019	2017	2018	2019
1- Compliance with labour regulations	(1)	C	8	44	35	36	97.78	87.50	100
2- Compliance with social legislation	(2)	C	8	44	36	34	97.78	90.00	94.44
3- Compliance with regulations on Health and Safety in the Workplace	(3)	L	3, 8 and 16	39	31	30	86.67	77.50	83.33
4- Compliance with gender equality regulations	(6)	L	5	1	2	31	2.22	5.00	86.11
5- The contractor expressly submits to the regulations in force regarding taxation, labour and social security, equal opportunities, non-discrimination, accessibility and removal of barriers, safety, occupational hazards and hygiene in the workplace, subcontracting in the construction sector, as well as all other regulations whose nature directly or indirectly affects contracts	(7)	C	3, 5, 8 and 16	6	5	0	13.33	12.50	0.00
6- Drawing up an Occupational Health and Safety Plan/Memorandum	(3)	L	3, 8 and 16	2	2	2	4.44	5.00	5.55
7- Awarded companies must appoint a person responsible for coordinating Occupational Health and Safety in the execution of the contract	(3)	L	3, 8 and 16	1	0	2	2.22	0.00	5.55
8-Preference for companies that can demonstrate an employment relationship with people with disabilities, representing more than 2% of staff. In the event of a tie between the companies selected, the	(4)	Ethical not R	8 and 10	37	27	24	82.22	67.50	66.67

tenderer with the highest percentage of permanent employees with disabilities on its staff shall have preference in the awarding of contracts

9-Preference for worker cooperatives and second-degree cooperatives. If there is still a tie, preference for companies with a percentage of disabled employees >2%; if there is still a tie, preference will be given to companies with a higher percentage of permanent employees that are disabled

10- Preference for companies that can demonstrate an employment relationship with people with disabilities, representing more than 2% of their staff. In the event of a tie between the companies selected, preference will be given to the bidder with the highest percentage of permanent employees with disabilities on its staff. If there is still a tie, preference will be given to the company that has an equality certification regulated in Law 3/2007

11- A minimum of 4% of the workers covered by the contract must be unemployed people over 45 years of age

12- Companies that, whenever there is a need to hire new workers, hire at least 40% of people living in social exclusion; or that prefers to hire people living in social exclusion

13- When applicable, companies must comply with the obligation to have at least 2% disabled employees

(4)	Ethical not R	8	0	0	2	0.00	0.00	5.55
(4)	Ethical not R	8 and 10	0	1	0	0.00	2.50	0.00
(4)	Ethical not R	8	0	0	1	0.00	0.00	2.77
(4)	Ethical not R	8 and 10	1	0	0	2.22	0.00	0.00
(4)	L	8 and 10	24	21	27	53.33	52.50	75.00

14- Procurement quota reserved for special employment centres. (Essential obligation that at least 70% of the workers in the contract must be people with disabilities)	(4)	Ethical R	8 and 10	1	2	1	2.20	5.00	2.80
15- 50% of the workers assigned to contracts must be disabled workers with greater employability difficulties (as referred to in Article 6.2. a) of Royal Decree-Law 290/2004, of 20 February)	(4)	Ethical R	8 and 10	1	1	0	2.22	2.00	0.00
16-If companies need to hire new workers, they must be of diverse abilities. These are: 1) People with a physical or sensory disability; 2) Recipients of the guaranteed minimum income or included in a family unit in which at least one of its members is a recipient of the guaranteed minimum income; 3) Long-term unemployed > 45 years of age	(4)	Ethical not R	8 and 10	1	0	0	2.22	0.00	0.00
17- Companies where at least 30% of the workers are permanent employees. This requirement is waived if more than 80% of the total number of employees of a company has a permanent contract	(5)	Ethical not R	8	6	8	4	13.34	20.00	11.11
18- Companies where at least 30% of the workers are permanent employees	(5)	Ethical not R	8	3	10	11	6.67	25.00	30.56
19- Companies have a commitment to gender parity among the personnel assigned to the contract	(6)	Ethical R	5	0	1	1	0.00	2.50	2.80
20- The persons assigned to the contract must comply with gender equality	(6)	Ethical not R	5	0	0	1	0.00	0.00	2.80
21- Development of a Gender Equality Plan	(6)	L	5	0	0	9	0.00	0.00	2.50

22- Certificate of absence of sexual offenses issued by the Central Register of sex offenders	(11)	C	8	1	0	0	2.22	0.00	0.00
23- Means to allow accessibility for the disabled are in place	(3)	L	8 and 10	0	0	3	0.00	0.00	8.33
24- Compliance with the collective labour agreement of the area	(9)	C	8	0	0	1	0.00	0.00	2.80
25- Companies must draw up Training Plans for employees	(10)	C	8	0	0	1	0.00	0.00	2.80

Source: Own elaboration

** Indicators' characteristics:*

C: Confusion between criterion/indicator

L: Legal provision/Indicator

Ethical not R: Ethical but not relevant

Ethical R: Ethical and relevant

Table 3: Indicators by stage of the procurement process.

Indicator	No. of procurement files		
	Stage 1	Stage 2	Stage 3
1	26		110
2	25		109
3	4		107
4	17	6	14
5			11
6		2	6
7			3
8		88	
9		2	
10		1	
11			1
12			1
13	66		21
14	3		1
15	1		1
16			1
17			18
18			24
19		1	
20			1
21	29		2
22			1
23			3
24			1
25			1

Source: Own elaboration

Supplementary material

Appendix 1: Public entities whose procurement files have been analysed and the percentage they represent in the total budget of the Autonomous Community.

Procuring entity	Percentage in the total budget of the autonomous community
Office of the President	0.1 %*
Regional Ministry of Transparency, Spatial Planning and External Action	
Regional Ministry of Economy and Finance	0.11 %
Regional Ministry of Employment and Industry	4.16 %
Regional Ministry of Development and the Environment	3.66 %
Regional Ministry of Agriculture, Livestock and Rural Development	1.32 %
Regional Ministry of Health	53.7 %
Regional Ministry for Family and Equal Opportunity	11.44 %
Regional Ministry of Education	24.76 %
Regional Ministry of Culture and Tourism	0.75 %

* These two Ministries shared a budget in the period analysed

Source: Own elaboration