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The Alignment of Taxation and Sustainability: might the Digital Controls of Non-Financial Information Become a Universal Panacea?

María Amparo Grau Ruiz
Prof. Dr., Faculty of Law, Complutense University of Madrid, Visiting Professor of Transnational Taxation, Northwestern Pritzker School of Law, PI PID2019-105959RB-I00, correspondence address: Dpto. Derecho Mercantil, Financiero y Tributario. Facultad de Derecho. Universidad Complutense de Madrid. Av. Complutense s/n, Ciudad Universitaria, 28040 Madrid, Spain; e-mail: grauruiz@ucm.es
https://orcid.org/0000-0002-0482-2816

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Abstract: There are certain trends that are already affecting –or will soon inevitably affect, the evolution of the tax law everywhere. These are the digitalization processes started by many tax administrations and the current challenges experienced by accounting and auditing institutions to provide reliable non-financial information. Both may offer new opportunities for fairer taxation in the search for sustainable development. In the middle of digital and green transformations, would it be possible to better adjust the tax treatment deserved by the taxpayers in accordance with their real impacts on sustainability? Regional and global organizations are devoting efforts to ensuring some degree of homogeneity in the measures to adopt. The purpose of the following pages is to open the discussions for in-depth research in the future. The dogmatic-legal and analytical methods have been used to supplement the comparative one in carrying out the review of the current state of the art and proposed changes.

1. Introduction

There are certain trends that are affecting – or will soon inevitably affect, the evolution of tax law all over the world. One is quite clear; the other is subtle. First, the sustained digitalization processes started by many tax

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administrations allow mobilizing domestic revenues, by stimulating voluntary compliance, fighting fraud, etc[1]. Up to date, their efforts have been mainly focused on a relatively limited perspective: the financial one. They strive to raise revenue and governments thus make attempts to face growing public expenditure after the economic crisis.

Nowadays, with new means, it should be also possible to devise better controls in order to adjust the future tax treatment deserved by the taxpayers in accordance with the real impact of their distinct economic activities on sustainability. In business practice, the tax and finance functions are already playing a greater role in helping their organizations address their Environmental, Social and Governance (ESG) objectives[2].

This clearly implies the necessary adoption of an additional extra-fiscal perspective when establishing and applying tax legislation. Quite often tax administrations do not feel comfortable with this expanded mission, as they depend on reinforced cooperarion with various specialized institutions in each specific field of action (e.g., environmental authorities[3]) to properly implement regulatory taxes[4].

Undeniably adequate funding for all the ongoing digital and green transformations[5] requires more reliable data. Thus, a second trend shows

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1 OECD, *Tax Administration 3.0: The Digital Transformation of Tax Administration* (Paris: OECD, 2020) https://www.oecd.org/tax/forum-on-tax-administration/publications-and-products/tax-administration-3–0-the-digital-transformation-of-tax-administration.pdf; OECD, *Tax administrations continue to accelerate their digital transformation*, (Paris: OECD, 2021) https://www.oecd.org/tax/forum-on-tax-administration/news/tax-administrations-continue-to-accelerate-their-digital-transformation.htm; OECD, *Towards Seamless Taxation: Supporting SMEs to Get Tax Right*, OECD Forum on Tax Administration. (Paris: OCDE, 2022) https://doi.org/10.1787/656c89ab-en.

2 "Tax Executives Embrace ESG & Tax Transparency," BDO TAX OUTLOOK SURVEY, 15, accessed July 10, 2022, https://insights.bdo.com/rs/116-EDP-270/images/TAX_2022-Tax-Outlook-Survey.pdf?aliId=eyJpIjoiTVFGbkRHb0lHVjdoUkN3ciIsInQiOiJRK1FBRDlWUnZLZWdIOTkrUXRPV3VnPT0ifQ%253D%253D.

3 United Nations, *Handbook on Carbon Taxation for Developing Countries. United Nations Committee of Experts on International Cooperation in Tax Matters* (New York: UNDESA, 2021), accessed June 10, 2022, https://www.un.org/development/desa/financing/sites/www.un.org.development.desa.financing/files/2021–10/Carbon%20Taxation.pdf.

4 Reuven S. Avi-Yonah, "The Three Goals of Taxation," *Tax Law Review* 60, no. 1(2006): 1–28.

5 There are significant efforts to mitigate and adapt to climate change both in the public and private sector EY, Climate Cash and Tax Barometer, accessed July 10, 2022, https://

how the accounting and auditing institutions are currently experiencing enormous challenges to rapidly and timely provide them. As it is critical to carry out sound evaluations of policy objectives and management in times of scarcity, both on the public and private side, revealing all this information and exploiting its full potential is of utmost importance.

The availability of non-financial information – whose quality is being gradually enhanced, will probably result in some expected changes in the design of future tax rules to truly meet the sustainable development goals (SDGs). For instance, regarding tax incentives – many of them under scrutiny[6], specific requirements could be accurately approved and supervised. This calls for relevant metrics and procedures established for both companies and administrations. The Global Tax Expenditures Database "provides timely and consistent information on preferential tax treatments such as exemptions, deductions, credits, deferrals and reduced tax rates that are implemented by governments worldwide to promote different policy goals"[7].

This is not a purely domestic problem. Different approaches are often found in a comparative analysis. Various regional and global organizations in charge of verification are aware of the complicated existing situation. So, they are uniting their efforts to allow the comparability of the measures to adopt, to be carefully collected and integrated at a later stage. This initial movement should serve to deliver, as a consequence, a fairer quantification of taxes and benefits.

www.ey.com/en_gl/tax-guides/ey-climate-cash-and-tax-barometer.

6 United Nations Conference on Trade and Development, "The Impact of a Global Minimum Tax on FDI," in *World Investment Report* (New York: UNCTAD, 2022), 99–130. See: *María* Amparo Grau Ruiz, "Perfiles de la fiscalidad empresarial venidera: de los incentivos que podrían subsistir o no en el caso de las grandes multinacionales a la propuesta de modificación del ecosistema de las pymes," *Revista Técnica Tributaria* vol. 2, no. 137(2022): 7–18.

7 More information is available at Flurim Aliu, Agustín Redonda, Christian von Haldenwang *The Global Tax Expenditures Database (GTED) Progress Report*, Deutsches Institut für Entwicklungspolitik - (DIE) & Council on Economic Policies (CEP), accessed April 13, 2022, https://gted.net/2022/04/the-global-tax-expenditures-database-gted-progress-report/; Christian Von Haldenwang, Agustín Redonda, Flurim Aliu, *Shedding Light on Worldwide Tax Expenditures. GTED Flagship Report 2021*, Deutsches Institut für Entwicklungspolitik - (DIE) & Council on Economic Policies (CEP), accessed August 23, 2021, https://gted.net/2021/05/shedding-light-on-worldwide-tax-expenditures/.

In the European Union, several initiatives have been debated and implemented in recent years to promote sustainability[8]. The European the European Financial Reporting Advisory Group (EFRAG) has been charged with the task to develop a common framework to allow fluent communication and dialogue among all the stakeholders (tax administrations included). The present lack of certainty creates undesirable imbalances when assessing genuine progress towards the SDGs. Hopefully, with the new technological means and the readiness of supplementary information, this will improve.

Hence, the main research goal of this contribution is to find out novel coordinated ways to help in the achievement of the difficult alignment of taxation and sustainability[9]. With that purpose in mind, the reader will notice that the research conducted has made use of several methods: comparative, dogmatic-legal and analytical. The hypothesis is that the generalized implementation of digital controls in tax matters combined with the expansion of the available amount and quality of non-financial information might have the potential to become a universal panacea, only if both are coherently developed –by linking these issues so that they converge to increase the effects of taxation on sustainability and vice versa. Let us check whether the maturity level of the modifications in each field and the interaction between them can really support the objective of devising more SDGs friendly tax systems.

2. Automation and Taxation

The state-of-the-art is here shown with a summary of valuable contents and facts described in recent publications. On average, every year it becomes easier for a medium-sized domestic company to fulfill its tax obligations,

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8 María Amparo Grau Ruiz, "Corporate Social Responsibility and taxation in regulation: the EU perspective," in *Fair Taxation & Corporate Social Responsibility,* ed. Karina Kim Engholm Elgaard, Rasmus Kristian Feldthusen, Axel Hilling, and Matti Kukkonen (Copenhagen: Ex tuto publishing, 2019), 201–227.

9 Frans Vanistendael, "Reflections on sustainable taxation," *Revista Técnica Tributaria* vol. 4, no. 127(2019): 137–147.

because of increased automation[10]. It allows compliance to be monitored more efficiently, even in real-time.

Evidently, the introduction of electronic tax filing and payment systems has reduced tax compliance times globally. Electronic filing (e-filing) and electronic payment (e-payment) are the processes by which tax returns and payments are submitted online via the Internet. Many economies have those systems for VAT. They have the potential to reduce the compliance burden on taxpayers, reduce fraud and provide governments with better information. Some tax administrations in the European Union and other countries have adopted standardized formats for reporting tax information[11]. Although they make use of technology and provide a more secure and reliable system for the exchange of data between tax administrations and taxpayers, they are usually not integrated systems and add an additional step to the transmission of data between taxpayers and tax authorities. Moving to real-time systems (Level III, which requires close integration of taxpayers' and tax administrations' technological solutions) can lead to greater control over taxpayers' data and improved fraud prevention. An example can be found in Spain with real-time SII [Immediate Information Supply] invoices[12]. These systems require significant investment in design and implementation. Some economies are considering or piloting the next technological level (Level IV). The European Commission's

[10] PWC *Paying Taxes 2020* offers the changing landscape of tax policy and administration across 190 economies. In the 190 economies covered, there has been a 16% drop in the number of payment indicators since 2012 and, over the same period, the average time taken by the company in our case study to fulfill key tax obligations has decreased by 10%. More information at https://www.pwc.com/payingtaxes, accessed July 11, 2022. The World Bank Group's *Doing Business* Paying Taxes ranking indicator includes three components in addition to the Total Tax & Contribution Rate. These estimate compliance costs by looking at hours spent each year on tax work and the number of tax payments made in a tax year, and evaluate and score certain post-filing compliance processes.

[11] The SAF-T or Standard Audit File for Tax is based on a model developed by the OECD, which can be implemented as a 'push' or 'pull' system by countries.

[12] Antonio Fernández de Buján y Arranz, "Robotization in Excise Duties: Has It Arrived with the Immediate Supply of Accounting Books (SILICIE)?" in *Interactive Robotics: Legal, Ethical, Social and Economic Aspects*, edited by María Amparo Grau Ruiz(Cham: Springer, 2022), 130–134.

Directorate-General for Taxation and Customs has explored the use of blockchain technology as a potential basis for the digital single market. The security and reliability offered by this technology are very attractive for VAT administration, but a solution has yet to be developed. In theory, this technology could be used for non-financial information as well[13].

Obviously, the tax administrations need to assess which level of technology is appropriate for them[14], depending on the complexity of their tax system, the availability of IT infrastructure and the level of sophistication of their taxpayers. There may be several obstacles: lack of funds or political will to invest in new systems, insufficient telecommunications infrastructure, or cultural reluctance to abandon paper-based systems.

Doing Business 2020 has collected new data on the implementation of some of these reforms, including the use of pre-filed tax returns, electronic invoices and the existence of a comprehensive online tax administration portal. E-invoices have several advantages over paper ones: they are less prone to errors, reduce the possibility of fraud and reduce processing costs. Tax administrations may choose to use platforms that allow trading partners to exchange electronic documents over a specific network (e.g., Pan-European Public Procurement Online). Another option is to use XML formats and transmit them via an online portal (like in Italy). Finally, tax administrations may use online cash register initiatives, whereby retailers are required to use OCR software to instantly upload sales data to the tax administration portal (the Republic of Korea and the Russian Federation use this system). The use of big data created by e-invoicing systems has led to improvements in the use of information for compliance purposes and the amount of VAT collected by tax administrations.

All tax administrations in the OECD High Income Group, South Asia, Europe and Central Asia use online tax portals. Tax administrations in Sub-Saharan Africa, East Asia and the Pacific lag behind.

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13 Virginia Martínez Torres, "Intelligent Management and Control of Data Contained in Non-financial Reporting," in *Interactive Robotics: Legal, Ethical, Social and Economic Aspects*, edited by María Amparo Grau Ruiz (Cham: Springer,2022), 185–191.

14 Rita de la Feria, María Amparo Grau Ruiz, "The Impact of Robotics in Tax Administration," in *Interactive Robotics: Legal, Ethical, Social and Economic Aspects*, ed. María Amparo Grau Ruiz (Cham: Springer,2022), 115–123.

The time taken by tax administrations to refund VAT or approve a Corporate Income Tax (CIT) adjustment may also have a cultural dimension, depending on how taxpayers are assessed from a risk perspective and on the prevailing ethos of tax administrations (i.e. facilitation or enforcement). Improvements in technology make the refund process faster and less susceptible to fraud. Technology has accelerated the VAT claim and CIT adjustment processes.

For tax administrations and taxpayers to reap the full benefits of online systems, proper implementation and management are crucial. Sometimes their advantages have not been fully exploited because they are not used by most taxpayers.

Recent surveys show that many organizations are feeling the duty of transforming themselves, at a time when the pace of regulatory change is accelerating. In these circumstances, data and technology may help them. Some companies reallocate part of the tax and financial budget from routine activities (such as tax compliance) to strategic activities (in tax policy, planning and litigation), or invest simultaneously in strategic internal activities, such as data management. Access to up-to-date data and technology is critical to achieving transparency in a changing global tax landscape. The tax and finance staff often need to strengthen their technical tax skills with some data, process and technology skills. Investment in tax technology remains a top priority for the tax department (in data analytics, business intelligence software, tax provision software and tax automation)[15]. Some companies build in-house tech capabilities. Others partner with a vendor or follow a hybrid approach. For instance, in Vietnam, more companies are using advanced accounting software, which allows them to calculate taxes using data automatically uploaded from accounting systems.

Last, but not least, computation and tax experts should pay attention to the work of different oversight institutions. It is essential to monitor the effects of technologies and data on the tax law, taxpayers and society. To that end, supervisory bodies have a decisive role to play. However, they are also

15 Investing in tax technology remains a top priority for the tax department. BDO (2022) The 2022 BDO Tax Outlook Survey, p. 13. The full report is available at: https://insights.bdo.com/tax-outlook.html.

obliged to undergo transformation processes of their own that enable them to perform their tasks efficiently[16].

3. Sustainability and taxation

"The next ten years will be driven by a sustainability and stewardship mindset that prioritizes the needs of all stakeholders while accelerating digital innovation to create lasting business value"[17]. In the corporate world, the adoption of ESG measures has gone from best practice to business imperative. Building the business sustainably is the responsibility of the entire organization, including the tax department.

Corporate tax transparency has emerged as a central ESG issue, long the focus of the OECD and recently the subject of a new Global Sustainability Standards Board standard. It is also a clear mandate for tax managers.

Notwithstanding this, data collection and analysis are still problematic, highlighting an underlying problem of tax data governance and fragmented systems. This problem is not the lack of reporting standards, but a lack of clarity on which standards and which ESG framework bodies to follow. The existing alternatives to meet the current obligations and voluntary commitments, in both the private and public sectors, are reviewed in the following paragraphs concerning the Spanish experience[18].

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[16] In the U.S. different oversight institutions have made continuous assessments of the efforts made by the Internal Revenue Service (IRS) when adopting new technologies to better perform its functions and provide a better service to taxpayers. They show which steps have been succesful, in which ones there have been some downsides, the reason for said downsides and proposals to overcome them. Thus, the reports prepared by the Treasury Inspector General for Tax Administration (TIGTA) and the United States Government Accountability Office (GAO) are of great interest. See: María Amparo Grau Ruiz, "Fiscal Transformations Due to AI and Robotization: Where Do Recent Changes in Tax Administrations, Procedures and Legal Systems Lead Us?," *Northwestern Journal of Technology& Intellectual Property,* vol. 19, no. 325 (2022): 325–363.

[17] Wayne Berson, "The 2022 BDO Middle Market CFO Outlook Survey". Accessed August 23, 2022, https://insights.bdo.com/cfo-survey.

[18] The author has tried to synthesize here the main discussions in the AudIT-S Research Seminar *Fiscalidad, digitalización y medioambiente ante los inminentes cambios en contabilidad y auditoría* [Taxation, digitisation and the environment in the face of imminent changes in accounting and auditing] held on the 29th of June 2022 at the Instituto de Estudios Fiscales, Spanish Ministry of Finance, in Madrid. She is very grateful to the speakers that pointed out these relevant topics in their fields of expertise: Elisa García Jara, José Muñoz Jiménez,

3.1. Non-financial information in private companies

The commitment to sustainable development requires consistent decisions by companies in the exercise of their economic activity, and by regulators. In view of the current differences between accounting criteria and tax criteria for determining the economic profit of companies, how can taxation be improved by aligning it with pro-sustainability strategies?

From an accounting point of view, basic standards are being developed for the presentation of non-financial reporting by certain companies. At both the national and European levels, stakeholders are demanding greater fiscal transparency and reporting on sustainable development. For example, some environmental expenses incurred by companies may be considered deductible if they correspond to a plan formulated by the taxpayer and accepted by the administration (as in Article 14.4 of the Corporate Tax Law). Otherwise, they would be subject to a positive adjustment in the accounting result before tax to arrive at the tax base, increasing it. The Spanish Law 13/1996 incorporated in Article 35 of the Corporate Income Tax Act a deduction of 10% of the gross tax payable on investments in tangible fixed assets that were earmarked for environmental protection, but to be able to apply this deduction, a certificate from the corresponding environmental body was required. Since Law 35/2006, this type of incentive has been reduced, until repealed by Law 27/2014 due to the existence of specific environmental regulations[19].

Law 11/2018 establishes that certain companies must present a statement of non-financial information that must contain the profits obtained

Antonio Prado Martín (Accounting Professors), José Manuel López (Auditor in Grant Thornton) and Santiago Martínez Argüelles (Professor and Spanish Court of Auditors). The recording in Spanish: accessed August 23, 2022, https://zoom.us/rec/play/x0oVc7KdG-jXttyI_i_f2gEoHlQYbzqq8loUB7rIgg9XeNfKs-yA0fiGYCXdotDWXny1SzdapO3_7oxo._1jfwGsqfOTnyVW-?startTime=1656491514000&_x_zm_rtaid=rfN-ywmWTdmL-5R8OKAv88A.1658834767274.e558e761280bd37022ec28d3047728ff&_x_zm_rhtaid=591.

19 Ley 13/1996, de 30 de diciembre, de Medidas Fiscales, Administrativas y del Orden Social. BOE No. 315, 31/12/1996. Ley 35/2006, de 28 de noviembre, del Impuesto sobre la Renta de las Personas Físicas y de modificación parcial de las leyes de los Impuestos sobre Sociedades, sobre la Renta de no Residentes y sobre el Patrimonio. BOE No. 285, 29/11/2006. Ley 27/2014, de 27 de noviembre, del Impuesto sobre Sociedades. BOE No. 288, 28/11/2014.

by each country, the taxes on profits paid and the public subsidies received[20]. Further work is needed to bring the quality of financial reporting in line with that of non-financial reporting, so that it provides insight into economic performance, risks and opportunities in environmental, social and governance aspects. Only on the basis of reliable data can effective fiscal policies be implemented that truly lead to fair taxation for sustainable development.

There are several international frameworks with which to prepare non-financial information, such as the universal, sectoral and thematic GRIs. The Directive 2013/34 indicated that non-financial information should be included in the management report, which should include key sustainability indicators. The Directive 2014/95 indicated which type of companies should prepare their non-financial statements and what information should be provided. The Commission published a communication setting out the methodology for producing such reliable, relevant, complete and clear non-financial information. Materiality (what is important in determining what information is provided) is not defined, there is no unified format for non-financial information statements and there is no breakdown of the impacts of the company's activity on the environment and of the environment on the company.

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20 In Spain, Royal Decree Law 18/2017, in view of a possible fine, transposed the directive and was subsequently approved as Law 11/2018. Ley 11/2018, de 28 de diciembre, por la que se modifica el Código de Comercio, el texto refundido de la Ley de Sociedades de Capital aprobado por el Real Decreto Legislativo 1/2010, de 2 de julio, y la Ley 22/2015, de 20 de julio, de Auditoría de Cuentas, en materia de información no financiera y diversidad. BOE No. 314, 29/12/2018. It is worth noting that in the European Union since 2011 there have been continued efforts (two communications, a resolution of the European Parliament, then two directives, a communication on guidelines on methodology, etc.). The Directive 2014/95/EU – also called the Non-Financial Reporting Directive (NFRD) – lays down the rules on the disclosure of non-financial and diverse information by certain large companies. This directive amends the Accounting Directive 2013/34/EU. In June 2017 the European Commission published its guidelines to help companies disclose environmental and social information. In June 2019 the European Commission published guidelines on reporting climate-related information, as a supplement to the existing ones. Detailed information can be found here, accessed August 23, 2022, https://ec.europa.eu/info/business-economy-euro/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en.

In the next four years, the EU intends to cover what has been done in financial reporting since Fra Luca Pacioli in order to generate non-financial information that is useful to users (investors, non-governmental and governmental institutions, or consumers). The 2017 and 2019 attempts to improve non-financial information made by the European Commission have not improved its quality. In the Green Deal, there are challenges, such as zero greenhouse gas emissions, maintaining natural capital and improving the quality of life, which are linked to the availability of this information. In order to improve sustainability information at the lowest possible cost, the proposal for a Directive of 21 April 2021 has been presented[21]. The Commission has mandated EFRAG to develop a reporting framework for large companies and, from 1 January 2026, small and medium-sized companies that are part of public-interest companies should include in their management report the following points: a brief description of the company's business model and strategy on sustainability issues; a description of the sustainability-related objectives set by the company and the progress made by the company in achieving these objectives; a description of the role of the administrative, management and supervisory bodies with regard to sustainability issues; a description of the company's policies in relation to sustainability issues; a description in relation to sustainability issues of the due diligence process, negative impacts and preventive measures; a description of the main risks for the company related to sustainability issues and relevant indicators. In addition, companies must also disclose information on intangible assets, including information on intellectual, human or social and relational capital. Companies will communicate the process undertaken to determine the information they have included in the management report taking into account short-, medium- and long-term horizons. The information shall be forward-looking and backward-looking, as well as qualitative and quantitative. Where appropriate, the information shall contain data on the company's value chain, its operations, and its

21 Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Directive 2013/34/EU, Directive 2004/109/EC, Directive 2006/43/EC and Regulation (EU) No 537/2014, as regards corporate sustainability reporting. COM/2021/189 final. The text of this proposal can be found here, accessed August 23, 2022, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021PC0189.

business relationships, among others. The information shall contain a reference to other information contained in the management report and to the amounts reported in the annual financial statements. Member States may in exceptional cases allow this information to be omitted provided that the undertaking justifies that it may cause damage or affect its commercial position. Where the undertaking is a subsidiary, it shall be exempted from presenting this information if it is already included in the consolidated report of the parent undertaking. The Commission shall establish rules for the presentation of non-financial information for small and medium-sized companies, the information shall be presented in a single electronic format, shall be published within a reasonable period of time – not exceeding 12 months, the information shall be understandable, relevant, representative, verifiable, comparable and give a true and fair view. The Commission will specify – by reviewing it every 3 years, the information that the company is required to present on environmental, social and governance factors. For example, environmental factors include climate change mitigation, climate change adaptation, marine waters and resources, resource use and the circular economy, pollution, biodiversity and ecosystems.

In April 2021, EFRAG has published a draft – under public exposure for 6 months, with the purpose of organizing the reporting of relevant information on sustainability issues, fostering maximum comparability across sectors, and ensuring a balance between sector-agnostic and sector-specific and company-specific information and facilitating navigation through the reported information.

These European sustainability reporting standards are organized by categories of three types: cross-cutting standards cover the general provisions that apply to sustainability reporting and disclosure requirements; thematic standards cover a specific sustainability topic or sub-topic (e.g., policies, objectives, actions and action plans, resources adopted by the company on a given topic or sub-topic, as well as the corresponding performance measures for each topic or sub-topic). Sectoral standards are foreseen but are not yet developed and are therefore not included in the consultation. The thematic standards address, first, environmental issues on climate, pollution, water and marine resources, biodiversity and ecosystems and on circular economy. Second, social issues such as labour or value chain labour, impact on local communities and on end-users and consumers. The third thematic group is on governance, risk management and internal control and on business conduct.

Most of the information proposed as mandatory by the new directive was already included in 2018 in the transposition process. Although the previous directive did not require the verification of non-financial information, Law 11/2018 already required its verification by an independent expert. In practice, for the user of this non-financial information, it is very complicated to compare different indicators, and companies can make use of interpretations. The typology of non-financial information right now comprises the statement of non-financial information because of Law 11/2018, the sustainability reports of listed companies from 2010–2011 and the integrated report that started in 2012–2013 (where the aim was to integrate non-financial information and forward-looking positions). As of 1 January 2021, the threshold has been lowered from 500 to 250 employees, so more Spanish companies are already experiencing this obligation to present non-financial information, in contrast to the rest of Europe. However, the small and medium-sized companies in Spain continue to be left out of the obligation to formulate the statement of non-financial information. Law 11/2018 equated the statement of non-financial information to the annual accounts, at a point in the shareholders' meeting where the company's shareholders must approve it and have to be formulated by the administrators. Companies can either include it within the management report or prepare it as a separate document (this would be preferable because it is required to be presented on the website, and failure to do so may lead to the closure of the Register). When a subsidiary of a company whose parent company is in another EU Member State in which such a non-financial information statement is prepared, then it is obliged in Spain to submit a complementary document when some details have to be added to fulfill the stricter requirements of the Spanish legislation if that is the case.

The verification of the non-financial information statement is mandatory. The verifier may be an independent expert. According to the ICAC consultation, auditors can be verifiers of both audited and non-audited companies. They cannot prepare the statement of non-financial information and verify it because there would be an incompatibility. The verification of the non-financial information as a whole is done in accordance with an ISAE 3000, which is an international limited assurance standard, not an audit.

Verifiers of non-financial information are asked to perform an assurance where the procedures to be performed are more limited than in reasonable assurance. It is also not a validation of a management system that special certifiers perform (e.g., carbon footprint). The materiality used by the verifier of the non-financial information statement does not necessarily have to be the same as that determined by the company. S/he analyzes the scope, relevance and completeness of the content of the information included in the statement. The compilation process that a consolidated company has, deserves special attention because the data may be generated differently and must be homogenized. The verifiers conduct tests on sample selections of certain indicators, both quantitative and qualitative. At the end, they can issue four conclusions: favourable, qualified, unfavourable – when everything verified would be wrong and denied –when they have not had enough information to be able to verify.

3.2. Non-financial information in the public sector

In Spain, in FY20 the public sector committed expenditure of almost 490 billion euros and 683 entities make up the state public sector. Being aware of its magnitude, one can question to what extent it is addressing sustainability issues[22], not only due to the clear need to play an exemplary role but also due to its wide impact on society. It is worth noting that its commercial companies are affected by Law 11/2018 and are subject to the presentation of non-financial information as well, while public administrations are explicitly excluded.

The General Budgetary Law[23] requires reporting on objectives associated with expenditure budget programmes, expressing indicators (in the

[22] Various authors. "Especial sostenibilidad", *Revista Española de Control Externo*, vol. XXIII, No. 67 (January 2021): 5, accessed August 22, 2022, https://recex.tcu.es/tribunal-de-cuentas/export/sites/nuevo-recex/.galleries/pdf/Revista-67.pdf.

[23] Several articles of the Spanish *Ley General Presupuestaria* foresee non-financial aspects in budgeting, management and accountability. Arts. 36–37 establish an annual objectives report for each expenditure programme, art. 37 mentions reports (two on impact and one alignment). Art. 69 objectives and results as a management principle, arts. 70–72 management by objectives, multiannual programmes with a system of objectives, results-based budgeting, management report and evaluation. Art.125 states that the IGAE is responsible for principles and criteria for monitoring objectives. Art.126 deals with the information system for monitoring objectives. Art.128 in the annual accounts stresses the degree

2021 budget there were 400 budget programmes). From a formal point of view, the programmes contain the definition of policies, the analysis of risks on which they intend to act, the definition of objectives and propose indicators for monitoring and evaluation. One problem is that the relevance of the indicators is not always appropriate, but the biggest problem is that the collection, capture and verification of the data associated with these indicators are complex and not always reliable.

Progress is being made, and the information contained in general budgets is of increasing quality. It is mandatory to introduce three reports accompanying the draft General State Budget: Gender impact report, Report on the impact on children, adolescents and families, Report on the alignment of the General State Budget with the SDGs of Agenda 2030[24]. The latter is an excellent starting point as a regulatory framework for presenting non-financial information to facilitate international comparability. The United Nations and INTOSAI (the international umbrella organisation of supreme audit institutions) have established methodologies for developing internationally agreed indicators for audits of these types of information. The budget alignment report together with the systematic monitoring by INE of the available information on the 232 indicators of the Sustainable Development Goals[25] is a unique opportunity for the presentation of non-financial information on the activity of the public sector.

of achievement of objectives, costs and physical and financial deviations. Ley 47/2003, de 26 de noviembre, General Presupuestaria. BOE No. 284, 27/11/2003.

24 The blue series contains a cross-cutting vision of the General State Budget, accesed August 22, 2022, https://www.sepg.pap.hacienda.gob.es/Presup/PGE2022Proyecto/MaestroDocumentos/PGE-ROM/N_22_A_Z.htm, https://www.sepg.pap.hacienda.gob.es/sitios/sepg/es-ES/Presupuestos/InformesImpacto/IA2022/IAPGE2022/Paginas/Inicio.aspx. United Nations General Assembly, Transforming our world: the 2030 Agenda for Sustainable Development. Resolution adopted by the General Assembly on 25 September 2015. A/RES/70/1.

25 "The 2030 Agenda for Sustainable Development is made up of 17 goals and 169 targets. In order to monitor them, 232 indicators were designed that can be measured through the statistical data collected here. The updating of these indicators, which constitute a statistical operation included in the current Annual Programme, is continuous and includes information from both the INE and other official sources that will be incorporated progressively", accessed July 10, 2022, https://www.ine.es/dyngs/ODS/es/index.htm.

Since 2015, the audit function of the Spanish Court of Auditors has included transparency, environmental sustainability and equality[26]. In the area of environmental sustainability, air quality, water management, desertification and fire prevention are being analyzed. There is a cross-cutting issue in all the audits since 2015, it is verified that all the objectives established in the law on transparency and good governance and the obligations of the administrations are fulfilled. It has been approved as an audit that is going to be carried out this year and there is the design of everything that has to do with fraud prevention plans and conflict of interest in the management of Next-generation funds.

The annual accounts must include a management report on the degree of achievement of objectives, deviations, and costs. Administrations must take this type of information into account in the budget, in management and when preparing the general account of the State. In the recent Court of Auditor's statement on the 2020 account in Parliament, it is highlighted that in the management report, which is where the information about monitoring and fulfillment of all these objectives and indicators should be placed, it does not appear, and this imposes a very serious limitation in terms of monitoring and evaluating the performance of the public sector this year.

Since the Declaration on the 2017 General State Account, the Court of Auditors includes a paragraph on compliance with the duty to prepare non-financial information statements by companies in the public business sector[27]. The public corporate sector is obliged to prepare its non-financial information statement, although there is diversity in compliance. As

26 In accordance with the art. 9.1 of the Ley Orgánica 2/1982 (Ley Orgánica 2/1982, de 12 de mayo, del Tribunal de Cuentas. BOE No. 121, 21/05/1982. The new wording was added by the Ley Orgánica 3/2015. Ley Orgánica 3/2015, de 30 de marzo, de control de la actividad económico-financiera de los Partidos Políticos, por la que se modifican la Ley Orgánica 8/2007, de 4 de julio, sobre financiación de los Partidos Políticos, la Ley Orgánica 6/2002, de 27 de junio, de Partidos Políticos y la Ley Orgánica 2/1982, de 12 de mayo, del Tribunal de Cuentas. BOE No. 77, 31/3/2015), the audit function of the Court of Audit shall refer to the submission of the economic-financial activity of the public sector to the principles of legality, efficiency, economy, transparency, as well as environmental sustainability and gender equality.

27 4.90 The CAGE 2020 report does not include the balance sheet and management report (...) which implies (...) to a certain extent, a breach of the duty to evaluate spending policies,

each company chooses the used framework, this generates problems of comparability. Verifications may be different depending on who the entity is. The accounts of any public entity in the state sector can be viewed on the IGAE website[28]. However, it is organized mostly in financial terms, not yet ready for the non-financial information reports. The lack of explicit reference does not mean that the public sector company has not prepared its report. In the public administrative sector, a journey in integrated reporting is starting and the margins for improvement are still significant. The SDG framework can be an interesting accelerator for standardizing and implementing integrated public sector reporting[29].

4. Conclusion

The aspiration for a fair distribution of taxes and benefits in our societies may become true in the new context of the useful tools and metrics developed to advance in the achievement of Sustainable Development Goals. At least, the means that are being introduced or modified in the functioning of our economies could be designed with that perspective in mind, both in the private and the public sector. Surely, the integration of non-financial information with the financial one and the efficient treatment of the data with the available technologies opens an avenue of possibilities for greater tax justice, but only if properly supervised.

The difficult alignment of taxation and sustainability can be effectively achieved by the Governments and Parliaments through the actual incorporation of non-financial information when drafting and passing tax

provided for in Article 72 of the General Budgetary Law. Statement CGE 2020 (Tribunal de Cuentas, 2022).

28 Registro de cuentas anuales del sector público, accessed July 10, 2022, https://www.igae.pap.hacienda.gob.es/sitios/igae/esES/Contabilidad/ContabilidadPublica/CPE/rcasp/Paginas/inicio.aspx.

29 The European Organisation of Supreme Audit Institutions (EUROSAI) and the European Confederation of Internal Audit Institutes (ECIIA) are working together to promote good governance, accountability and audit across the European public sector. A common project tries to determine the extent to which Integrated Reporting has been, or is expected to be, adopted in the European Public Sector. Accessed July 10, 2022, https://www.eciia.eu/2021/07/integrated-reporting-in-the-european-public-sector-its-time-to-act/, https://www.eurosai.org/handle404?exporturi=/export/sites/eurosai/.content/documents/Integrated-Reporting-in-the-European-Public-Sector.pdf.

rules, and obviously by ensuring their adequate application in administrative routines. The frequent additional efforts required tax administrators to leave their comfort zones when managing non-revenue goals through extra-fiscal measures (either with taxes or tax incentives) could be minimized if significant data concerning legally accepted sustainability indicators were included in streamlined digitalized procedures. As previously explained, the current technologies already allow the automatic feeding of many data within the tax management systems, so this strategy could be rationally extended to some sustainability data. This fact should no longer be ignored and cause the necessary adaptation of the legal order. In practice, by establishing channels to weigh the financial information with the non-financial one, the tax rules could be more accurately connected to real life. This would avoid poor objective estimates in the assessment of taxes and tax expenditures, quite anachronic in this century.

The comparative, dogmatic-legal and analytical research conducted here shows that the proposed approach is feasible. In the moment of the reception or update of the digital technologies, the legislature should pay attention (and consequently reflect this priority in the final design of the tax rules) not only to the treatment of financial data for purely collection purposes increasing the tax revenue but also to the co-benefits of taking into consideration all the relevant details in each case to reinforce sustainability – as they could be derived from the newly accessible non-financial information. *De lege ferenda* these basic criteria should guide the next steps of policymaking everywhere to ensure universal sustainable development.

Certainly, automation has demonstrated a key impact on the easier fulfillment of tax obligations and the efficient monitoring of compliance. Understanding a broader meaning of compliance calls for assessing the achievement of all the goals stated in the tax law (collecting revenues, redistributing and other constitutionally protected ones that promote sustainable development). Accordingly, the standardized formats for reporting tax information should consider both financial and other relevant non-financial data. Like that, the pertinent non-financial data might be swiftly considered by tax administrations to evaluate the claims for VAT refunds or CIT adjustments, where they were related to actions impacting sustainability – in the event that the legislation foresees them.

Nowadays, many taxpayers may have the impression that the digitalization progress is somehow biased towards the gain of tax administrations, as it mostly serves to enhance the control over financial movements to secure the payment of taxes[30]. This limited vision could be augmented and, in addition, offer them the opportunity to learn that, at least, some of their pro-sustainability actions will be counted. They could be definitively taken into consideration when assessing the tax debt. The taxpayers' interest in the use of online systems could thus increase, as they could experience this benefit.

An online tax administration portal could be connected to other portals created, for instance, by environmental authorities –if automation runs in parallel in both sectors. The tax administration is usually pioneering the technological transformations, but to meet the Paris Agreement objectives many different processes are being implemented by other administrations (e.g., to measure GHG emissions). This could reduce costs, and eventually fraud. As already mentioned, each country should assess which level of technology is appropriate for achieving a tax system aligned with the sustainable development goals. Anyway, it seems a wise policy decision to fund the investment in IT infrastructure and prudently inform the taxpayers of their obligations and, of course, their rights to avoid any possible mistrust (i.e. in case of initiatives regarding software to instantly upload data or use of platforms to exchange various electronic documents) substantive changes in accounting to cover non-financial information[31] and their proper accommodation in accounting software used for tax purposes will surely make a difference.

Corporate tax transparency is a central ESG issue and requires that relevant information for tax purposes be subject to scrutiny. This comprises financial and non-financial data that may be contemplated in the taxable event, the tax base, allowances, credits, or deductions, among others. However, the reporting standards on sustainability data are still not very clear. So, the following distinction in reporting is critical: what should be

30 Mercedes Navarro Egea, "The Digitalization of Relations Between Citizens and Tax Administrations," in *Interactive Robotics: Legal, Ethical, Social and Economic Aspects*, ed. María Amparo Grau Ruiz (Cham: Springer,2022), 124–129.

31 Rutger Hoekstra, *How Natural Capital Accounting Contributes To Integrated Policies For Sustainability* (New York: UNDESA, 2020), 8, accessed August 23, 2022, https://seea.un.org/content/how-natural-capital-accounting-contributes-integrated-policies-sustainability.

configured as an obligation or left as a voluntary commitment? Which thresholds could apply?

In the private sector, there is a clear demand for tax experts who are aware of the need of making real ESG progress and, at the same time, be capable of using data and technology. The same request is emerging in the public sector, but the rhythm of adaptation to the new circumstances seems to be a bit slower. Due to the magnitude of the undergoing transformations, the supervisory bodies competent in each field have a decisive role to play and should constantly keep an open dialogue among them to ensure the collection of data with sufficient quality (as it is actually happening in the International and the European Organization of Supreme Audit Institutions, or the European Confederation of Internal Audit Institutes, for example).

How does the information that the private and public companies are presenting (or will present) serve to establish taxes coherently with the SDGs? It is time to prioritize the task of selecting the specific ESG contents to include in the companies' or States' accounts (under a voluntary or mandatory option) to better fit the need for fairer tax rules. And simultaneously reconsider their traditional design, which often leaves aside or considers in a too rough manner the data that can have an impact on sustainability. The silo thinking must be exiled to finish with these fragmented systems. The changes affecting substance (because non-financial information can offer a complete view) and form (technological means allow reasonable exploitation of the data) permit a sound reorientation of policymaking in tax matters to promote sustainability-consistent decisions by all the stakeholders in the exercise of their activities.

In the middle of a transitional period, pervaded with uncertainty, the main problem lies in the materiality and comparability of the information to be reported. This is observable in the nature of the document to be presented (particularly complicated in the case of a subsidiary whose parent company is in another EU Member State, for instance) and the degree of verification of the non-financial information statement (yet a limited assurance standard in many places, not an audit). These differently generated and validated data should be homogenized. The EU is pushing forward, but the pace of implementation of standards varies across countries and in different sectors.

Therefore, the current exchange of information in tax matters can solely focus on financial data, probably due to the uneven situation affecting non-financial information and the lack of connectivity with financial information within the same territorial scope. This picture could change in the long term, especially if some immediate information supply mechanisms are applied and enlarged to cover some sustainability data in real-time.

Once the non-financial information reaches a point of growth equivalent to the financial one and gets sophisticatedly integrated with it, the tax authorities will, in fact, be forced to consider it. In the interim, despite the complexities, a progressive inclusion of the data associated with sustainability indicators specifically chosen for tax purposes should be made through the legislation when technological progress facilitates it. Hopefully, sharing and analyzing further experiences on their capture, verification and use will be extremely useful to align taxation and public spending with sustainability (like the Spanish legislative modifications to introduce a mandatory Report on the alignment of the General State Budget with the SDGs, the extension of the audit function of the Court of Auditors to environmental sustainability or the Declaration on the General State Account regarding the compliance with the duty to prepare non-financial information statements by companies in the public business sector). Ambitious sustainability objectives require different choices when designing and implementing taxes and tax benefits, taking advantage of all currently (or soon) available resources, like the non-financial data and the technological tools to correctly process them.

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