

5th Edition

# IWAT 2026

International Workshop on  
Accounting and Taxation

Book of Abstracts of the International Workshop on Accounting and Taxation  
(IWAT2026)



APRIL 24th, 2026

**April 2026 | Porto - Portugal**

**Info: [www.isag.pt](http://www.isag.pt)**

# **Book of Abstracts of the International Workshop Accounting and Taxation (IWAT2026)**

24<sup>th</sup> of April 2026 | Porto, Portugal

**Edited by**

**Ana Pinto Borges, PhD, Elvira Vieira, PhD, and  
Albertina Paula Monteiro, PhD**

Copyright to the authors, 2026. All Rights Reserved.

No reproduction, copy or transmission are allowed without written permission from the individual authors.

Abstracts and Extended Abstracts were read and selected by Scientific Committee of the IWAT2026. All manuscripts went through a double-blind peer review process to be presented at the Workshop.

**Further copies of these proceedings can be consulted at:**

<https://iwat26.isag.pt/en/book-of-abstracts/>

**DOI: [HTTPS://DOI.ORG/10.58869/IWAT2026](https://doi.org/10.58869/IWAT2026)**

**ISBN: 978-989-36197-2-8**

**SUPPORT: ELECTRONIC | FORMAT: PDF / PDF/A**

**EDITOR: ISAG - EUROPEAN BUSINESS SCHOOL**

**PUBLISHER: ISAG - EUROPEAN BUSINESS SCHOOL**

**RUA DOS SALAZARES 840, 4100-442 PORTO, PORTUGAL**

## TABLE OF CONTENTS

<b>Presentation: ISAG – European Business School</b> .....	i
<b>Presentation: Consuelo Vieira da Costa Foundation</b> .....	iii
<b>Presentation: International Workshop Accounting and Taxation</b> .....	v
<b>Ethics &amp; Malpractice Statement</b> .....	vii
<b>Communications</b> .....	1
<b>Session I – “Shaping the Future of Business: Sustainability and Digital Transformation”</b> .....	1
<i>Digital Transformation, Earnings Management, Environmental, Social and Governance: Bibliometric Analysis</i> .....	1
<i>Corporate Social Responsibility Reporting: the impact of social investment, financial performance and regulatory pressures regarding sustainability reporting</i> .....	5
<i>The impact of sustainability engagement on ESG performance reporting: Evidence from listed companies in Latin America</i> .....	9
<i>Impact of corporate governance characteristics on Workforce performance: Evidence from the Healthcare Sector in European Companies</i> .....	13
<i>Water Footprint of Artificial Intelligence: Exploratory Analysis of Water Consumption in Data Centers in Europe</i> .....	17
<b>Session II – “Beyond Taxation: Corporate Performance, Reputation and Strategy”</b> .....	21
<i>Investment Funds in the European Union: Conceptual and Fiscal Framework</i> .....	21
<i>Tax Incentives Applied to Urban Rehabilitation</i> .....	24
<i>Portuguese Tax System: a historical reflection on its contribution to ESG metrics</i> .....	29
<i>Aggressive Tax Planning Schemes: the case of Amazon</i> .....	34
<i>The Influence of Financial and Economic Performance on Corporate Reputation: Empirical Evidence from the MERCO Index</i> .....	37
<i>Do Firms Keep Their Profits? Competitive Adjustment, Transitory Rents and the Illusion of Persistence</i> .....	42
<b>Session III – “Accounting Reimagined: Digital Transformation and AI”</b> ...	45
<i>Artificial intelligence in the new era of corporate information: a bibliometric analysis on transparency and sustainability</i> .....	45

<i>Digital Transformation in Accounting: Technological and Ethical Impacts on the Certified Accountant Profession</i> .....	48
<i>Digitalizing ESG information: the role of AI, blockchain and automation in enhancing transparency and efficiency</i> .....	52
<i>Key Audit Matters: Evidence on Asset Impairments</i> .....	56
<i>The quality of sustainability reporting of listed companies in the Iberian Peninsula</i> .....	58
<b>Session IV – “Accounting Insights: Performance and Disclosure”</b> .....	<b>61</b>
<i>Activity-Based Costing in an Aluminium Extrusion Company: A Case Study</i> 61	
<i>Non-Current Assets Measurement: A Case Study of the Cávado Sub-Region Municipalities</i> .....	64
<i>Determinants And Impacts of the Quality of Sustainability Reporting: The Perspective of Managers</i> .....	68
<i>Beyond the Balance Sheet: Intangible Assets Disclosure in Portuguese Banks</i> .....	72
<b>Session V – “Responsible Business: ESG, Tax and Society”</b> .....	<b>76</b>
<i>Why does the Market Applaud what Accounting Punishes in the Utilities sector?</i> .....	76
<i>Hybrid welfare provision in Portugal: institutional configurations and distributional effects on public service delivery (1925 - 2025)</i> .....	80
<i>Personal income taxation in Portugal: progressive versus flat tax</i> .....	85
<i>ESG Performance across Traditional, Renewable, and Energy Transition Firms: A Comparative Firm-Level Analysis</i> .....	89
<i>Determinants and Impacts of Financial Reporting Quality</i> .....	91



## **Presentation: ISAG – European Business School**

ISAG - Instituto Superior de Administração e Gestão - is a private polytechnic higher education establishment founded and instituted by ESE - Ensino Superior Empresarial, Lda. (ESE) in October 1979 and recognised by Decree-Law no. 375/87 of 11 December.

As a conclusion of a fusion process started in November 2000, which had as first stage the merger by incorporation of the founding entities ESE/ENFOC in June of 2005, there occurred the merger of ISAG – Instituto Superior de Administração e Gestão and ISAI – Instituto Superior de Assistentes e Intérpretes in a single institution of higher education with the designation of ISAG – Instituto Superior de Administração e Gestão.

The fundamental aim of ISAG - European Business School (ISAG-EBS) is to provide high-level technical and cultural training in the areas of Business Sciences, Tourism and Hotel Management, through the implementation of a modern teaching philosophy that prepares students to carry out highly qualified professional activities in the context of business globalisation and internationalisation.

ISAG-EBS was one of the first business schools in Portugal, and the first higher education institution to offer a degree in tourism in the north of Portugal. Currently, ISAG offers 5 degrees (Business Management, Hotel Management, Business Relations, Tourism, and Management), 2 master's degrees (Commercial and Marketing Management and Business Management), Executive Training (Postgraduate Courses, Mini MBA, among others), 7 Higher Technical Professional Courses (Catering and Beverages, Accounting and Taxation, Tourism Product Development, Digital Marketing Management, International Management and Trade, Industrial Management and Management Informatics) and Curricular Units on a free basis.

With a diversified offer of higher education, ISAG-EBS provides learning experiences with a strong emphasis on the relationship with the economic and business world, based on a teaching staff that combines high-level scientific training with highly experienced specialists of recognised merit.

The experience acquired over the years and the updating of concepts has enabled ISAG-EBS to develop courses and programmes that are specifically geared towards companies. Our training is designed to improve and develop soft skills, such as entrepreneurial and leadership abilities, but also hard skills, particularly in management, marketing and sales.

## **Presentation: Consuelo Vieira da Costa Foundation**

The Consuelo Vieira da Costa Foundation (FCVC) is a private and non-profit foundation created on April 3, 2018, and recognized by the Presidency of the Council of Ministers on September 21, 2018 (Order No. 9392/2018).

FCVC started its activity on September 13, 2019, with the statutory purposes of carrying out activities to promote, develop and support initiatives of a predominantly social, cultural and scientific research nature, in the fields of teaching, education and professional training.

With these purposes in mind, the Foundation operates in the following areas:

- Social | *Support for young people in the pursuit of their studies at the level of higher education, through the awarding of Social Scholarships and the awarding of young people with Merit Scholarships.*
- Education | *Creation of the Senior University Consuelo Vieira da Costa.*
- Culture | *Carrying out interventional and inclusion actions in society, enabling access to culture.*
- Research | *Creation of the Center for Research in Business Sciences and Tourism (CICET).*

### **Mission**

Contribute to the development of society, particularly in the social, cultural, educational and scientific research domains.

### **Vision**

To be identified and recognized as a reference institution at national and international level, oriented towards the promotion and involvement of the community and for the production and dissemination of scientific knowledge.

### **Values**

- I. Respect and Humanism
- II. Ethics, Responsibility and Social Inclusion
- III. Sustainable development
- IV. Quality and Innovation

## **About CICET - FCVC**

In 2008, ISAG - European Business School created the ISAG Research Centre - NIDISAG, with the mission of promoting, realising and producing scientific knowledge in ISAG's scientific areas (Accounting, Law, Economics, Finance, Management, History, Hospitality, Informatics, Modern Languages, Portuguese Language, Marketing, Mathematics and Tourism). In 2021, NIDISAG ceased its activities, with the Research Coordination Office (GCI) ensuring the continuity of its mission.

The GCI has established a protocol with the Research Centre in Business Sciences and Tourism (CICET-FCVC) - Research Centre in Business Sciences and Tourism, with a view to promoting and developing scientific research in areas of common interest, namely in the areas of Business Sciences, Hotel Management and Tourism.

As a result, CICET-FCVC, in partnership with ISAG's GCI, is now responsible for conducting applied studies and joint research projects. CICE-FCVC is a non-profit research centre created by the Consuelo Vieira da Costa Foundation in 2019, made up of national and international researchers, PhDs and doctoral students, including ISAG professors.

CICET-FCVC started its activity in October 2020 and has sought to increase its number of researchers (through the establishment of cooperation protocols), its scientific production, as well as the applicability of its studies in local, regional, and national policies.

In 2025, the center was accredited by the Foundation for Science and Technology (FCT) and is now part of the national network of recognized R&D units, under project reference CICET-FCVC UID/06354/2025 and DOI identifier <https://doi.org/10.54499/UID/06354/2025>.

## **Presentation: International Workshop Accounting and Taxation**

Following the continued success and growing international recognition of previous editions, IWAT2026 further consolidates its role as a platform for advancing knowledge and fostering debate on contemporary challenges in accounting and taxation. This edition places a strong emphasis on digital transformation, artificial intelligence, sustainability, and corporate performance, reflecting the dynamic and evolving landscape of business and financial reporting.

IWAT2026 was organized in a hybrid format, combining in-person and virtual participation, and welcomed submissions in Portuguese, Spanish, and English. Contributions were accepted in the form of full papers and extended abstracts, all of which underwent a rigorous double-blind peer review process. The abstracts of accepted and registered contributions are compiled in this Book of Abstracts and made available to all participants.

The scientific program featured a plenary session entitled “Digital Accounting: Opportunities and Challenges in the Age of Artificial Intelligence”, delivered by Professor Rui Silva (University of Trás-os-Montes and Alto Douro), addressing the transformative impact of emerging technologies on the accounting profession.

In addition to the plenary session, IWAT2026 included five parallel thematic sessions covering a wide range of relevant topics: sustainability and digital transformation; corporate performance, taxation, and strategy; digitalization and artificial intelligence in accounting; financial reporting and disclosure practices; and responsible business, ESG, and societal impact. Across these sessions, a diverse set of contributions from international researchers provided valuable insights into current academic and professional debates.

IWAT2026 brought together researchers and practitioners from different countries and institutions, promoting interdisciplinary dialogue and knowledge exchange in a collaborative environment.

Regarding publication opportunities, the best full papers written in English, once accepted and registered, will be invited to submit their work to international indexed journals in the fields of accounting and taxation, subject to a rigorous

peer review process. Additionally, a selection of outstanding papers will be invited to be included as chapters in a book published by IGI Global, indexed in Scopus, under the title “Anchoring Corporate Value Through Accounting, Finance, Taxation, and Auditing”. All submissions will undergo a thorough evaluation by reviewers and the respective editorial boards.

## **Ethics & Malpractice Statement**

The International Workshop Accounting and Taxation (IWAT2026) upholds the highest standards of scientific integrity, ethical research practices, and responsible publication. The Organizing Committee actively implements measures to prevent any form of academic or publication malpractice, ensuring the credibility and rigor of the workshop's proceedings.

As organizers of IWAT2026, ISAG – European Business School and the Research Center in Business Sciences and Tourism (CICET – FCVC) assume full responsibility for overseeing all stages of the publication process for the Book of abstracts of the International Workshop Accounting and Taxation. ISAG – European Business School, as the publisher of the book series, guarantees that editorial decisions remain independent and uninfluenced by commercial interests, including advertising, reprint, or other financial considerations.

All papers and abstracts submitted for presentation at IWAT2026 and publication in the book of abstracts underwent a double-blind peer-review process, based on predefined rules and evaluation criteria approved by the Organizing Committee. This review process is conducted with objectivity and transparency, ensuring the confidentiality of all submissions. Manuscript acceptance is strictly governed by legal and ethical guidelines, with zero tolerance for plagiarism or copyright infringement.

For further details, the official Ethics & Malpractice Statement can be accessed at: <https://iwat26.isag.pt/en/ethics-malpractice/>

## Committees

### Organizing Committee

- Albertina Paula Monteiro
- Ana Pinto Borges
- Bruno Miguel Vieira
- Catarina Cepeda
- Elvira Vieira
- Adelinda Ramos
- Sónia Soares (Technical support)

### Scientific Committee

Adriana Rodrigues Silva, *Polytechnic Institute of Santarém (ESGTS)*

Albertina Paula Monteiro, *Porto Accounting and Business School, Polytechnic of Porto (ISCAP, PP)*

Amélia Carvalho, *Porto Polytechnic Institute, School of Technology and Management*

Amélia Silva, *Porto Accounting and Business School, Polytechnic of Porto (ISCAP, PP)*

Ana Arromba Dinis, *Polytechnic Institute of Cávado and Ave (IPCA)*

Ana Clara Borrego, *Polytechnic Institute of Portalegre (IPP)*

Ana Covas, *Porto Accounting and Business School, Polytechnic of Porto (ISCAP, PP)*

Ana Isabel Lopes, *ISCTE, University Institute of Lisbon*

Ana Maria Alves Bandeira, *Porto Accounting and Business School, Polytechnic of Porto (ISCAP, PP)*

Ana Paula Silva, *Polytechnic Institute of Viana do Castelo (IPVC)*

Ana Pinto Borges, *ISAG – European Business School, Research Center in Business Sciences and Tourism (CICET – FCVC)*

António Cunha, *ISAG – European Business School and Research Center in Business Sciences and Tourism (CICET – FCVC)*

Armindo Lima, *Higher Institute of Entre Douro e Vouga*

Beatriz Aibar-Guzmán, *University of Santiago de Compostela, Spain (USC)*

Bentouir Naima, *Ain Témouchent University, Algeria*

Carmen Ruiz Hidalgo, *University of Vigo, Spain (UV)*

Catarina Cepeda, *Porto Accounting and Business School, Polytechnic of Porto (ISCAP, PP)*

Cláudia Cardoso, *Polytechnic Institute of Cávado and Ave (IPCA)*

Cláudia Pereira, *Porto Accounting and Business School, Polytechnic of Porto (ISCAP, PP)*

Cristina Aibar-Guzmán, *University of Santiago de Compostela, Spain (USC)*

Cristina Sá, *Centre of Applied Research in Management and Economics (CARME), ESTG, Polytechnic Institute of Leiria*

Delfina gomes, *University of UMinho (UM)*

Dulce Gomes, *ISAG – European Business School, Research Center in Business Sciences and Tourism (CICET – FCVC)*

Eduardo Leite, *University of Madeira (UMa)*

Elvira Vieira, *ISAG - European Business School, Research Center in Business Science and Tourism (CICET-FCVC), Porto, Portugal & IPVC-Polytechnic Institute of Viana do Castelo and Applied Management Research Unit (UNIAG), and Instituto Politécnico de Bragança, Portugal*

Francisco Carreira, *Instituto Politécnico de Setúbal*

Helena Costa Oliveira, *Porto Accounting and Business School, Polytechnic of Porto (ISCAP, PP)*

Humberto Ribeiro, *University of Aveiro (UA)*

Isabel Alexandra Neves Maldonado, *Porto Accounting and Business School, Polytechnic of Porto (ISCAP, PP)*

José Campos Amorim, *Porto Accounting and Business School, Polytechnic of Porto (ISCAP, PP)*

José Luís Martins, *Polytechnic Institute of Leiria*

José Manuel Pereira, *Polytechnic Institute of Cávado and Ave (IPCA)*

Lídia Oliveira, *University of Minho (UM)*

Liliana Ivone Pereira, *Polytechnic Institute of Cávado and Ave (IPCA)*

Luís Lima Santos, *Polytechnic Institute of Leiria*

Luís Miguel Pereira Gomes, *Porto Accounting and Business School, Polytechnic of Porto (ISCAP, PP)*

Lurdes Silva, *Polytechnic Institute of Cávado and Ave (IPCA)*

Maria José Fernandes, *Polytechnic Institute of Cávado and Ave (IPCA)*

Monica Siota Alvarez, *University of Vigo (UV)*

Orlando Lima Rua, *Porto Accounting and Business School, Polytechnic of Porto (ISCAP, PP)*

Patrícia Quesado, *Polytechnic Institute of Cávado and Ave (IPCA)*

Raimonda Bublienė, *Faculty of Business Management at VILNIUS TECH, Lithuania*

Rajeswaran Ayyadurai, *IL Health & Beauty Natural Oils Co Inc, Chico, California, USA*

Ricardo Bruno Antunes Marques, *Polytechnic Institute of Leiria*

Rui Bertuzi, *Porto Accounting and Business School, Polytechnic of Porto (ISCAP, PP)*

Rui Costa Robalo, *Polytechnic Institute of Santarém (ESGTS)*

Rui Silva, *University of Trás-os-Montes and Alto Douro (UTAD)*

Sandra Raquel Alves, *Polytechnic Institute of Leiria (IPL)*

Sara Serra, *Polytechnic Institute of Cávado and Ave (IPCA)*

Sónia Maria Monteiro, *Polytechnic Institute of Cávado and Ave (IPCA)*

Verónica Ribeiro, *Polytechnic Institute of Cávado and Ave (IPCA)*

Viktorija Skvarciany, *Faculty of Business Management at VILNIUS TECH, Lithuania*



## Communications

### Session I – “Shaping the Future of Business: Sustainability and Digital Transformation”

Chair: Catarina Cepêda

*CICF, CEOS-PP, ISCAP.IPP.PT; UMAIA*

### ***Digital Transformation, Earnings Management, Environmental, Social and Governance: Bibliometric Analysis***

**André Lamblet Dias.** *Federal University of Rio de Janeiro (UFRJ), Brasil & University of Aveiro (UA), Portugal. andrelamblet30@gmail.com*

**Helena Coelho Inácio.** *University of Aveiro (UA), Portugal. helena.inacio@ua.pt*

**Thiago de Abreu Costa.** *Federal University of Rio de Janeiro (UFRJ), Brasil. thiago@facc.ufrj.br*

#### **Abstract**

**Purpose:** Despite the growing literature on digital transformation and ESG, their combined effect on earnings management remains largely unexplored. Therefore, this study aims to address this research gap by exploring the relationship between digital transformation, earnings management, and ESG through bibliometric analysis. It examines the maturity, main findings, theoretical connections and trends in scientific production between these three thematic axes to understand how technology and sustainability jointly impact accounting information quality.

**Methodology:** The analysis was based on the use of the Bibliometrix package of Rstudio software and VOSviewer. Following the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol, initially, the search was performed using a string with the three thematic axes together; however, the databases returned fewer than five records. Strategically, the search for articles in the databases was carried out separately, based on the three thematic axes (digital transformation and earnings management; digital transformation and ESG; earnings management and ESG). This separate search resulted in 3,365 records across the Web of Science (WoS) and Scopus databases. The inclusion and exclusion criteria in the databases were as follows: (1) a time limit was applied, up to the year 2025; (2) only articles were selected to ensure the quality of the research; (3) restrictions were imposed on the areas of business, administration, and accounting; and (4) for the language, only English was included for compatibility with the subsequent analysis. After applying these criteria, the databases

provided 1,110 records. After merging the data, duplicate records were automatically removed using Bibliometrix, establishing a final dataset of 714 articles that are the subject of our bibliometric analysis.

**Results:** The results indicate that scientific production on these topics had an exponential growth curve starting in 2023. This movement culminates in 2025 with a volume of over 400 published articles. The thematic mapping confirms a strong interdependence among the themes, revealing that ESG and digital transformation represent the current research frontier. Finance Research Letters ranks first in terms of publications analyzing the themes of digital transformation, earnings management, and ESG. Analysis of authors' output over time highlights the high scientific authority of researchers Li Y and Chen Y, while the most cited article is "Corporate ESG performance and manager misconduct: Evidence from China" by He, Du, and Yu. Geographically, the University of Sfax in Tunisia is the most relevant affiliation, and China leads in both total scientific production and international collaboration networks. Thematically, keyword and co-occurrence analyses reveal that the literature is heavily dominated by three main pillars: ESG practices, earnings management, and digital transformation. Furthermore, bibliographic coupling organizes the field into four core research streams: 1) digital technologies and ESG nexus; 2) strategic reporting and business ethics; 3) strategic performance and disclosure framework; and 4) emerging digital frontiers. The study confirms that contemporary literature investigates technology not merely as a tool for operational efficiency, but as a critical mechanism for transparency and socio-environmental governance. The integration of the thematics represents the current and rapidly growing research frontier.

**Research limitations:** Limitations include the linguistic restriction (English only) and the restriction to selected databases.

**Originality:** The originality of this study lies in utilizing bibliometric analysis to systematically map the unprecedented tripartite intersection of digital transformation, ESG practices, and earnings management. Unlike traditional literature reviews, this science mapping approach provides structural evidence of how these previously isolated streams are converging into a consolidated research nexus. It advances theoretical understanding by empirically demonstrating, through thematic clusters, that technology is no longer viewed merely as an operational tool, but as a core governance mechanism linking sustainability to financial reporting quality. Consequently, this study guides future empirical research by identifying specific latent topics and theoretical gaps, offering a robust road map for scholars to investigate the impact of emerging technologies on corporate transparency and ESG compliance. For future research, we suggest conducting qualitative studies to explore how country-specific regulations affect this triad, alongside empirical analyses measuring the impact of specific technologies (such as Blockchain and AI) on mitigating earnings management and improving audit quality in firms with high ESG scores.

**Keywords:** *Digital transformation; Earnings Management; ESG.*

**Acknowledgments:** This study was financed in part by the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior – Brasil (CAPES) through the PDSE Program 17/2025 Finance Code 001.

## References

- Aria, M., & Cuccurullo, C. (2017). bibliometrix: An R-tool for comprehensive science mapping analysis. *Journal of informetrics*, 11(4), 959-975.
- Autore, D., Chen, H. A., Clarke, N., & Lin, J. (2024). Blockchain and earnings management: Evidence from the supply chain. *The British Accounting Review*, 56(4), 101357.
- Baiod, W., & Hussain, M. M. (2023). The impact and adoption of emerging technologies on accounting: perceptions of Canadian companies”, *International Journal of Accounting & Information Management*, 32(4), 557-592.
- Bhimani, A., & Willcocks, L (2014). Digitisation, Big Data and the transformation of accounting information. *Accounting and Business Research*, 44(4), 469-490.
- Cheng, Y., & Li, H. (2025). The impact of ESG performance on corporate digital transformation. Environment. *Development and Sustainability*, 1-28.
- Costa, A. J., Curi, D., Bandeira, A. M., Ferreira, A., Tomé, B., Joaquim, C., ... & Marques, R. P. (2022). Literature review and theoretical framework of the evolution and interconnectedness of corporate sustainability constructs. *Sustainability*, 14(8), 4413.
- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of business research*, 133, 285-296.
- Fang, Q., Yu, N., & Xu, H. (2023). Governance effects of digital transformation: from the perspective of accounting quality. *China Journal of Accounting Studies*, 11(1), 77-107.
- He, F., Du, H., & Yu, B. (2022). Corporate ESG performance and manager misconduct: Evidence from China. *International Review of Financial Analysis*, 82, 102201.
- He, W., & Xian, Y. (2025). Does Digital Transformation Affect Earnings Management Choices?” *Emerging Markets Finance and Trade*, 1-22.
- Jensen, M., & Meckling, W. (1976). Theory of the firm: Management behavior, agency costs and capital structure. *Journal of Financial Economics*, 3(4), 305-360.
- Lai, H. K., & Hsieh, S. F. (2025). Evaluating the Impact of Robotic Process Automation on Earnings Management. *Journal of Information Systems*, 39(1), 103-133.
- Liu, Y., Song, J., Zhou, B., & Liu, J. (2025). Artificial intelligence applications and corporate ESG performance. *International Review of Economics & Finance*, 104, 104559.
- Lou, Z., Li, M., Shan, Y. G., & Ye, A. (2024). Does corporate digitalisation moderate real earnings management? *Accounting & Finance*, 64(4), 4157-4196.
- Lu, Y., Xu, C., Zhu, B., & Sun, Y. (2024). Digitalization transformation and ESG performance: Evidence from China. *Business Strategy and the Environment*, 33(2), 352-368.
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *bmj*, 372.
- Pranckutė, R. (2021). Web of Science (WoS) and Scopus: The titans of bibliographic information in today’s academic world. *Publications*, 9(1), 12.
- Verhoef, P. C., Broekhuizen, T., Bart, Y., Bhattacharya, A., Dong, J. Q., Fabian, N., & Haenlein, M. (2019). Digital transformation: A multidisciplinary reflection and research agenda. *Journal of Business Research*, 122, 889-901.
- Vial, G. (2019). Understanding digital transformation: a review and a research agenda. *The Journal of Strategic Information Systems*, 28(2), 118-144.
- Wang, H., Jiao, S., Bu, K., Wang, Y., & Wang, Y. (2023). Digital transformation and manufacturing companies’ ESG responsibility performance”, *Finance Research Letters*, 58, 104370.

- Wang, L., & Hou, S. (2024). The impact of digital transformation and earnings management on ESG performance: evidence from Chinese listed enterprises. *Scientific Reports*, 14(1), 783.
- Yang, B., Huang, J., & Chen, Y. (2024). “The relationship between ESG ratings and digital technological innovation in manufacturing: Insights via dual machine learning models”, *Finance Research Letters*, 71, 106362.

# ***Corporate Social Responsibility Reporting: the impact of social investment, financial performance and regulatory pressures regarding sustainability reporting***

## ***Divulgação da Responsabilidade Social Empresarial: o impacto do Investimento Social, Desempenho Financeiro e pressões normativas de relato de sustentabilidade***

**Andreia Silva.** ISCAP, Politécnico do Porto, Portugal. [2201306@iscap.ipp.pt](mailto:2201306@iscap.ipp.pt)

**Catarina Cepeda.** CICF, School of Management, IPCA, Barcelos, Portugal; CEOS.PP, ISCAP, Polytechnic of Porto, Matosinhos, Portugal; Instituto Politécnico Da Maia (IPMAIA), Portugal. [clmc@iscap.ipp.pt](mailto:clmc@iscap.ipp.pt) ORCID: <https://orcid.org/0000-0002-3911-0894>

**Albertina Paula Monteiro.** CEOS.PP, ISCAP, Politécnico do Porto, Matosinhos, Portugal. [amonteiro@iscap.ipp.pt](mailto:amonteiro@iscap.ipp.pt). ORCID: <https://orcid.org/0000-0002-2146-9807>

### **Abstract**

**Purpose:** The aim of this research project is to analyse the relationship between the level of Corporate Social Responsibility (CSR) disclosure, financial performance, social investment and regulatory pressures regarding sustainability reporting among companies in the energy sector included in the Dow Jones Sustainability Index (DJSI) between 2020 and 2024.

**Methodology:** The methodology adopted will take a positive approach using mixed qualitative and quantitative methods, focusing on energy sector companies included in the DJSI during the period from 2020 to 2024.

**Results:** The study's results are expected to reveal a positive relationship between the level of CSR disclosure, investment and the financial performance of energy sector companies included in the DJSI. Additionally, the study aims to verify the positive effect of regulatory pressures on CSR reporting.

**Limitations:** The main limitation of this study relates to the size and specificity of the sample, as the study is restricted to energy sector companies included in the DJSI, which may limit the generalizability of the results.

**Originality:** This study stands out for its originality in analysing companies from various countries, given that most existing studies focus on the context of Portugal or the European Union, thereby providing a more comprehensive and comparative perspective. In this way, the study contributes to a deeper understanding of the factors that influence the disclosure of CSR.

**Keywords:** Financial Performance; Corporate Social Responsibility Reporting; Social Investment; Sustainability.

## Resumo

**Objetivo:** O presente projeto de investigação tem como objetivo analisar a relação entre o nível de divulgação da Responsabilidade Social Empresarial (RSE), o desempenho financeiro, o investimento social e as pressões normativas de relato de sustentabilidade nas empresas do setor energético integradas *no Dow Jones Sustainability Index (DJSI)*, no período entre 2020 e 2024.

**Metodologia:** A metodologia adotada, terá uma perspetiva positivista com métodos mistos de natureza qualitativa e quantitativa, incidindo sobre as empresas do setor energético incluídas no DJSI durante o período compreendido entre 2020 e 2024.

**Resultados:** Espera-se que os resultados do estudo revelem uma relação positiva entre o nível de divulgação da RSE, investimento e o desempenho financeiro das empresas do setor energético integradas no DJSI. Adicionalmente pretende-se verificar o efeito positivo das pressões normativas no relato da RSE.

**Limitações:** A principal limitação deste estudo está relacionada com a dimensão e especificidade da amostra, uma vez que o estudo é limitado às empresas do setor energético incluídas no DSJI, o que pode restringir a generalização dos resultados.

**Originalidade:** Este estudo destaca-se pela sua originalidade por analisar empresas de diversos países, uma vez que a maioria dos estudos existentes se concentra no contexto de Portugal ou da União Europeia, permitindo assim uma perspetiva mais abrangente e comparativa. Desta forma, o estudo contribui para o aprofundamento do conhecimento dos fatores que influenciam a divulgação da RSE.

**Palavras-Chave:** *Desempenho Financeiro; Relato da Responsabilidade Social Empresarial; Investimento Social; Sustentabilidade.*

## References/Referências Bibliográficas

- Benvenuto, M., Aufiero, C., & Viola, C. (2023). A systematic literature review on the determinants of sustainability reporting systems. *Heliyon*, 9(4), e14893. <https://doi.org/10.1016/j.heliyon.2023.e14893>
- Bowen, H. (1953). *Social Responsibilities of the Businessman*. University of Iowa Press. [https://books.google.pt/books/about/Social\\_Responsibilities\\_of\\_the\\_Businessm.html?hl=pt-BR&id=4y0vAAAAMAAJ&redir\\_esc=y](https://books.google.pt/books/about/Social_Responsibilities_of_the_Businessm.html?hl=pt-BR&id=4y0vAAAAMAAJ&redir_esc=y)
- Carroll, A. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business & Society*, 38(5), 268–295. [https://www.researchgate.net/publication/282441223\\_Corporate\\_social\\_responsibility\\_Evolution\\_of\\_a\\_definitional\\_construct](https://www.researchgate.net/publication/282441223_Corporate_social_responsibility_Evolution_of_a_definitional_construct)
- Comissão das Comunidades Europeias. (2001). *Livro Verde*. [https://www.europarl.europa.eu/meetdocs/committees/empl/20020416/doc05a\\_pt.pdf](https://www.europarl.europa.eu/meetdocs/committees/empl/20020416/doc05a_pt.pdf)
- Davis, K. (1960). Can business afford to ignore social responsibilities? *California Management Review*, 2(3), 70–76. <https://doi.org/10.2307/41166246>

- Dmytriiev, S. D., Freeman, R. E., & Hörisch, J. (2021). The Relationship between Stakeholder Theory and Corporate Social Responsibility: Differences, Similarities, and Implications for Social Issues in Management. *Journal of Management Studies*, 58(6), 1441–1470. <https://doi.org/10.1111/joms.12684>
- Fernando, S., & Lawrence, S. (2014). A theoretical framework for CSR practices: Integrating legitimacy theory, stakeholder theory and institutional theory. *The Journal of Theoretical Accounting*, 10.1, 149–178. [https://www.researchgate.net/publication/290485216\\_A\\_theoretical\\_framework\\_for\\_CSR\\_practices\\_Integrating\\_legitimacy\\_theory\\_stakeholder\\_theory\\_and\\_institutional\\_theory](https://www.researchgate.net/publication/290485216_A_theoretical_framework_for_CSR_practices_Integrating_legitimacy_theory_stakeholder_theory_and_institutional_theory)
- Frederick, W. C. (1960). The growing concern over business responsibility. *California Management Review*, 2(4), 54–61. <https://www.williamcfrederick.com/articles%20archive/growingconcern.pdf>
- Gokten, S., Ozerhan, Y., & Gokten, P. O. (2020). The historical development of sustainability reporting: a periodic approach. *Zeszyty Teoretyczne Rachunkowości*, 107(163), 99–118. <https://doi.org/10.5604/01.3001.0014.2466>
- Huang, K., Li, Y., Oyewale, K., & Tworoger, E. (2025). Corporate Social Responsibility and Firm Financial Performance: Evidence from America's Best Corporate Citizens. *International Journal of Financial Studies*, 13(3). <https://doi.org/10.3390/ijfs13030119>
- Implementation support | EFRAG. (2023). <https://www.efrag.org/en/sustainability-reporting/esrs-workstreams/implementation-support>
- Iswati, W. (2020). The Impact of Disclosure Sustainability Reporting, Influence Corporate Social Responsibilities Towards Corporate Value with Mediation of Financial Performance. *International Journal of Managerial Studies and Research (IJMSR)*, 8(1), 1-16. <https://doi.org/10.20431/2349-0349.0801001>
- Khalil, M., Abdelraouf, M. & Shahwan, T. Evaluating the effect of corporate social responsibility (CSR) on corporate financial performance” an applied study on Egyptian stock market. *Futur Bus J* 12, 15 (2026). <https://doi.org/10.1186/s43093-026-00734-8>
- Kludacz-Alessandri, M., CygáNska, M., Tsai, W.-H., & Pietrzak, M. B. (2021). Corporate Social Responsibility and Financial Performance among Energy Sector Companies. *Energies*, 14(19), 6068. <https://doi.org/10.3390/EN14196068>
- Latapí Agudelo, M. A., Jóhannsdóttir, L., & Davídsdóttir, B. (2019). A literature review of the history and evolution of corporate social responsibility. *International Journal of Corporate Social Responsibility*, 4(1), Article 1. <https://doi.org/10.1186/s40991-018-0039-y>
- Mahajan, R., Lim, W. M., Sareen, M., Kumar, S., & Panwar, R. (2023). Stakeholder theory. *Journal of Business Research*, 166, Article 114104. <https://doi.org/10.1016/J.JBUSRES.2023.114104>
- Meutia, I., Kartasari, S. F., & Yaacob, Z. (2022). Stakeholder or legitimacy theory? The rationale behind a company's materiality analysis: Evidence from Indonesia. *Sustainability*, 14(13), Article 7763. <https://doi.org/10.3390/su14137763>
- Monteiro, A. P., Cepeda, C., Macedo, C., Cardoso, C., & Oliveira, C. (2025). Impact of sustainability strategies on ESG performance disclosure. *The Nexus of Corporate Sustainability Management, Accounting, and Auditing*, 141–163. <https://doi.org/10.4018/979-8-3693-5663-0.CH006>
- Nilsson, A., & Robinson, D. T. (2018). What does the SEC's conflict minerals rule mean for firms? *Innovation Policy and the Economy*, 18(1), 79–106. <https://doi.org/10.1086/694408>
- Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24(3), 403–441. <https://doi.org/10.1177/0170840603024003910>
- União Europeia. (2014, 22 de outubro). Diretiva 2014/95/UE do Parlamento Europeu e do Conselho. Jornal Oficial da União Europeia, L 330/1. <https://eur-lex.europa.eu/legal-content/PT/TXT/?uri=CELEX:32014L0095>

- União Europeia. (2022, 14 de dezembro). Diretiva (UE) 2022/2464 do Parlamento Europeu e do Conselho. Jornal Oficial da União Europeia, L 322/15. <https://eur-lex.europa.eu/legal-content/pt/ALL/?uri=CELEX:32022L2464>
- Van Oorschot, K. E., Aas Johansen, V., Lynes Thorup, N., & Aspen, D. M. (2024). Standardization cycles in sustainability reporting within the Global Reporting Initiative. *European Management Journal*, 42(4), 492–502. <https://doi.org/10.1016/J.EMJ.2024.04.001>

# ***The impact of sustainability engagement on ESG performance reporting: Evidence from listed companies in Latin America***

## ***O impacto do envolvimento em sustentabilidade no relato do desempenho ESG: Evidencia das empresas cotadas da América Latina***

**Catarina Cepeda.** *CICF, School of Management, IPCA, Barcelos, Portugal; CEOS.PP, ISCAP, Polytechnic of Porto, Matosinhos, Portugal; INSTITUTO POLITÉCNICO DA MAIA – IPMAIA; E-mail address: clmc@iscap.ipp.pt ORCID: <https://orcid.org/0000-0002-3911-0894>*

**Albertina Monteiro.** *CEOS.PP, ISCAP, Polytechnic of Porto, Matosinhos, Portugal. E-mail address: amonteiro@iscap.ipp.pt. ORCID: <https://orcid.org/0000-0002-2146-9807>*

**Ana Pinto Borges.** *ISAG - European Business School, Porto, Portugal & Research Center in Business Sciences and Tourism (CICET-FCVC), Porto, Portugal; E-mail address: anaborges@isag.pt*

**Elvira Vieira.** *ISAG - European Business School, Research Center in Business Science and Tourism (CICET-FCVC), Porto, Portugal & IPVC-Polytechnic Institute of Viana do Castelo and Applied Management Research Unit (UNIAG), and Instituto Politécnico de Bragança, Portugal. [elvira.vieira@isag.pt](mailto:elvira.vieira@isag.pt)*

### **Abstract**

**Purpose:** This study investigates the impact of sustainability engagement, namely the *Sustainable Development Goals* (SDGs), the *United Nations Principles for Responsible Investment* (UNPRI) and the *United Nations Global Compact* (UNGC) on the reporting of the Environmental, Social and Governance (ESG) performance of companies in Latin America. The study seeks to understand how these variables influence ESG performance reporting, considering the specific context of emerging economies, where institutional pressures and regulatory challenges differ significantly from developed countries.

**Methodology:** Quantitative in nature, the survey is based on a sample of 387 Latin American companies, whose data cover the period between 2017 and 2021. Using advanced statistical regression methods with panel data, the study assesses the relationship between companies' involvement in sustainability and their ESG reporting, controlling variables such as company size, financial indicators and corporate governance structures.

**Results:** The results reveal that engagement with the SDGs and adherence to the UNPRI are significantly associated with higher levels of ESG performance reporting, indicating that voluntary initiatives that involve greater strategic commitment and

integration into business practices can effectively improve business transparency. On the other hand, the signature of the *Global Compact* does not have a statistically significant impact on the dependent variable.

**Research Limitations:** Despite the robustness of the dataset and the diversity of companies analyzed, the study is limited to listed companies in Latin American countries and may not fully extract the reality of private or smaller companies. Future research could expand the analysis to other regional contexts and include private companies to assess whether the identified patterns hold.

**Originality:** This study contributes to the literature on ESG reporting by providing empirical evidence on the impact of corporate sustainability initiatives on companies in emerging economies, a context that is still little explored. The results highlight the importance of strategic sustainability initiatives to improve ESG performance reporting, offering practical implications for managers, investors and policymakers in countries.

**Keywords:** *SDG; UNPRI; Global Compact Signatory; ESG performance; Sustainability Report.*

**Acknowledgements:** This work was supported by FCT - Fundação para a Ciência e Tecnologia, I.P. by project reference CICET-FCVC UID/06354/2025 and DOI identifier <https://doi.org/10.54499/UID/06354/2025>. This work was supported by national funds through FCT - Fundação para a Ciência e Tecnologia, I.P. under the project UNIAG UID/04752/2025 (DOI 10.54499/UID/04752/2025). This study was conducted at the Research Center on Accounting and Taxation (CICF) and was funded by the Portuguese Foundation for Science and Technology (FCT) through national funds with the reference UID/04043/2025 and doi <https://doi.org/10.54499/UID/04043/2025>

## Resumo

**Objetivo:** Este estudo investiga o impacto do envolvimento em sustentabilidade, nomeadamente os *Sustainable Development Goals* (SDGs), os *United Nations Principles for Responsible Investment* (UNPRI) e o *United Nations Global Compact* (UNGC) no relato do desempenho Ambiental, Social e de Governação (ESG) de empresas da América Latina. O estudo procura compreender como estas variáveis influenciam o relato de desempenho ESG, considerando o contexto específico de economias emergentes, onde pressões institucionais e desafios regulatórios diferem significativamente dos países desenvolvidos.

**Metodologia:** De natureza quantitativa, a pesquisa tem por base uma amostra de 387 empresas latino-americanas, cujo dados abrangem o período entre 2017 e 2021. Utilizando métodos estatísticos avançados de regressão com dados em painel, o estudo avalia a relação entre o envolvimento das empresas em sustentabilidade e o seu relato ESG, controlando variáveis como dimensão da empresa, indicadores financeiros e estruturas de governação empresarial.

**Resultados:** Os resultados revelam que o envolvimento com os SDGs e a adesão aos UNPRI estão significativamente associados a níveis mais elevados de relato do desempenho ESG, indicando que iniciativas voluntárias que envolvem maior compromisso estratégico e integração nas práticas empresariais podem efetivamente

melhorar a transparência empresarial. Por outro lado, a assinatura do *Global Compact* não apresenta impacto estatisticamente significativo na variável dependente.

**Limitações da Investigação:** Apesar da robustez do conjunto de dados e da diversidade de empresas analisadas, o estudo é limitado a empresas cotadas dos países da América Latina, podendo não extrair completamente a realidade das empresas privadas ou de menor dimensão. Investigações futuras poderiam expandir a análise a outros contextos regionais e incluir empresas privadas para avaliar se os padrões identificados se mantêm.

**Originalidade:** Este estudo contribui para a literatura sobre relato de fatores ESG ao fornecer evidência empírica sobre o impacto de iniciativas empresariais de sustentabilidade em empresas de economias emergentes, um contexto ainda pouco explorado. Os resultados destacam a importância de iniciativas estratégicas de sustentabilidade para melhorar o relato de desempenho ESG, oferecendo implicações práticas para gestores, investidores e formuladores de políticas em países.

**Palavras-chaves:** *SDG; UNPRI; Global Compact Signatory; Desempenho ESG; Relatório de Sustentabilidade.*

**Agradecimentos:** Este trabalho foi apoiado pela FCT – Fundação para a Ciência e Tecnologia, I.P., no âmbito do projeto com a referência CICET-FCVC UID/06354/2025 e o identificador DOI <https://doi.org/10.54499/UID/06354/2025>. Este trabalho foi apoiado por fundos nacionais através da FCT – Fundação para a Ciência e Tecnologia, I.P., no âmbito do projeto UNIAG UID/04752/2025 (DOI 10.54499/UID/04752/2025). Este estudo foi realizado no Centro de Investigação em Contabilidade e Fiscalidade (CICF) e foi financiado pela Fundação para a Ciência e Tecnologia (FCT) através de fundos nacionais com a referência UID/04043/2025 e doi <https://doi.org/10.54499/UID/04043/2025>

## References/Referencias Bibliográficas

- Bose, S., & Khan, H. Z. (2022). Corporate SDG Reporting and Institutional Determinants: An International Study. *Journal of Cleaner Production*, 365, 132780. <https://doi.org/10.1016/j.jclepro.2021.132780>
- Cepêda, C., Monteiro, A. P., & Aibar-Guzmán, B. (2025a). Bridging the ESG Credibility Gap: The Role of Institutional Investors in Mitigating ESG Decoupling. *Business Strategy and the Environment*, 34, 7139–7160. <https://doi.org/10.1002/bse.4336>
- Cepêda, C., Monteiro, A. P., & Aibar-Guzmán, B. (2025b). Decoupling in Sustainability Reporting: A Systematic Literature Review. *Corporate Social Responsibility and Environmental Management*, 32, 2988–3007. <https://doi.org/10.1002/csr.3114>
- Cepeda, C., Monteiro, A. P., Silva, A., & Bandeira, A. M. (2026). Alignment Between SDGs and ESG Performance Reporting on European Companies. In *Empowering Development With Strategic Accounting: Organizational, Economic, and Sustainable Impacts* (pp. 1-32). IGI Global Scientific Publishing.
- Firmino, A. L., & Peixoto, F. M. (2025). The impact of ESG performance on greenhouse gas emission performance in Latin America. *Revista Contabilidade & Finanças*, 36(97), e2089.
- Monteiro, A. P., Cepêda, C., Borges, A. P., & Vieira, E. (2024). Does CSR committee presence, stakeholder engagement, gender equality (SDG 5) and firm value

- influence ESG performance reporting? An EU pre and during Covid-19 analysis. *Measuring Business Excellence*
- Ortas, E., Álvarez, I., & Garayar, A. (2015). The environmental, social, governance, and financial performance effects on companies that adopt the United Nations Global Compact. *Sustainability*, 7(2), 1932-1956.
- Soni, M., & Dayal, V. (2023). Assessing ESG performance through SDG disclosure: A study of European listed firms. *Proceedings of the International Conference on Business Excellence*, 17(1), 749–762. <https://sciendo.com/article/10.2478/picbe-2023-0072>
- Sun, Y., & Chen, Z. (2025). Do Institutional Investors' ESG Commitments Affect ESG Rating Disagreement? An Empirical Analysis of UNPRI Signatory Commitment. *Sustainability*, 17(24), 11083.
- Velte, P., & Stawinoga, M. (2020). Do chief sustainability officers and CSR committees influence CSR-related outcomes? A structured literature review based on empirical-quantitative research findings. *Journal of Management Control*, 31(4), 333-377.

# ***Impact of corporate governance characteristics on Workforce performance: Evidence from the Healthcare Sector in European Companies***

## ***Impacto das características da governação empresarial no desempenho da força de Trabalho: Evidência do Setor da saúde em Empresas Europeias***

**Catarina Cepeda.** *CICF, School of Management, IPCA, Barcelos, Portugal; CEOS.PP, ISCAP, Polytechnic of Porto, Matosinhos, Portugal; INSTITUTO POLITÉCNICO DA MAIA – IPMAIA; E-mail address: clmc@iscap.ipp.pt ORCID: <https://orcid.org/0000-0002-3911-0894>*

**Albertina Monteiro.** *CEOS.PP, ISCAP, Polytechnic of Porto, Matosinhos, Portugal. E-mail address: amonteiro@iscap.ipp.pt ORCID: <https://orcid.org/0000-0002-2146-9807>*

**Ana Rita Cepeda.** *Nurce Professional at Hospital Terra Quente S.A., Mirandela, Portugal. anarcepeda@gmail.com*

### **Abstract**

**Purpose:** This study aims to investigate the relationship between corporate governance characteristics, namely gender and cultural diversity, as well as the experience and independence of the board of directors, and the workforce performance in healthcare companies in Europe, from 2017 to 2021. The work aims to understand how governance mechanisms influence the workforce performance in healthcare sector.

**Methodology:** Panel data from 227 observations of 71 European companies, from the LSEG Data & Analytics database, were used. The statistical model applied was random-effects regression, suitable for analyzing variations between and within companies, controlling unobserved heterogeneity between groups. Governance variables included gender diversity, cultural diversity, board experience, and independence.

**Results:** The results indicate that gender diversity and board experience are positively associated with the workforce performance. Variables such as cultural diversity and the presence of independent members did not show significant effects. Additionally, financial performance and company size proved to be positive and relevant to the workforce.

**Limitations:** The study assumes random effects and does not include qualitative variables on organizational culture. These may influence results and should be explored in future studies.

**Originality:** The study contributes to the literature by integrating empirical evidence on corporate governance and workforce in the European healthcare sector, highlighting the relevance of gender diversity and technical experience on boards of directors as determinants of organizational capability.

**Keywords:** *Workforce; Board gender diversity; Board cultural diversity; Board experience; ESG reporting.*

**Acknowledgements:** This study was conducted at the Research Center on Accounting and Taxation (CICF) and was funded by the Portuguese Foundation for Science and Technology (FCT) through national funds with the reference UID/04043/2025 and doi <https://doi.org/10.54499/UID/04043/2025>

## Resumo

**Objetivo:** Este estudo tem como objetivo investigar a relação entre características de governação empresarial, nomeadamente diversidade de género e cultural assim como a experiência do conselho de administração no desempenho da força de trabalho em empresas do sector da saúde na Europa, no período de 2017 a 2021. O trabalho visa compreender como mecanismos de governação influenciam a alocação de recursos humanos, considerando o contexto regulatório e estratégico do sector.

**Metodologia:** Foram utilizados dados de painel de 227 observações de 71 empresas europeias, provenientes da base *LSEG Data & Analytics*. O modelo estatístico aplicado foi a regressão de efeitos aleatórios, adequada para analisar variações entre e dentro das empresas, controlando a heterogeneidade não observada entre os grupos. As variáveis de governação incluíram diversidade de género, diversidade cultural, experiência do conselho de administração e a sua independência.

**Resultados:** Os resultados indicam que a diversidade de género e experiência do conselho de administração apresentam associação positiva com o desempenho da força de trabalho. Variáveis como diversidade cultural e presença de membros independentes não apresentaram efeitos significativos. Adicionalmente, desempenho financeiro e tamanho da empresa mostraram-se positivos e relevantes para a força laboral.

**Limitações:** O estudo assume efeitos aleatórios e não inclui variáveis qualitativas sobre cultura organizacional ou práticas internas de gestão de capital humano. Estes fatores podem influenciar resultados e devem ser explorados em estudos futuros.

**Originalidade:** O estudo contribui para a literatura ao integrar evidência empírica sobre governação empresarial e força de trabalho no setor *healthcare* europeu, destacando a relevância da diversidade de género e da experiência técnica em conselhos de administração como determinantes de capacidade organizacional

**Palavras-chave:** Força de trabalho; Diversidade de género no Conselho de Administração; Diversidade cultural no Conselho de Administração; Experiência do Conselho de Administração; Relatórios ESG.

**Agradecimentos:** Este estudo foi realizado no Centro de Investigação em Contabilidade e Fiscalidade (CICF) e foi financiado pela Fundação para a Ciência e a Tecnologia (FCT) através de fundos nacionais, com a referência UID/04043/2025 e o DOI <https://doi.org/10.54499/UID/04043/2025>

## References/Referências Bibliográficas

- Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, *94*(2), 291–309.
- Charitou, A., Georgiou, I., & Soteriou, A. C. (2016). Corporate governance, board composition, director expertise, and value: The case of quality excellence. *Multinational Finance Journal*, *20*(3), 181-236.
- Cepêda, C., Monteiro, A. P., & Aibar-Guzmán, B. (2025a). Bridging the ESG Credibility Gap: The Role of Institutional Investors in Mitigating ESG Decoupling. *Business Strategy and the Environment*, *34*, 7139–7160. <https://doi.org/10.1002/bse.4336>
- Cepêda, C., Monteiro, A. P., & Aibar-Guzmán, B. (2025b). Decoupling in Sustainability Reporting: A Systematic Literature Review. *Corporate Social Responsibility and Environmental Management*, *32*, 2988–3007. <https://doi.org/10.1002/csr.3114>
- Cepêda, C., Silva, A., & Carreira, F. (2025). Exploring the Impact of Cultural and Gender Diversity on ESG Performance Reporting of EU Healthcare Corporations. In *The Nexus of Corporate Sustainability Management, Accounting, and Auditing* (pp. 165-186). IGI Global Scientific Publishing.
- Cornejo-Abarca, P., Ugarte, S. M., & Martín-Caballero, A. (2025). Raising their voices against patriarchy: The dynamic use of women’s leadership styles for progressing gender equality in unions. *Gender, Work & Organization*, *32*(4), 1457–1469. <https://doi.org/10.1111/gwao.13236>
- Danso, F. K., Adusei, M., Sarpong-Danquah, B., & Prempeh, K. B. (2024). Board expertise diversity and firm performance in sub-Saharan Africa: do firm age and size matter?. *Future Business Journal*, *10*(1), 98.
- García-Sánchez, I. M., Martínez-Ferrero, J., & García-Meca, E. (2018). Board of directors and CSR in banking: The moderating role of bank regulation and investor protection strength. *Australian Accounting Review*, *28*(3), 428-445. <https://doi.org/10.1111/auar.12199>
- García-Sánchez, I. M., Ortiz-Martínez, E., Marín-Hernández, S., & Aibar-Guzmán, B. (2023). How does the European Green Deal affect the disclosure of environmental information?. *Corporate Social Responsibility and Environmental Management*, *30*(6), 2766-2782. <https://doi.org/10.1002/csr.2514>
- García-Sánchez, I.-M., Minutiello, V., & Tettamanzi, P. (2022). Gender disclosure: The impact of peer behaviour and the firm's equality policies. *Corporate Social Responsibility and Environmental Management*, *29*(2), 385–405. <https://doi.org/10.1002/csr.2207>
- García-Sánchez, I.-M., Suárez-Fernández, O., & Martínez-Ferrero, J. (2019). Female directors and impression management in sustainability reporting. *International Business Review*, *28*(2), 359–374. <https://doi.org/10.1016/j.ibusrev.2018.10.007>
- Monteiro, A. P., Cepêda, C., & da Silva, A. F. (2024). Does the workforce and sustainability reports strengthen the relationship between gender diversity and sustainability performance reporting?. *Administrative sciences*, *14*(6), 105. <https://doi.org/10.3390/admsci14060105>
- Mullins, F. (2018). HR on board! The implications of human resource expertise on boards of directors for diversity management. *Human resource management*, *57*(5), 1127-1143.
- Post, C., & Byron, K. (2015). Women on boards and firm financial performance: A meta-analysis. *Academy of management Journal*, *58*(5), 1546-1571. <https://doi.org/10.5465/amj.2013.0319>

- Silva, A. F., Carreira, F., & Cepêda, C. (2025). Does Corporate Governance Impact ESG Performance Reporting in Healthcare?. In *Environmental, Social, Governance and Digital Transformation in Organizations* (pp. 51-72). Cham: Springer Nature Switzerland.
- Thams, Y., Bendell, B. L., & Terjesen, S. (2018). Explaining women's presence on corporate boards: The institutionalization of progressive gender-related policies. *Journal of Business Research*, 86, 130-140.  
<https://doi.org/10.1016/j.jbusres.2018.01.043>

# ***Water Footprint of Artificial Intelligence: Exploratory Analysis of Water Consumption in Data Centers in Europe***

## ***Pegada Hídrica da Inteligência Artificial: Análise Exploratória do Consumo de Água em Data Centers na Europa***

**Susana Patrão.** *University of Aveiro, Portugal.* [susana.patraso@ua.pt](mailto:susana.patraso@ua.pt)

### **Abstract**

**Purpose:** Analyze the water footprint of AI technological infrastructures in Europe, through the analysis of water use reported in the service sector, in the countries hosting the data centers of large technology companies. The aim is to identify temporal patterns of water use, reporting gaps, and potential impacts associated with the presence and expansion of these infrastructures.

**Methodology:** Collection and analysis of statistical data available from Eurostat relating to water abstraction and use, by public supply and by self/other supply, in the service sector.

**Results:** The results reveal a high degree of heterogeneity in statistical reporting on water use, with several countries failing to provide essential data on this matter, namely Ireland, Finland, France, Italy, and Switzerland. The discontinuity in data reporting by Germany, Spain, Sweden, and Belgium is noteworthy, coinciding with the dates of installation or expansion of data centers. Belgium stands out with evidence of self/other supply after the commissioning of AI technology infrastructures. In the remaining countries, it is not possible to measure consistent changes due to temporal inconsistencies and lack of data.

**Research limitations:** The absence or discontinuity of data in various countries prevents the analysis from being comparable and more robust, as does the fact that some data is estimated or imputed. The impossibility of isolating data center consumption within the service sector also prevents the study from considering indirect water consumption related to electricity and hardware production.

**Originality:** This study contributes to fostering the debate on the water footprint of AI, an area that has been little explored in literature, as the focus is still on the carbon footprint. The combination of statistical data and literature reveals gaps in the water transparency of the technology sector, proposing recommendations for mandatory reporting policies and contributing to reflection on the sustainability of AI.

**Keywords:** *Water Footprint; Artificial Intelligence; Data Centers; Water Resources; European Union.*

## Resumo

**Objetivo:** Analisar a pegada hídrica das infra-estruturas tecnológicas de IA na Europa, através da análise da utilização de água reportada no sector dos serviços, nos países que acolhem os *data centers* das grandes empresas tecnológicas. Pretende-se identificar padrões temporais do uso de água, lacunas de reporte e potenciais impactos associados à presença e expansão destas infra-estruturas.

**Metodologia:** Recolha e análise de dados estatísticos disponíveis no Eurostat relativos à captação e utilização de água, por abastecimento público e por abastecimento próprio/terceiros do sector dos serviços.

**Resultados:** Os resultados revelam uma elevada heterogeneidade no reporte estatístico sobre o uso de água, sendo que vários países não disponibilizam dados essenciais sobre esta matéria, nomeadamente a Irlanda, Finlândia, França, Itália e Suíça. Releva-se a descontinuidade do reporte dos dados pela Alemanha, Espanha, Suécia e Bélgica, coincidindo com as datas de instalação ou expansão de *data centers*. A Bélgica destaca-se com evidências de abastecimento próprio/terceiros após a entrada em funcionamento de infra-estruturas tecnológicas de IA. Nos restantes países não é possível aferir alterações consistentes, dado a inconsistências temporais e falta de dados.

**Limitações:** A ausência ou descontinuidade de dados em vários países, impedem que a análise seja comparável e mais robusta, bem como o facto de alguns dados serem estimados ou imputados. A impossibilidade de isolar o consumo dos *data centers* dentro do sector dos serviços. O estudo não teve em consideração o consumo indireto de água, relativo à produção de eletricidade e hardware.

**Originalidade:** Este estudo contribui para fomentar o debate sobre a pegada hídrica da IA, pouco explorada na literatura, pois o foco ainda se encontra na pegada carbónica. A combinação de dados estatísticos e a literatura revelam lacunas na transparência hídrica do sector tecnológico, propondo recomendações para políticas de reporte obrigatório e contribuir para a reflexão da sustentabilidade da IA.

**Palavras-Chave:** *Pegada Hídrica; Inteligência Artificial; Data centers; Recursos Hídricos; União Europeia.*

## References/Referências Bibliográficas

- Aldaya, M.M., Chapagain, A.K., Hoekstra, A.Y., & Mekonnen, M.M. (2011). *The Water Footprint Assessment Manual: Setting the Global Standard* (1st ed.). *Routledge*. <https://doi.org/10.4324/9781849775526>
- Amazon Web Services. (2026). *AWS regions and availability zones: User guide*. *Amazon Web Services*. <https://docs.aws.amazon.com/>
- Amudha, T. (2021). *Artificial Intelligence: A Complete Insight*. In *Artificial Intelligence Theory, Models, and Applications*. *Auerbach Publications*. <https://doi.org/10.1201/9781003175865>

- Bansode, S. S., Hiremath, R., & Hiremath, G. R. (2024). Promoting sustainability: Mitigating the water footprint in AI-embedded data centres. In *Quality of Life and Climate Change: Impacts, Sustainable Adaptation, and Social-Ecological Resilience*. IGI Global Scientific Publishing. <https://doi.org/10.4018/978-1-6684-9863-7.ch010>
- Bracarense, N., Bawack, R. E., Wamba, S. F., & Carillo, K. D. A. (2022). Artificial Intelligence and Sustainability: A Bibliometric Analysis and Future Research Directions. *Pacific Asia Journal of the Association for Information Systems*, 14(2), 136-159. <https://doi.org/10.17705/1pais.14209>
- Carmeno, N. L., Domingos, T. & O'Neill, D. W. (2026). *The impacts of artificial intelligence on environmental sustainability and human well-being*. <https://doi.org/10.48550/arXiv.2602.24091>
- Chávez, M. & Caicedo, C. (2025). Agua e Inteligencia Artificial: El Lado Oscuro del Progreso Tecnológico. *Estudios Y Perspectivas Revista Científica Y Académica*, 5(2), 47–65. <https://doi.org/10.61384/r.c.a.v5i2.1096>
- EUROSTAT (2026a). Annual freshwater abstraction by source and sector. [https://doi.org/10.2908/ENV\\_WAT\\_ABS](https://doi.org/10.2908/ENV_WAT_ABS)
- EUROSTAT (2026b). Water exploitation index, plus (WEI+). [https://doi.org/10.2908/SDG\\_06\\_60](https://doi.org/10.2908/SDG_06_60)
- EUROSTAT (2026c). Water use by supply category and economical sector. [https://doi.org/10.2908/ENV\\_WAT\\_CAT](https://doi.org/10.2908/ENV_WAT_CAT)
- Goff, T. (2023). Recommandations pour une action publique en faveur d'une IA générative respectueuse de l'environnement. <https://hal.science/hal-04371031v2>
- Google. (n.d.). Data center locations. <https://datacenters.google/locations/>
- Google (2023). 2023 Environmental Report. <https://sustainability.google/reports/google-2023-environmental-report/>
- Google (2025). 2025 Environmental Report. <https://sustainability.google/reports/google-2025-environmental-report/>
- Herrera, M., Xie, X., Menapace, A., Zanfei, A. & Brentan, B. (2025). Sustainable AI infrastructure: A scenario-based forecast of water footprint under uncertainty. *Journal of Cleaner Production*, 526, 146528. <https://doi.org/10.1016/j.jclepro.2025.146528>
- Karakaş, Ü. & Özdemir, V. (2024). Artificial Intelligence and Environmental Impact: Moving Beyond Humanizing Vocabulary and Anthropocentrism. *OMICS*, 29(1), 2-4. <https://doi.org/10.1089/omi.2024.0197>
- Krishna, R. (2026). Environmental Effects of Artificial Intelligence on the Planet Earth: Mitigation Pathways for a Greener Future. *Science Discovery Environment*, 1, 73-84. <https://doi.org/10.11648/j.sdenv.20260101.17>
- Li, P., Yang, J., Islam, M. & Ren, S. (2025). Making AI Less "Thirsty": Uncovering and Addressing the Secret Water Footprint of AI Models. *ACM*, 68 (7), 54-61. <https://doi.org/10.1145/3724499>
- Microsoft. (n.d.). Azure global infrastructure – Regions and datacenters explorer. <https://datacenters.microsoft.com/globe/explore?info=region&view=table>
- Microsoft (2025). Environmental Sustainability Report 2025. <https://www.microsoft.com/en-us/corporate-responsibility/sustainability/report/>
- Mytton, D. (2021). Data centre water consumption. *npj Clean Water*, 4, 11. <https://doi.org/10.1038/s41545-021-00101-w>
- OECD (2022), Measuring the environmental impacts of artificial intelligence compute and applications: The AI footprint, OECD Digital Economy Papers, No. 341, OECD Publishing, Paris, <https://doi.org/10.1787/7babf571-en>
- Official Journal of the European Union (2022). Directive (EU) 2022/2664 of the European Parliament and of the Council of 14 December 2022. Amending Regulation (EU) No 537/2014, Directive 2004/109/EC, Directive 2006/43/EC and Directive

- 2013/34/EU, as regards corporate sustainability reporting. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32022L2464>
- Official Journal of the European Union (2023). Commission Delegated Regulation (EU) 2023/137 of 10 October 2022. Amending Regulation (EC) No 1893/2006 of the European Parliament and of the Council establishing the statistical classification of economic activities NACE Revision 2. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32023R0137>
- Official Journal of the European Union (2024a). Commission Delegated Regulation (EU) 2024/1364 of 14 March 2024. On the first phase of the establishment of a common Union rating scheme for data centres. [https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L\\_202401364](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401364)
- Official Journal of the European Union (2024b). Regulation (EU) 2024/1689 of the European Parliament and of the Council. Laying down harmonized rules on artificial intelligence. [https://eur-lex.europa.eu/legal-content/ENG/TXT/PDF/?uri=OJ:L\\_202401689](https://eur-lex.europa.eu/legal-content/ENG/TXT/PDF/?uri=OJ:L_202401689)
- Silva, P., Eccard, W. & Cavalcante, J. (2025). Inteligência Artificial e Sustentabilidade: Desafios Regulatórios e Impacto Ambiental. *Revista da Faculdade de Direito da Universidade Federal de Minas Gerais*, 86, 225-248. <https://doi.org/10.12818/P.0304-2340.2025v86p225>
- Schwartz, R. Dodge, J., Smith, N. & Etzioni, O. (2020). Green AI. *ACM*, 63 (12), 54-63. <https://doi.org/10.1145/3381831>
- Toderas, M. (2025). Artificial Intelligence for Sustainability: A Systematic Review and Critical Analysis of AI Applications, Challenges, and Future Directions. *Sustainability*, 17, 8049. <https://doi.org/10.3390/su17178049>
- Uffelen, N., Lauwaert, L., Coeckelbergh, M. & Kudina, O. (2024). *Towards an Environmental Ethics of Artificial Intelligence*. <https://doi.org/10.48550/arXiv.2501.10390>
- Wynsberghe, A. (2021). Sustainable AI: AI for sustainability and the sustainability of AI. *AI and Ethics*, 1, 213-218. <https://doi.org/10.1007/s43681-021-00043-6>

## Session II – “Beyond Taxation: Corporate Performance, Reputation and Strategy”

Chair: Ana Pinto Borges e Elvira Vieira

*ISAG - European Business School, Porto, Portugal & Research Center in Business Sciences and Tourism (CICET-FCVC), Porto, Portugal | ISAG - European Business School, Research Center in Business Science and Tourism (CICET-FCVC), Porto, Portugal & IPVC-Polytechnic Institute of Viana do Castelo and Applied Management Research Unit (UNIAG), and Instituto Politécnico de Bragança, Portugal. elvira.vieira@isag.pt*

### ***Investment Funds in the European Union: Conceptual and Fiscal Framework***

### ***Fundos de Investimento na União Europeia: Enquadramento Conceptual e Fiscal***

**Diogo Miguel Barbosa dos Santos.** Porto Accounting and Business School, Polytechnic of Porto. [diogomiguelsantos019@gmail.com](mailto:diogomiguelsantos019@gmail.com)

**José Campos Amorim.** Porto Accounting and Business School, Polytechnic of Porto, CEOS.PP. [j.camposamorim@gmail.com](mailto:j.camposamorim@gmail.com)

#### **Abstract**

**Purpose:** This study analyzes the typology, legal framework and tax implications of investment funds in the European context, with a special focus on the distinction between *Undertakings for Collective Investment in Transferable Securities* (UCITS) and *Alternative Investment Funds* (AIF). It aims to understand the structural, regulatory and tax differences between these categories, as well as the challenges of fiscal neutrality and cross-border tax coordination that arise from the fragmentation of national tax systems within the European Union.

**Methodology:** The research is based on a legal-dogmatic methodology and literature review. Directives 2009/65/EC and 2011/61/EU are analysed, articulating them with relevant doctrinal contributions on *hedge funds*, *private equity*, real estate funds and *private credit*. The approach is qualitative and interpretative, centered on normative and conceptual systematization

**Results:** The analysis shows that the distinction between UCITS and AIF structures the European framework for collective investment undertakings, reflecting different levels of investor protection, liquidity and strategic flexibility. It is also evident that AIFs are more heterogeneous in nature and have greater exposure to risks associated with illiquidity, leverage and management costs, and are predominantly aimed at qualified

investors.

**Originality:** The study contributes to a systematized understanding of the different categories of funds in European law, articulating the legal, tax and accounting dimensions. Its originality lies in the integration of European normative analysis with OECD principles and with recent literature on international taxation, adopting a critical perspective on the tensions between prudential harmonisation, tax fragmentation and economic neutrality in the European Union.

**Keywords:** *Investment Funds; UCITS; Alternative Investment Funds; European Regulation; Private Equity; Hedge Funds.*

## Resumo

**Objetivo:** O presente estudo analisa a tipologia, o enquadramento jurídico e as implicações fiscais dos fundos de investimento no contexto europeu, com especial enfoque na distinção entre *Undertakings for Collective Investment in Transferable Securities* (UCITS) e *Alternative Investment Funds* (AIF). Pretende-se compreender as diferenças estruturais, regulatórias e fiscais entre estas categorias, bem como os desafios de neutralidade fiscal e coordenação tributária transfronteiriça que decorrem da fragmentação dos sistemas fiscais nacionais no espaço da União Europeia.

**Metodologia:** A investigação assenta numa metodologia jurídico-dogmática e de revisão de literatura. Procedeu-se à análise das Diretivas 2009/65/CE e 2011/61/UE, articulando-as com contributos doutrinários relevantes sobre *hedge funds*, *private equity*, fundos imobiliários e *private credit*. A abordagem é qualitativa e interpretativa, centrada na sistematização normativa e conceptual

**Resultados:** A análise demonstra que a distinção entre UCITS e AIF estrutura o regime europeu dos organismos de investimento coletivo, refletindo diferentes níveis de proteção do investidor, liquidez e flexibilidade estratégica. Evidencia-se ainda que os AIF assumem natureza mais heterogénea e maior exposição a riscos associados à iliquidez, alavancagem e custos de gestão, sendo predominantemente direcionados a investidores qualificados.

**Originalidade:** O estudo contribui para uma compreensão sistematizada das diferentes categorias de fundos no direito europeu, articulando dimensão jurídica, fiscal e contabilística. A sua originalidade reside na integração da análise normativa europeia com os princípios da OCDE e com literatura recente de fiscalidade internacional, adotando uma perspetiva crítica sobre as tensões entre harmonização prudencial, fragmentação fiscal e neutralidade económica na União Europeia

**Keywords:** *Fundos de investimento; OICVM; Fundos de investimento alternativos; Regulamentação europeia; Capital de risco; Fundos de cobertura.*

## References/Referências Bibliográficas

- Bergt, J. (2023). *Legal Analysis of the Complexities regarding Collective Investment Schemes like Alternative Investme \_ Article \_ Chambers and Partners.*
- Dourado, A. P., Müller, J. M., Rangel, L., & Spengel, C. (2024). *Discriminatory Taxation*

*of Investment Funds in the European Union: How the CJEU Case-law Keeps Ignoring Neutrality.*

<https://curia.europa.eu/juris/showPdf.jsf?jsessionid=B5879390614F633E3B6AA15DE CDD2BCA?text=&docid=>

EFAMA. (2024). *Asset Management in Europe, 17th Edition*.

Müller, J. M., Rangel, L., & Spengel, C. (2025). *Tax Neutrality Treatment of Investment Funds in the European Union*. [www.ibfd.org/Shop](http://www.ibfd.org/Shop)

OCDE. (1999). *TAXATION OF CROSS-BORDER PORTFOLIO INVESTMENT Mutual Funds and Possible Tax Distortions*. <http://www.copyright.com/>.

Wegman, H. E. (2016). *Investor protection: Towards additional EU regulation of investment funds?* <http://hdl.handle.net/1887/38038>

Zetsche, Dirk. (2018). *Investment Fund Taxation EUCOTAX Series on European Taxation*.

<https://ssrn.com/abstract=3239464>Electroniccopyavailableat:<https://ssrn.com/abstract=3239464>Electroniccopyavailableat:<https://ssrn.com/abstract=3239464>

# ***Tax Incentives Applied to Urban Rehabilitation***

## ***Incentivos Fiscais em Matéria de Reabilitação Urbana***

***Iolanda Gabriela Lopes Reis da Silva.*** Porto Accounting and Business School, Polytechnic of Porto, Portugal. 2250135@iscap.ipp.pt

***José Campos Amorim.*** Porto Accounting and Business School, Polytechnic of Porto, CEOS.PP, Portugal. j.camposamorim@gmail.com

### **Abstract**

**Purpose:** The objective of this study is to conduct a comprehensive examination of the tax incentives currently applicable to urban rehabilitation and the challenges associated with their interpretation and application, particularly the litigation arising between taxpayers and the Tax Authority, through proceedings before the Administrative Arbitration Centre (CAAD). The analysis also explores how the position of the Tax Arbitration has evolved regarding this matter.

**Methodology:** To achieve these objectives, the study was based on an analysis of the Tax Arbitration proceedings submitted to CAAD and decided over the past four years, all of which concern the application of tax benefits within the context of urban rehabilitation. The analysis focused on the main tax at issue in the litigation and on the respective decision issued by the Arbitral Tribunals.

**Results:** The main source of litigation in Tax Arbitration concerns the application of the reduced VAT rate (6%) to urban rehabilitation works, under item 2.23 of List I annexed to the VAT Code. The origin of the dispute lies in the Tax Authority's requirement that Urban Rehabilitation Operations (ORU) be certified by the competent Municipality. Until March 2025, the case law of the Arbitral Tribunals displayed significant divergences; however, following the Uniformisation Judgment issued by the Supreme Administrative Court, subsequent decisions have aligned with the position of the Tax Authority.

**Research limitations:** This study does not address the way in which the Tax Authority itself has evolved in the interpretation and application of the tax incentives under item 2.233 of List I annexed to VAT Code.

**Originality:** The originality of this study lies in the integrated and systematic analysis of arbitral litigation concerning item 2.23 of List I annexed to the VAT Code, as well as in the longitudinal assessment of the impact of the 2025 Uniformisation Judgment issued by the Supreme Administrative Court (STA). The study contributes to the existing body of knowledge by clarifying the legal criteria applicable to urban rehabilitation, identifying interpretative divergences, and producing empirical evidence on the evolution of arbitral law.

**Keywords:** *Urban Rehabilitation; Tax Incentives; ORU; Tax Arbitration; Item 2.23 VAT.*

## Resumo

**Objetivo:** O objetivo deste estudo é analisar os incentivos fiscais que existem atualmente em matéria de reabilitação urbana e as problemáticas associadas à sua interpretação e aplicação, com incidência nas questões de litigância entre os contribuintes e a Autoridade Tributária e Aduaneira (AT), com recurso ao Centro de Arbitragem Administrativa (CAAD). Esta análise explora ainda a evolução da posição da Arbitragem Tributária sobre esta temática.

**Metodologia:** Para atingir estes objetivos, o estudo foi baseado na análise dos processos de Arbitragem Tributária submetidos ao CAAD, decididos nos últimos 4 anos, cujo tema está associado à aplicação dos benefícios fiscais no âmbito da reabilitação urbana. A análise focou-se no principal imposto objeto de litigância e nas decisões dos Tribunais Arbitrais.

**Resultados:** A principal causa de litigância na Arbitragem Tributária diz respeito à aplicação da taxa reduzida de IVA (6%) às empreitadas de reabilitação urbana, ao abrigo da verba 2.23 da Lista I anexa ao CIVA. A origem do conflito reside na exigência por parte da AT de certificação de Operação de Reabilitação Urbana (ORU), por parte do Município competente. Até março de 2025, são observadas divergências da jurisprudência dos Tribunais Arbitrais, no entanto, após o Acórdão de Uniformização do Supremo Tribunal Administrativo (STA), as suas decisões são convergentes com a AT.

**Limitações:** Este estudo não aborda a forma como a própria AT evoluiu na interpretação e aplicação dos incentivos fiscais ao abrigo da verba 2.23 da Lista I anexa ao CIVA.

**Originalidade:** A originalidade deste estudo reside na análise integrada e sistemática da litigância arbitral relativa à verba 2.23 da Lista I anexa ao CIVA, bem como na avaliação longitudinal do impacto do Acórdão de Uniformização do STA de 2025. O estudo contribui para o conhecimento ao clarificar os critérios jurídicos aplicáveis à reabilitação urbana, identificar divergências interpretativas, produzir evidência empírica sobre a evolução da jurisprudência arbitral.

**Palavras-Chave:** Reabilitação Urbana; Incentivos Fiscais; ORU; Arbitragem Tributária; Verba 2.23 do CIVA.

## References/Referências Bibliográficas

- Autoridade Tributária e Aduaneira. (2023, 30 de outubro). *Ofício-circulado n.º 25003/2023: IVA – Verbas 2.18 e 2.23 da Lista I anexa ao Código do IVA*. Área de Gestão Tributária – IVA. <https://www.portaldasfinancas.gov.pt>
- Carvalho, M. J. N. (2025). *O IVA na Reabilitação Urbana: Algumas questões suscitadas pela redação da verba 2.23 da Lista I anexa ao Código do IVA* [Dissertação de Mestrado, Universidade Católica Portuguesa]. Universidade Católica Portuguesa. <https://repositorio.ucp.pt/bitstreams/359c5faa-b322-43a0-9fa9-98346ca8a4fd/download>
- Dower – Sociedade de Advogados. (2025). *IVA na Reabilitação Urbana: Nova decisão do Supremo Tribunal Administrativo*. [https://www.dower.pt/xms/files/IVA\\_na\\_Reabilitacao\\_Urbana\\_PT.pdf](https://www.dower.pt/xms/files/IVA_na_Reabilitacao_Urbana_PT.pdf)
- PMCG – Sociedade de Advogados. (2025, abril 7). *A aplicação da taxa reduzida de IVA às empreitadas de reabilitação urbana: Revisão sistemática e*

jurisprudencial à luz do Acórdão do STA, Processo n.º 012/24.9BALSb, de 26 de março de 2025. <https://www.pmcg.pt/a-aplicacao-da-taxa-reduzida-de-iva-as-empregadas-de-reabilitacao-urbana/>

Reis, J. M., & Soares, S. (2025). Ainda o IVA na Reabilitação Urbana: Navegando as subtis alterações legislativas e interpretativas da Verba 2.23 da Lista I do CIVA. *Revista Electrónica de Fiscalidade da AFP*, Ano VI. <https://mail.afp.pt/revista/edicoes/813-revista-electronica-de-fiscalidade-da-afp-ano-vi-no-1-2025?start=3>

Supremo Tribunal Administrativo. (2025, 26 de março). *Acórdão n.º 0203/2025 (Processo n.º 0203/23.0BALSb)*. Diário da República. <https://diariodarepublica.pt/dr/detalhe/acordao/0203-2025-929388975>

## **Processos CAAD (por ordem cronológica de data de decisão)**

Centro de Arbitragem Administrativa (CAAD). (2022, 23 de junho).

*Decisão arbitral no Processo n.º 849/2021-T* – IVA; princípio do inquisitório; dedução de IVA; aplicação da taxa reduzida em operações de reabilitação urbana. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>

Centro de Arbitragem Administrativa (CAAD). (2022, 22 de julho).

*Decisão arbitral no Processo n.º 137/2022-T* – IVA; aplicação da verba 2.23 da Lista I anexa ao Código do IVA. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>

Centro de Arbitragem Administrativa (CAAD). (2023, 30 de janeiro).

*Decisão arbitral no Processo n.º 404/2022-T* – IVA; taxa reduzida; reabilitação de prédios urbanos; operação de reabilitação urbana. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>

Centro de Arbitragem Administrativa (CAAD). (2023, 1 de março).

*Decisão arbitral no Processo n.º 295/2022-T* – IVA; verba 2.23 da Lista I anexa ao CIVA; conceito de operação de reabilitação urbana para efeitos da aplicação da taxa reduzida. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>

Centro de Arbitragem Administrativa (CAAD). (2023, 8 de maio).

*Decisão arbitral no Processo n.º 603/2022-T* – IVA; taxa reduzida; empreitada de reabilitação urbana; interpretação da verba 2.23 da Lista I anexa ao CIVA. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>

Centro de Arbitragem Administrativa (CAAD). (2023, 31 de julho).

*Decisão arbitral no Processo n.º 3/2023-T* – Revisão do ato tributário; reabilitação urbana; aplicação da taxa reduzida de IVA. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>

Centro de Arbitragem Administrativa (CAAD). (2023, 14 de agosto).

*Decisão arbitral no Processo n.º 93/2023-T* – IVA; taxa reduzida; verba 2.23 da Lista I anexa ao Código do IVA; conceito de empreitada de reabilitação urbana; necessidade de Operação de Reabilitação Urbana (ORU). Lisboa: CAAD. Disponível em <https://www.caad.org.pt>

Centro de Arbitragem Administrativa (CAAD). (2023, 16 de outubro).

*Decisão arbitral no Processo n.º 2/2023-T* – IVA; empreitada de reabilitação urbana; aplicação da verba 2.23 da Lista I anexa ao Código do IVA; delimitação de Área de Reabilitação Urbana (ARU); desnecessidade de aprovação prévia de Operação de Reabilitação Urbana (ORU) para aplicação da taxa reduzida. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>

Centro de Arbitragem Administrativa (CAAD). (2023, 10 de novembro).

*Decisão arbitral no Processo n.º 354/2023-T* – IVA; taxa reduzida; operação de reabilitação urbana; interpretação da verba 2.23 da Lista I anexa ao CIVA. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>

Centro de Arbitragem Administrativa (CAAD). (2023, 12 de dezembro).

*Decisão arbitral no Processo n.º 517/2023-T* – IVA; taxa reduzida; reabilitação de prédios urbanos; enquadramento das empreitadas de reabilitação urbana.

- Lisboa: CAAD. Disponível em <https://www.caad.org.pt> Centro de Arbitragem Administrativa (CAAD). (2024, 28 de maio).  
*Decisão arbitral no Processo n.º 803/2023-T – IVA; empreitadas de reabilitação urbana; interpretação da verba 2.23 da Lista I anexa ao Código do IVA.* Lisboa: CAAD. Disponível em <https://www.caad.org.pt>  
 Centro de Arbitragem Administrativa (CAAD). (2024, 27 de junho).  
*Decisão arbitral no Processo n.º 947/2023-T – IVA; reabilitação urbana; verba 2.23 da Lista I do Código do IVA; desnecessidade de prévia aprovação de operação de reabilitação urbana (ORU).* Lisboa: CAAD. Disponível em <https://www.caad.org.pt>  
 Centro de Arbitragem Administrativa (CAAD). (2024, 15 de julho).  
*Decisão arbitral no Processo n.º 932/2023-T – IVA; reabilitação urbana; aplicação da verba 2.23 da Lista I do Código do IVA; desnecessidade de prévia aprovação de ORU.* Lisboa: CAAD. Disponível em <https://www.caad.org.pt>  
 Centro de Arbitragem Administrativa (CAAD). (2024, 9 de agosto).  
*Decisão arbitral no Processo n.º 660/2023-T – IVA; conceito de reabilitação urbana; aplicação da taxa reduzida prevista na verba 2.23 da Lista I anexa ao CIVA.* Lisboa: CAAD. Disponível em <https://www.caad.org.pt>  
 Centro de Arbitragem Administrativa (CAAD). (2024, 18 de outubro).  
*Decisão arbitral no Processo n.º 181/2024-T – IVA; verba 2.23 da Lista I anexa ao Código do IVA; requisitos da aplicação; inversão do sujeito passivo; questão de inconstitucionalidade normativa.* Lisboa: CAAD. Disponível em <https://www.caad.org.pt>  
 Centro de Arbitragem Administrativa (CAAD). (2024, 1 de novembro).  
*Decisão arbitral no Processo n.º 255/2024-T – IVA; taxa reduzida; verba 2.23 da Lista I anexa ao Código do IVA; reabilitação urbana; desnecessidade de prévia aprovação de Operação de Reabilitação Urbana (ORU).* Lisboa: CAAD. Disponível em <https://www.caad.org.pt>  
 Centro de Arbitragem Administrativa (CAAD). (2024, 19 de novembro).  
*Decisão arbitral no Processo n.º 539/2024-T – IVA; redébito de serviços de reabilitação urbana; taxa reduzida; mandato sem representação; direito à dedução do imposto.* Lisboa: CAAD. Disponível em <https://www.caad.org.pt>  
 Centro de Arbitragem Administrativa (CAAD). (2024, 13 de dezembro).  
*Decisão arbitral no Processo n.º 469/2024-T – IVA; taxa reduzida; empreitada de reabilitação urbana; projeto urbanístico de reconhecido interesse nacional; pedido de revisão oficiosa (artigo 78.º da LGT).* Lisboa: CAAD. Disponível em <https://www.caad.org.pt>  
 Centro de Arbitragem Administrativa (CAAD). (2025, 15 de janeiro).  
*Decisão arbitral no Processo n.º 691/2024-T – IVA; empreitada de reabilitação urbana; aplicação da verba 2.23 da Lista I anexa ao Código do IVA; caso julgado material.* Lisboa: CAAD. Disponível em <https://www.caad.org.pt> «  
 Centro de Arbitragem Administrativa (CAAD). (2025, 5 de fevereiro).  
*Decisão arbitral no Processo n.º 825/2024-T – IVA; taxa reduzida; empreitada de reabilitação urbana; interpretação da verba 2.23 da Lista I anexa ao Código do IVA.* Lisboa: CAAD. Disponível em <https://www.caad.org.pt>  
 Centro de Arbitragem Administrativa (CAAD). (2025, 21 de março).  
*Decisão arbitral no Processo n.º 932/2024-T – IVA; reabilitação urbana; aplicação da verba 2.23 da Lista I anexa ao Código do IVA; enquadramento da operação de reabilitação urbana.* Lisboa: CAAD. Disponível em <https://www.caad.org.pt>  
 Centro de Arbitragem Administrativa (CAAD). (2025, 13 de abril).  
*Decisão arbitral no Processo n.º 1249/2024-T – IVA; taxa reduzida; verba 2.23 da Lista I anexa ao Código do IVA; empreitada de reabilitação urbana; relação entre ARU e ORU.* Lisboa: CAAD. Disponível em <https://www.caad.org.pt>  
 Centro de Arbitragem Administrativa (CAAD). (2025, 2 de maio).  
*Decisão arbitral no Processo n.º 1291/2024-T – IVA; empreitada de reabilitação*

- urbana; aplicação da taxa reduzida prevista na verba 2.23 da Lista I anexa ao Código do IVA. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>
- Centro de Arbitragem Administrativa (CAAD). (2025, 14 de maio).  
*Decisão arbitral no Processo n.º 16/2025-T* – IVA; verba 2.23 da Lista I anexa ao Código do IVA; exigência de Operação de Reabilitação Urbana (ORU) para aplicação da taxa reduzida de IVA em empreitadas de reabilitação urbana. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>
- Centro de Arbitragem Administrativa (CAAD). (2025, 22 de maio).  
*Decisão arbitral no Processo n.º 1057/2024-T* – IVA; conceito de operação de reabilitação urbana; aplicação da taxa reduzida prevista na verba 2.23 da Lista I anexa ao Código do IVA. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>
- Centro de Arbitragem Administrativa (CAAD). (2025, 12 de agosto).  
*Decisão arbitral no Processo n.º 1112/2024-T* – IVA; verba 2.23 da Lista I anexa ao Código do IVA; empreitada de reabilitação urbana realizada em Área de Reabilitação Urbana (ARU); inexistência de Operação de Reabilitação Urbana (ORU) aprovada; inaplicabilidade da taxa reduzida de IVA. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>
- Centro de Arbitragem Administrativa (CAAD). (2025, 14 de agosto).  
*Decisão arbitral no Processo n.º 125/2025-T* – IVA, IRC e retenção na fonte em IRS; aplicação da verba 2.23 da Lista I anexa ao Código do IVA; dedutibilidade de gastos e direito ao reembolso do IVA indevidamente liquidado. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>
- Centro de Arbitragem Administrativa (CAAD). (2025, 19 de agosto).  
*Decisão arbitral no Processo n.º 1311/2024-T* – IVA; taxa reduzida; verba 2.23 da Lista I anexa ao Código do IVA; empreitada de reabilitação urbana em ARU e necessidade de ORU. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>
- Centro de Arbitragem Administrativa (CAAD). (2025, 25 de setembro).  
*Decisão arbitral no Processo n.º 72/2025-T* – IVA; aplicação da taxa reduzida; interpretação das verbas 2.23 e 2.27 da Lista I anexa ao Código do IVA. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>
- Centro de Arbitragem Administrativa (CAAD). (2025, 9 de outubro).  
*Decisão arbitral no Processo n.º 1292/2024-T* – IVA; taxa reduzida; empreitada em Área de Reabilitação Urbana (ARU); inexistência de Operação de Reabilitação Urbana (ORU) previamente aprovada. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>
- Centro de Arbitragem Administrativa (CAAD). (2025, 17 de outubro).  
*Decisão arbitral no Processo n.º 150/2025-T* – IVA; operações de reabilitação urbana; refaturação de serviços; mandato sem representação; aplicação da taxa reduzida prevista na verba 2.23 da Lista I anexa ao Código do IVA. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>
- Centro de Arbitragem Administrativa (CAAD). (2025, 27 de outubro).  
*Decisão arbitral no Processo n.º 1319/2024-T* – IVA; empreitada de reabilitação urbana; aplicação das verbas 2.23 e 2.27 da Lista I anexa ao Código do IVA. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>
- Centro de Arbitragem Administrativa (CAAD). (2025, 27 de outubro).  
*Decisão arbitral no Processo n.º 211/2025-T* – IVA; taxa reduzida; verba 2.23 da Lista I anexa ao Código do IVA; empreitada de reabilitação urbana; relação entre Área de Reabilitação Urbana (ARU) e Operação de Reabilitação Urbana (ORU). Lisboa: CAAD. Disponível em <https://www.caad.org.pt>
- Centro de Arbitragem Administrativa (CAAD). (2025, 3 de novembro).  
*Decisão arbitral no Processo n.º 104/2025-T* – IVA; empreitada de reabilitação urbana; aplicação da verba 2.23 da Lista I anexa ao Código do IVA; exigência de prévia aprovação de Operação de Reabilitação Urbana (ORU) para aplicação da taxa reduzida de IVA. Lisboa: CAAD. Disponível em <https://www.caad.org.pt>

# ***Portuguese Tax System: a historical reflection on its contribution to ESG metrics***

## ***Sistema Fiscal Português: uma reflexão histórica sobre o seu contributo para as métricas ESG***

*Cristina Sá. CARME, Polytechnic University of Leiria, Portugal. cristina.sa@ipleiria.pt*

*José Luís Martins. School of Technology and Management, Polytechnic University of Leiria, Portugal. jose.martins@ipleiria.pt*

### **Abstract**

**Purpose:** Currently, taxation is an instrument of economic and social policy and is mostly not limited to its revenue-raising function (Nabais, 2018; Nabais & Tavares, 2020). The extrafiscal function becomes evident when taxation is used as a tool of economic and social intervention, encouraging desirable behaviours (for example, investment in renewable energy) or discouraging negative practices (such as the consumption of fossil fuels). This study aims to reflect on the historical contribution of the Portuguese tax system to ESG (Environmental, Social and Governance) metrics, analyzing how tax policy has been used to promote environmental, social and good governance objectives. It seeks to understand how Portuguese policymakers have mobilized tax instruments with extrafiscal purposes to influence economic and social behaviour, encouraging sustainable practices and reinforcing principles of equity, transparency and institutional accountability.

The present study aims to highlight how taxation can act as a complementary mechanism to ESG policies in promoting the alignment of economic objectives with environmental and social goals (Schaltegger, Hörisch & Freeman, 2012). In this context, tax rules can contribute not only to behavioural change but also to the establishment of governance policies and procedures that support ESG accountability and transparency (Gribnau, 2024).

**Methodology.** The research adopts a qualitative, exploratory and descriptive methodology based on documentary and normative analysis, with a historical-descriptive approach that allows the identification of continuities, ruptures and trends in the evolution of the Portuguese tax legal framework. The choice of a qualitative approach is justified by the nature of the object of study — a complex normative and political system — and by the absence of statistical series or databases that currently allow a rigorous quantification of the ESG effects of tax policies.

The methodology focuses on the analysis of tax legislation and national and European strategic documents related to sustainability and tax policy. The research strategy involves three main stages: identifying the relevant legal sources, systematizing tax measures with an impact on the ESG dimensions, and conducting an interpretative analysis of the evolution of these measures between 1989 and 2025. The legislation

analyzed covers the period between 1989 and 2025, and the legal laws selected include fiscal measures directly related to ESG dimensions. The legal sources considered are the Portuguese Constitution (Article 103), the General Tax Law, the Framework Law of the Tax System, the tax codes of the different taxes, the Tax Benefits Statute (EBF), and the State Budget Laws. In addition to legal sources, reports and financial statements from the Ministry of Finance and the Portuguese Tax and Customs Authority (AT) were also analyzed, as well as strategic documents from the Portuguese Government and European institutions, namely the National Energy and Climate Plan (PNEC) 2030 and the Roadmap for Carbon Neutrality 2050.

ESG policies correspond to the environmental, social, and governance dimensions. The indicators for each of these dimensions were identified in accordance with the GRI (2021). The fiscal measures analyzed were selected through the identification of their respective extrafiscal objective and their correspondence with the applicable ESG indicators.

**Results:** The results highlight the idea that tax policymakers in Portugal have used the tax system to pursue extrafiscal purposes and that, for decades, they have recognized and valued concerns related to environmental, social and governance (ESG) practices.

In the environmental dimension, the most significant tax changes in Portugal, known as the Green Tax Reform, occurred in 2014 in relation to renewable energy and electric vehicles. This option followed the trend observed in other European Union countries. Subsequently, further changes were introduced in environmental tax rules in the sectors of energy and emissions, transport, water, waste, spatial planning, forests and biodiversity. In addition, a tax regime on plastic bags and an incentive scheme for the scrappage of end-of-life vehicles were introduced.

In the social dimension, fiscal policy contributes to income redistribution and the promotion of social cohesion through mechanisms such as tax deductions related to education, health and housing expenses, as well as tax benefits granted to entities in the social sector and to philanthropic initiatives.

About the governance dimension, the Portuguese tax system incorporates a set of instruments aimed at ensuring greater transparency, accountability and integrity in the relationship between taxpayers, companies and public administration.

It can therefore be concluded that the historical analysis demonstrates that the Portuguese tax system has, over the past decades, incorporated instruments designed to guide environmental, economic and social behaviour, even before the consolidation of the ESG concept in the international debate.

**Research limitations:** The work developed in this study presents some limitations. First, it focuses on a qualitative and historical-normative analysis and does not incorporate an empirical analysis of the fiscal measures referenced. The mere existence of legal provisions and the analysis of their evolution do not allow their effectiveness to be assessed. The analysis depends on the interpretation of legal diplomas and institutional documents, which may not fully reflect the practical effects of the policies implemented. Second, the complexity and constant evolution of the Portuguese tax system may limit the scope of the analysis, as new fiscal measures continue to be introduced within the context of European sustainability and energy transition policies.

**Originality:** The originality of this study lies in the integrated and historical analysis of the relationship between the Portuguese tax system and ESG metrics. The study highlights how the Portuguese tax system has been used over the decades to promote environmental, social and governance objectives, offering a historical perspective that remains relatively underexplored in the literature, especially in Portugal. Most existing studies tend to analyze environmental taxation or social tax benefits from an isolated

perspective; this work proposes an interdisciplinary approach that combines tax law, public economics and sustainability. By highlighting the role of fiscal policy advocated in recent decades in Portugal in promoting sustainable and responsible practices, this work contributes both to the academic debate and to the formulation of public policies oriented towards sustainability. In this context, fiscal policies and the evolution of the relationship between the Tax Authority and taxpayers have progressively incorporated principles associated with ESG dimensions.

**Keywords:** *Portuguese Tax System; Environmental, Social and Governance (ESG); Sustainability; Extrafiscal Purposes.*

## Resumo

**Objetivo:** Atualmente a tributação é, em grande medida, um instrumento de política económica e social, não se limitando à sua função arrecadatória (Nabais, 2018; Nabais & Tavares, 2020). A função extrafiscal manifesta-se quando o imposto é utilizado como instrumento de intervenção económica e social, induzindo comportamentos desejáveis (por exemplo, o investimento em energias renováveis) ou desincentivando práticas negativas (consumo de combustíveis fósseis). O estudo tem como objetivo refletir sobre o contributo histórico do sistema fiscal português para as métricas de ESG (*Environmental, Social and Governance*), analisando de que forma a política fiscal tem sido utilizada para promover objetivos ambientais, sociais e de boa governação. Em particular, procura compreender como o decisor político português mobilizou instrumentos fiscais com finalidades extrafiscais para influenciar comportamentos económicos e sociais, incentivando práticas sustentáveis e reforçando princípios de equidade, transparência e responsabilidade institucional.

Com o presente trabalho pretende-se evidenciar como a tributação pode atuar como um mecanismo complementar das políticas de ESG, na promoção da articulação dos objetivos económicos com objetivos de natureza ambiental e social (Schaltegger, Hörisch & Freeman, 2012). Neste contexto, as normas fiscais podem contribuir não apenas para a mudança de comportamentos, mas também para a definição de políticas e procedimentos de governação que apoiam a *accountability* e a transparência em ESG (Gribnau, 2024).

**Metodologia:** A investigação adota uma metodologia de natureza qualitativa, exploratória e descritiva, assente na análise documental e normativa, com uma abordagem histórico-descritiva que permite identificar continuidades, ruturas e tendências na evolução do ordenamento jurídico-tributário português. A escolha de uma abordagem qualitativa justifica-se pela natureza do objeto de estudo - um sistema normativo e político de elevada complexidade - e pela ausência de séries estatísticas ou bases de dados que permitam, neste momento, quantificar de forma rigorosa os efeitos ESG das políticas fiscais.

A metodologia centra-se na análise de legislação fiscal e documentos estratégicos nacionais e europeus relacionados com a sustentabilidade e a política fiscal. A estratégia de investigação envolve três etapas principais: identificação das fontes legais relevantes, sistematização das medidas fiscais com impacto nas dimensões ESG e análise interpretativa da evolução dessas medidas entre 1989 e 2025. A legislação analisada corresponde ao período entre 1989-2025, tendo sido selecionados diplomas que abrangem medidas fiscais diretamente relacionadas com as dimensões ESG. Entre as fontes jurídicas consideradas incluem-se a Constituição da República Portuguesa

(artigo 103.º), a Lei Geral Tributária, a Lei de Bases do Sistema Fiscal, os códigos fiscais dos diferentes impostos, o Estatuto dos Benefícios Fiscais (EBF) e as Leis do Orçamento do Estado.

Para além das fontes legais, procedeu-se igualmente à análise de relatórios e contas do Ministério das Finanças e da Autoridade Tributária e Aduaneira (AT), bem como de documentos estratégicos do Governo português e das instituições europeias, designadamente o Plano Nacional Energia e Clima (PNEC) 2030 e o Roteiro para a Neutralidade Carbónica 2050.

As políticas ESG correspondem à dimensão ambiental, social e de governação. Os indicadores referentes a cada uma das dimensões foram identificados de acordo com o GRI (2021). As medidas fiscais analisadas foram selecionadas através da identificação do respetivo objetivo extrafiscal e da sua correspondência com os indicadores ESG aplicáveis.

**Resultados:** Os resultados obtidos evidenciam a ideia de que o decisor de política fiscal em Portugal tem mobilizado o sistema fiscal para alcançar finalidades extrafiscais e que, desde há décadas, reconhece e valoriza preocupações com as práticas ambientais, sociais e de boa governação (ESG). Na dimensão ambiental, as alterações fiscais mais relevantes em Portugal, denominadas de reforma da Fiscalidade Verde, ocorreram em relação às energias renováveis e aos veículos elétricos, em 2014. Esta opção acompanhou a tendência que se verificou noutros países da União Europeia. Posteriormente alterações nas normas fiscais ambientais nos sectores da energia e emissões, transportes, água, resíduos, ordenamento do território, florestas e biodiversidade, tendo ainda sido introduzido um regime de tributação dos sacos de plástico e um regime de incentivo ao abate de veículos em fim de vida. Na dimensão social, a política fiscal contribui para a redistribuição de rendimento e promoção da coesão social através de mecanismos como deduções fiscais relacionadas com despesas de educação, saúde e habitação, bem como benefícios fiscais atribuídos a entidades do setor social e iniciativas de mecenato. No que se refere à dimensão de governação, o sistema fiscal português incorpora um conjunto de instrumentos destinados a garantir maior transparência, responsabilidade e integridade no relacionamento entre contribuintes, empresas e a administração pública. Conclui-se que a análise histórica demonstra que o sistema fiscal português tem incorporado, ao longo das últimas décadas, instrumentos destinados a orientar comportamentos ambientais, económicos e sociais, mesmo antes da consolidação do conceito ESG no debate internacional.

**Limitações:** O trabalho desenvolvido neste estudo apresenta algumas limitações. Desde logo, o trabalho centra-se numa análise de natureza qualitativa e histórico-normativa, não incorporando uma análise empírica das medidas fiscais referenciadas. A simples existência da norma legal e análise da sua evolução não permite aferir a sua eficácia. A análise depende da interpretação de diplomas legais e de documentos institucionais, podendo esta análise não refletir integralmente os efeitos práticos das políticas implementadas. Em segundo lugar, é de referir que a complexidade e constante evolução do sistema fiscal português pode limitar a abrangência da análise, uma vez que novas medidas fiscais continuam a ser introduzidas no contexto das políticas europeias de sustentabilidade e transição energética.

**Originalidade:** A originalidade do estudo reside na análise integrada e histórica da relação entre o sistema fiscal português e as métricas ESG. O estudo evidencia como o sistema fiscal português tem sido utilizado ao longo das décadas para promover objetivos ambientais, sociais e de governação, oferecendo uma perspetiva histórica ainda pouco explorada na literatura, sobretudo em Portugal. A maioria dos estudos existentes tende a analisar os temas da fiscalidade ambiental ou benefícios fiscais sociais de forma isolada. Em contraste, este trabalho propõe uma perspetiva

interdisciplinar que articula direito fiscal, economia pública e sustentabilidade. Ao destacar o papel da política fiscal preconizada nas últimas décadas em Portugal na promoção de práticas sustentáveis e responsáveis, o estudo contribui para o debate académico e para a formulação de políticas públicas orientadas para a sustentabilidade. Neste sentido, evidencia-se que as políticas fiscais e a evolução da relação entre a Autoridade Tributária e os contribuintes têm vindo a incorporar progressivamente princípios associados às dimensões ESG.

**Palavras-Chave:** *Sistema Fiscal Português; ESG; Sustentabilidade; Finalidades Extrafiscais.*

### **References/Referências Bibliográficas**

- Nabais, J. C. (2018). *O Dever Fundamental de Pagar Impostos*. Coimbra: Almedina.
- Nabais, J. C., & Tavares, M. (2020). Fiscalidade e Sustentabilidade: O papel extrafiscal dos impostos. *Revista de Finanças Públicas e Direito Fiscal*, 13(2), 11-62.
- GRI (Global Reporting Initiative) (2021). *GRI Standards 2021: Consolidated Set*.
- Gribnau, H. (2024). Sustainable tax governance: A shared responsibility. *eJournal of Tax Research*, 22(3), 492–517.
- Schaltegger, S., Lüdeke-Freund, F. & Hansen, E. G. (2012). Business Cases for Sustainability and the Role of Business Model Innovation: Developing a Conceptual Framework. *Journal of Innovation and Sustainable Development*, 6(2), 95-119.

# ***Aggressive Tax Planning Schemes: the case of Amazon***

## ***Planeamento Fiscal Agressivo: o caso da Amazon***

**Beatriz Correia Moura.** *Porto Accounting and Business School, Polytechnic of Porto.*

*beatrizcorreiamoura2003@gmail.com*

**José Campos Amorim.** *Porto Accounting and Business School, Polytechnic of Porto,*

*CEOS.PP. j.camposamorim@gmail.com*

### **Abstract**

**Purpose:** This paper critically examines aggressive tax planning strategies, using the tax ruling granted to Amazon by the Grand Duchy of Luxembourg as case study. The research aims to analyse how European authorities apply transfer pricing methodologies and assess selective advantages within the framework of State aid rules.

**Methodology:** The study adopts a qualitative approach, based on the analysis of official sources, such as the decisions of the European Commission and the judgments of the General Court of the European Union. This analysis is supported by a structured interpretation of Organisation for Economic Co-operation transfer pricing guidelines, particularly regarding the arm's length principle, functional analysis, and the selection of the «tested party».

**Results:** The findings indicate that, although the European Commission identified a selective advantage based on the incorrect choice of the «tested party» (LuxOpCo instead of LuxSCS), the General Court of the European Union annulled the decision due to shortcomings in the burden of proof. The Court held that the European Commission had not demonstrated with sufficient certainty the existence of a selective advantage, having underestimated the functions performed by LuxSCS in holding intangible assets.

**Research limitations:** The study is limited by its reliance on publicly available data and by its focus on a particular case study, which restricts the generalisability of the findings.

**Originality:** The contribution of this paper lies in its analysis of the tension between economic substance and legal form in the context of multinational technology companies, highlighting the limits of the European Commission's intervention considering the methodological rigor required by European courts to establish unlawful State aid.

**Keywords:** *Aggressive tax planning; Tax ruling; Amazon; Luxembourg; State aid.*

### **Resumo**

**Objetivo:** O presente trabalho analisa criticamente as estratégias de planeamento fiscal agressivo, tendo como estudo de caso o *tax ruling* concedido à *Amazon* pelo Grão-Ducado do Luxemburgo. A investigação procura examinar, em particular, compreender a forma como as autoridades europeias aplicam metodologias de preços de transferência na avaliação de vantagens seletivas no âmbito dos auxílios de Estado.

**Metodologia:** A investigação assenta numa metodologia qualitativa, baseada na análise de fontes oficiais, como as decisões da Comissão Europeia e o acórdão do Tribunal Geral da União Europeia. Esta análise é complementada pela interpretação das diretrizes da Organização para a Cooperação e Desenvolvimento Económico em matéria de preços de transferência, com especial atenção para o Princípio da Plena Concorrência, na análise funcional e na seleção da «parte testada».

**Resultados:** A investigação revela que, embora a Comissão Europeia tenha identificado uma vantagem seletiva baseada na escolha errada da «parte testada» (*LuxOpCo* em vez de *LuxSCS*), o Tribunal Geral da União Europeia anulou a decisão por falhas no ónus da prova. O Tribunal considerou que a Comissão Europeia não demonstrou com certeza a existência de uma vantagem seletiva, subestimando as funções da *LuxSCS* na detenção de ativos intangíveis.

**Limitações:** O estudo é condicionado pelo acesso exclusivo a dados públicos e pelo foco num único estudo de caso, o que limita a generalização quantitativa dos resultados para outras estruturas empresariais ou jurisdições.

**Originalidade:** A motivação e originalidade do estudo residem na análise da tensão entre a substância económica e a forma jurídica no contexto das empresas tecnológicas, discutindo os limites da intervenção da Comissão Europeia perante o rigor metodológico exigido pelos tribunais europeus para caracterizar auxílios de Estado ilegais.

**Palavras-Chave:** *Planeamento fiscal agressivo; Tax ruling; Amazon; Luxemburgo; Auxílio de Estado.*

## References/Referências Bibliográficas

- Ado, A. B., Mustapha, U. A., Lateef, S. A., Rashid, N., Mustapha, A., & Sahee Ademola, L. (2021). The impact of corporate tax planning on the financial performance of listed companies in Nigeria. *International Journal of Economics, Management and Accounting*, 29(2), 274–297. <https://doi.org/https://doi.org/10.31436/ijema.v29i2.821>
- Beuselinck, C., & Pierk, J. (2022). On the dynamics between local and international tax planning in multinational corporations. *Review of Accounting Studies*, 29, 852–888. <https://doi.org/10.1007/s11142-022-09731-y>
- Caldas, Marta. (2015). *O conceito de planeamento fiscal agressivo : novos limites ao planeamento fiscal?* Almedina.
- Campos Amorim, J. (2010). *Planeamento e evasão fiscal - Jornadas de Contabilidade e Fiscalidade*. Vida Económica.
- Comissão Europeia. (2014). *State aid SA.38944 (2014/C) - Luxembourg - Alleged aid to Amazon by way of a tax ruling - Commission Decision C(2014) 7156 final*.
- Comissão Europeia. (2017). *Decisão (UE) 2018/859 da Comissão de 4 de outubro de 2017*.
- HM Revenue & Customs: Annual Report and Accounts 2011–12 (December 3, 2012). [www.parliament.uk/pac](http://www.parliament.uk/pac).

- Jedlička, V. (2017). International Tax Planning: Current State of Knowledge. *European Financial and Accounting Journal*, 12(4), 31–46. <https://doi.org/doi:10.18267/j.efaj.199>
- Lüdemann, N., Shiba, A., Thymianis, N., Heist, N., Ludwig, C., & Paulheim, H. (2020). *A Knowledge Graph for Assessing Aggressive Tax Planning Strategies*. 395–410. [https://doi.org/10.1007/978-3-030-62466-8\\_25](https://doi.org/10.1007/978-3-030-62466-8_25)
- OECD. (1995). *Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations 1995*.
- OECD. (2022). *OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations 2022* (OECD Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations). OECD. <https://doi.org/10.1787/0e655865-en>
- Parada, L. (2022, January 14). Amazon and the State Aid Tax Saga. *Cahiers de Fiscalité Luxembourgeoise et Européenne*, 1, 1–21. <https://doi.org/10.2139/ssrn.4009152>
- Sanches, J. L. Saldanha. (2006). *Os limites do planeamento fiscal: substância e forma no direito fiscal português, comunitário e internacional*. Coimbra Editora.
- TGUE. (2021). *Acórdão do Tribunal Geral de 12 de maio de 2021, Luxemburgo e Amazon/Comissão (Processos T-816/17 e T-318/18)*. <https://doi.org/EU:T:2021:252>
- União Europeia. (2012, December 6). *Recomendação da Comissão de 6 de dezembro de 2012*. <https://eur-lex.europa.eu/legal-content/PT/TXT/PDF/?uri=CELEX:32012H0772>
- União Europeia. (2016). Tratado sobre o Funcionamento da União Europeia (Versão Consolidada). *Jornal Oficial Da União Europeia*, C 202, 47–200.
- Yunira, H., Susilawaty, T. E., Kesuma, S. A., & Muda, I. (2023). A Systematic Literature Review on Corporate Tax Planning. *International Journal of Social Service and Research*, 03(07), 1821–1827. <https://doi.org/10.46799/ijssr.v3i7.490>

# ***The Influence of Financial and Economic Performance on Corporate Reputation: Empirical Evidence from the MERCO Index***

## ***A Influência do Desempenho Financeiro e Económico na Reputação Empresarial: Evidência Empírica do MERCO Index***

**Catarina Gonçalves.** ISCAP, Polytechnic of Porto, Rua Jaime Lopes Amorim, 4465-004 Matosinhos, Portugal. 2190477@iscap.ipp.pt

**Catarina Cepeda.** CICF, School of Management, IPCA, Barcelos, Portugal; CEOS.PP, ISCAP, Polytechnic of Porto, Rua Jaime Lopes Amorim, 4465-004 Matosinhos, Portugal; INSTITUTO POLITÉCNICO DA MAIA – IPMAIA; E-mail address: clmc@iscap.ipp.pt  
ORCID: <https://orcid.org/0000-0002-3911-0894>

**Ana Maria Bandeira.** CEOS.PP, ISCAP, Polytechnic of Porto, Rua Jaime Lopes Amorim, 4465-004 Matosinhos, Portugal. E-mail address: [bandeira@iscap.ipp.pt](mailto:bandeira@iscap.ipp.pt).  
ORCID: [https:// https://orcid.org/0000-0003-2529-8280](https://orcid.org/0000-0003-2529-8280)

### **Abstract**

**Purpose:** This study analyses the influence of profitability on the reputation and prestige of organisations. The main objective is to empirically test the extent to which financial performance (ROE) and economic performance (ROA) influence the positioning and evaluation of companies in the independent MERCO Index ranking.

**Methodology:** A quantitative empirical analysis was conducted by estimating a regression model with panel data and random effects. The study uses a cross-sectional data sample comprising 162 companies operating in the Iberian Peninsula.

**Results:** The results confirm that financial profitability (ROE) has a positive and statistically significant impact on the MERCO Index, validating the idea that the availability of excess resources facilitates investment in reputation building. In contrast, operational efficiency (ROA) does not have a significant impact, suggesting a gap between discourse and practice. Additionally, it was found that the presence of women in management is associated with a penalty in the index, which may indicate that the market and stakeholders penalise the merely symbolic adoption of diversity practices.

**Research limitations:** The study is limited by the use of a relatively small cross-sectional sample (162 Iberian companies). Future research should adopt a longitudinal perspective, allowing for an assessment of the impact of the new European Corporate Sustainability Reporting Directive (CSRD) on mitigating the inconsistency between ESG

reporting and actual performance, as well as analysing the moderating role of independent auditing as a mechanism for restricting reporting manipulation.

**Originality:** The research breaks new ground by demonstrating that ESG prestige as assessed by multiple stakeholders is strongly driven by shareholder wealth (ROE) rather than true asset efficiency (ROA). The study makes a critical and practical contribution by alerting investors to the importance of integrating financial metrics into reputational assessments in order to expose potential greenwashing practices masked by short-term financial results.

**Keywords:** *ESG Decoupling; Greenwashing; MERC0; Financial Profitability (ROE); Economic Profitability (ROA); Iberian Peninsula.*

## Resumo

**Objetivo:** Este estudo analisa a influência da rentabilidade na reputação e no prestígio das organizações. O objetivo central consiste em testar empiricamente em que medida o desempenho financeiro (ROE) e o desempenho económico (ROA) influenciam o posicionamento e a avaliação das empresas no ranking independente MERC0 Index.

**Metodologia:** Foi realizada uma análise empírica quantitativa através da estimação de um modelo de regressão com dados em painel e efeitos aleatórios. O estudo recorre a uma amostra de dados transversal composta por 162 empresas que operam no contexto geográfico da Península Ibérica.

**Resultados:** Os resultados confirmam que a rentabilidade financeira (ROE) exerce um impacto positivo e estatisticamente significativo no MERC0 Index, validando a ideia de que a disponibilidade de recursos excedentários facilita o investimento na construção da reputação. Em contraste, a eficiência operacional (ROA) não apresenta um impacto significativo, sugerindo a existência de um desfasamento entre o discurso e a prática. Adicionalmente, verificou-se que a presença de mulheres na gestão está associada a uma penalização no índice, o que poderá indicar que o mercado e os *stakeholders* penalizam a adoção meramente simbólica de práticas de diversidade.

**Limitações:** O estudo encontra-se limitado pela utilização de uma amostra transversal relativamente reduzida (162 empresas ibéricas). Investigações futuras deverão adotar uma perspetiva longitudinal, permitindo avaliar o impacto da nova Diretiva Europeia de Relato de Sustentabilidade (CSRD) na mitigação da inconsistência entre o relato ESG e o desempenho real, bem como analisar o papel moderador da auditoria independente enquanto mecanismo de restrição à manipulação do relato.

**Originalidade:** A investigação inova ao demonstrar que o prestígio ESG avaliado por *multistakeholders* é fortemente impulsionado pela riqueza acionista (ROE) em detrimento da verdadeira eficiência dos ativos (ROA). O estudo apresenta um contributo crítico e prático ao alertar os investidores para a importância de integrar métricas financeiras nas avaliações reputacionais, de forma a expor potenciais práticas de *greenwashing* mascaradas por resultados financeiros de curto prazo.

**Palavras-Chave:** *ESG Decoupling; Greenwashing; MERC0; Rentabilidade Financeira (ROE); Rentabilidade Económica (ROA); Península Ibérica.*

## References/Referências Bibliográficas

- Assembleia da República. (2017). Lei n.º 62/2017, de 1 de agosto | DR. <https://diariodarepublica.pt/dr/detalhe/lei/62-2017-107791612>
- Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of management Review*, 32(3), 946–967. <https://doi.org/10.5465/amr.2007.25275684>
- Carreira, F., Silva, A., & Cepêda, C. (2025). Does Profitability Support Sustainability? Examining the Influence of Financial Performance and ESG Controversies on ESG Ratings. *Systems*, 13(10), 848. <https://doi.org/10.3390/systems13100848>
- Carroll, A. B. (2021). Corporate Social Responsibility: Perspectives on the CSR Construct's Development and Future. *Business & Society*, 60(6), 1258–1278. <https://doi.org/10.1177/00076503211001765>
- Cepêda, C., Monteiro, A. P., & Aibar-Guzmán, B. (2025a). Decoupling in Sustainability Reporting: A Systematic Literature Review. *Corporate Social Responsibility and Environmental Management*, 32(3), 2988–3007. <https://doi.org/10.1002/csr.3114>
- Cepêda, C., Monteiro, A. P., & Aibar-Guzmán, B. (2025b). Bridging the ESG Credibility Gap: The Role of Institutional Investors in Mitigating ESG Decoupling. *Business Strategy and the Environment*, 34, 7139–7160. <https://doi.org/10.1002/bse.4336>
- Cho, C. H., Laine, M., Roberts, R. W., & Rodrigue, M. (2015). Organized hypocrisy, organizational façades, and sustainability reporting. *Accounting, Organizations and Society*, 40(5), 78–94. <https://doi.org/10.1016/j.aos.2014.12.003>
- Clarkson, M. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of management review*, 20(1), 92–117.
- Deegan, C. (2002). The legitimising effect of social and environmental disclosures - a theoretical foundation. *Accounting, Auditing & Accountability Journal*, 15(3), 282–311. <https://doi.org/10.1108/09513570210435852>
- Diwan, H., & Amarayil Sreeraman, B. (2023). From financial reporting to ESG reporting: a bibliometric analysis of the evolution in corporate sustainability disclosures. *Environment, Development and Sustainability* 2023 26:6, 26(6), 13769–13805. <https://doi.org/10.1007/s10668-023-03249-2>
- Eitrem, A., Meidell, A., & Modell, S. (2024). The use of institutional theory in social and environmental accounting research: a critical review. *Accounting and Business Research*, 54(7), 775–810. <https://doi.org/10.1080/00014788.2024.2328934>
- Fernandez-Feijoo, B., Romero, S., & Ruiz, S. (2014). Effect of Stakeholders' Pressure on Transparency of Sustainability Reports within the GRI Framework. *Journal of Business Ethics*, 122(1), 53–63. <https://doi.org/10.1007/s10551-013-1748-5>
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston, MA: Pitman.
- García-Sánchez, I. M., Hussain, N., Aibar-Guzmán, C., & Aibar-Guzmán, B. (2022). Assurance of corporate social responsibility reports: Does it reduce decoupling practices? *Business Ethics, Environment and Responsibility*, 31(1), 118–138. <https://doi.org/10.1111/beer.12394>
- Gerged, A. M. (2021). Factors affecting corporate environmental disclosure in emerging markets: The role of corporate governance structures. *Business Strategy and the Environment*, 30(1), 609–629. <https://doi.org/10.1002/bse.2642>
- Gillan, S. L., Koch, A., & Starks, L. T. (2021). Firms and social responsibility: A review of ESG and CSR research in corporate finance. *Journal of Corporate Finance*, 66, 101889. <https://doi.org/10.1016/j.jcorpfin.2021.101889>
- Hawn, O., & Ioannou, I. (2016). Mind The Gap: The Interplay Between External and Internal Actions in the Case of Corporate Social Responsibility. *Strategic Management Journal Strat. Mgmt. J*, 37, 2569–2588. <https://doi.org/10.1002/smj.2464>

- Jefatura del Estado. (2007a). BOE-A-2007-6115 Ley Orgánica 3/2007, de 22 de marzo, para la igualdad efectiva de mujeres y hombres. <https://www.boe.es/eli/es/lo/2007/03/22/3>
- Jefatura del Estado. (2007b). BOE-A-2007-18475 Ley 26/2007, de 23 de octubre, de Responsabilidad Medioambiental. <https://www.boe.es/eli/es/l/2007/10/23/26>
- Jefatura del Estado. (2017). BOE-A-2017-12902 Ley 9/2017, de 8 de noviembre, de Contratos del Sector Público, por la que se transponen al ordenamiento jurídico español las Directivas del Parlamento Europeo y del Consejo 2014/23/UE y 2014/24/UE, de 26 de febrero de 2014. <https://www.boe.es/eli/es/l/2017/11/08/9>
- Jefatura del Estado. (2018). BOE-A-2018-17989 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 Aud.... <https://www.boe.es/eli/es/l/2018/12/28/11>
- Jefatura del Estado. (2019). BOE-A-2019-3244 Real Decreto-ley 6/2019, de 1 de marzo, de medidas urgentes para garantía de la igualdad de trato y de oportunidades entre mujeres y hombres en el empleo y la ocupación. <https://www.boe.es/eli/es/rdl/2019/03/01/6>
- Khaled, R., Ali, H., & Mohamed, E. K. A. (2021). The Sustainable Development Goals and corporate sustainability performance: Mapping, extent and determinants. *Journal of Cleaner Production*, 311(2), 127599. <https://doi.org/10.1016/j.jclepro.2021.127599>
- Martiny, A., Tagliatalata, J., Testa, F., & Iraldo, F. (2024). Determinants of environmental social and governance (ESG) performance: A systematic literature review. *Journal of Cleaner Production*, 456(1), 142213. <https://doi.org/10.1016/j.jclepro.2024.142213>
- Martínez, N. O., Carabel, T. C., & del Castillo Feito, C. (2018). Legitimacy and reputation of organizations: Their relationship with management systems and financial performance. In *Organizational legitimacy: Challenges and opportunities for businesses and institutions* (pp. 141-157). Cham: Springer International Publishing.
- MERCO. (2026a). Merco Decalogue. <https://www.merco.info/pt/decalogo>
- MERCO. (2026b). O que é Merco? <https://www.merco.info/es/que-es-merco>
- Michelon, G., Pilonato, S., & Ricceri, F. (2015). CSR reporting practices and the quality of disclosure: An empirical analysis. *Critical Perspectives on Accounting*, 33(14), 59–78. <https://doi.org/10.1016/j.cpa.2014.10.003>
- Ministério do Ambiente do Ordenamento do Território e do Desenvolvimento Regional. (2008). Decreto-Lei n.º 147/2008, de 29 de julho | DR. <https://diariodarepublica.pt/dr/detalhe/decreto-lei/147-2008-454822>
- Nguyen, V. H. (2025). Corporate social responsibility disclosure and firm value: a signaling theory perspective. *Journal of Economics and Development*, 27(2), 114–128. <https://doi.org/10.1108/JED-02-2024-0067>
- Pisano, S., Lepore, L., Nastari, R., & Al-Gamrh, B. (2025). Evaluating the Influence of Board Characteristics on Environmental Decoupling: Evidence From Europe. *Business Strategy and the Environment*, 34(6), 7300–7323. <https://doi.org/10.1002/bse.4350>
- Short, J. C., McKenny, A. F., Ketchen, D. J., Snow, C. C., & Hult, G. T. M. (2016). An Empirical Examination of Firm, Industry, and Temporal Effects on Corporate Social Performance. *Business and Society*, 55(8), 1122–1156. <https://doi.org/10.1177/0007650315574848>
- Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of management review*, 20(3), 571-610.
- Tamasiga, P., Onyeaka, H., Bakwena, M., & Ouassou, E. houssin. (2024). Beyond compliance: evaluating the role of environmental, social and governance

- disclosures in enhancing firm value and performance. *SN Business & Economics*, 4(10), 118-. <https://doi.org/10.1007/s43546-024-00714-6>
- Torelli, R., Balluchi, F., & Lazzini, A. (2020). Greenwashing and environmental communication: Effects on stakeholders' perceptions. *Business Strategy and the Environment*, 29(2), 407–421. <https://doi.org/10.1002/bse.2373>
- União Europeia. (2014). Diretiva - 2014/95 - EN - EUR-Lex. <https://eur-lex.europa.eu/legal-content/PT/TXT/?uri=celex%3A32014L0095>
- União Europeia. (2022). Diretiva - 2022/2464 - EN - EUR-Lex. <https://eur-lex.europa.eu/legal-content/PT/TXT/?uri=CELEX%3A32022L2464>
- União Europeia. (2023). Diretiva delegada - UE - 2023/2775 - EN - EUR-Lex. [https://eur-lex.europa.eu/eli/dir\\_del/2023/2775/oj/por](https://eur-lex.europa.eu/eli/dir_del/2023/2775/oj/por)
- Xiao, C., Wang, Q., van Donk, D. P., & van der Vaart, T. (2018). When are stakeholder pressures effective? An extension of slack resources theory. *International Journal of Production Economics*, 199, 138-149. <https://doi.org/10.1016/j.ijpe.2018.03.002>
- Xu, M., Tse, Y. K., Geng, R., Liu, Z., & Potter, A. (2025). Greenwashing and market value of firms: An empirical study. *International Journal of Production Economics*, 284(2), 109606. <https://doi.org/10.1016/j.ijpe.2025.109606>
- Zhan, X., Zhan, Y., & Li, G. (2025). The Cost of ESG Decoupling: How Misaligned Disclosures Undermine Corporate Sustainability? *SAGE Open*, 15(3). <https://doi.org/10.1177/21582440251369170>

# ***Do Firms Keep Their Profits? Competitive Adjustment, Transitory Rents and the Illusion of Persistence***

## ***As Empresas Mantêm os Seus Lucros? Ajustamento Competitivo, Rendas Transitórias e a Ilusão da Persistência***

**Margarida Rodrigues.** CEFAGE-UBI, Covilhã, Portugal, Instituto Politécnico da Guarda, Guarda, Portugal. Mail: [rodriguesm@ipg.pt](mailto:rodriguesm@ipg.pt)

**Ana Pinto Borges.** ISAG - European Business School, Porto, Portugal & Research Center in Business Sciences and Tourism (CICET-FCVC), Porto, Portugal; E-mail address: [anaborges@isag.pt](mailto:anaborges@isag.pt)

**Elvira Vieira.** ISAG - European Business School, Research Center in Business Science and Tourism (CICET-FCVC), Porto, Portugal & IPVC-Polytechnic Institute of Viana do Castelo and Applied Management Research Unit (UNIAG), and Instituto Politécnico de Bragança, Portugal. [elvira.vieira@isag.pt](mailto:elvira.vieira@isag.pt)

**Mário Franco.** Universidade da Beira Interior, CEFAGE - UBI Research Center Covilhã, Portugal. E-mail: [mfranco@ubi.pt](mailto:mfranco@ubi.pt)

### **Abstract**

**Purpose:** The persistence of firm profitability remains a central yet insufficiently interrogated assumption in strategic management and industrial organisation. Much of the empirical literature implicitly treats profits as firm-specific rents reflecting sustained competitive advantage. This paper challenges that premise by examining whether profitability in SME-dominated manufacturing sectors is persistent or instead continuously eroded through competitive adjustment. Focusing on the Portuguese textile and apparel industry, the study repositions profitability as a dynamic market outcome shaped by expansion cycles, financial structure and sectoral equilibrium forces.

**Methodology:** Using an unbalanced panel of 3,431 firms over the period 2019–2024, drawn from the SABI database, the analysis adopts a dynamic panel specification estimated via two-step System-GMM. This approach addresses simultaneity between profitability, firm growth and capital structure, allowing identification of structural effects beyond endogenous adjustment processes. Fixed-effects and Driscoll–Kraay estimators are employed as complementary benchmarks to assess the stability of the estimated relationships under alternative assumptions regarding cross-sectional dependence and unobserved heterogeneity.

**Results:** The results provide consistent evidence against profit persistence. Once dynamic adjustment and endogeneity are properly controlled for, lagged profitability does

not exert a significant effect on current returns. Profitability emerges primarily during expansion episodes, reflecting temporary demand–capacity imbalances rather than durable efficiency advantages. Firm size does not generate structural rents, and its apparent negative association with profitability in static models reflects transitional adjustment costs rather than scale diseconomies. Leverage operates as a transmission mechanism that amplifies operating outcomes at the equity level, rather than as a governance device improving performance. Operational risk does not significantly affect contemporaneous profitability, indicating that uncertainty is absorbed intertemporally through investment, financing and survival margins rather than through immediate return penalties. Collectively, the evidence characterises the sector as operating close to a competitive equilibrium in which rents are systematically competed away.

**Research limitations:** The analysis is confined to a single low-margin manufacturing sector within a specific institutional context, which may limit external validity across industries with stronger differentiation or market power. Additionally, accounting-based measures may not fully capture intangible capabilities or strategic positioning.

**Originality:** This study contributes to the literature by explicitly testing the persistence assumption underlying firm performance research and by reframing profitability as a transient outcome of competitive processes. By integrating dynamic panel econometrics with a conceptual lens grounded in competitive equilibrium and firm dynamics, the paper advances a reinterpretation of scale, leverage and growth not as sources of sustained advantage, but as mechanisms embedded in continuous market rebalancing.

**Keywords:** *Profit persistence; Competitive equilibrium; Firm dynamics; SMEs; System-GMM; Industrial organisation.*

**Acknowledgements:** This work was supported by FCT - Fundação para a Ciência e Tecnologia, I.P. by project reference CICET-FCVC UID/06354/2025 and DOI identifier <https://doi.org/10.54499/UID/06354/2025>. This work was supported by national funds through FCT - Fundação para a Ciência e Tecnologia, I.P. under the project UNIAG UID/04752/2025 (DOI 10.54499/UID/04752/2025).

## Resumo

**Objetivo:** A persistência da rentabilidade empresarial constitui um pressuposto central, mas raramente testado de forma explícita, na literatura de gestão estratégica e organização industrial. Este estudo questiona essa premissa ao analisar se, em setores industriais dominados por PME, os lucros refletem rendas estruturais ou são continuamente dissipados por mecanismos de ajustamento competitivo. Com base na indústria têxtil e do vestuário em Portugal, o artigo propõe uma reinterpretação da rentabilidade como resultado dinâmico de processos de reequilíbrio de mercado.

**Metodologia:** A análise baseia-se num painel não balanceado de 3.431 empresas no período 2019–2024, utilizando dados da base SABI. É adotado um modelo de painel dinâmico estimado por System-GMM em dois passos, permitindo controlar a endogeneidade entre rentabilidade, crescimento e estrutura financeira. Modelos de efeitos fixos e com erros de Driscoll–Kraay são utilizados como referência para robustez.

**Resultados:** Os resultados não evidenciam persistência dos lucros após controlo da dinâmica empresarial e da simultaneidade. A rentabilidade surge sobretudo durante

episódios de expansão, refletindo desequilíbrios temporários entre procura e capacidade produtiva. A dimensão não gera rendas estruturais, e o efeito observado em modelos estáticos resulta de custos de ajustamento associados ao crescimento. A alavancagem atua como mecanismo de amplificação dos resultados operacionais, enquanto o risco operacional não apresenta impacto contemporâneo significativo. O setor revela um funcionamento próximo de equilíbrio competitivo, no qual os lucros são continuamente gerados e rapidamente dissipados.

**Limitações:** A análise incide sobre um setor específico e de margens reduzidas, podendo limitar a generalização para contextos com maior poder de mercado ou diferenciação. Os indicadores contabilísticos podem ainda não captar plenamente ativos intangíveis.

**Originalidade:** leitura da performance empresarial enquanto resultado transitório de forças competitivas. Ao articular uma abordagem econométrica dinâmica com fundamentos teóricos de equilíbrio competitivo, oferece uma interpretação alternativa dos determinantes da rentabilidade.

**Palavras-Chave:** *Persistência dos lucros; Equilíbrio competitivo; Dinâmica empresarial; PME; System-GMM; Organização industrial.*

## References/Referências Bibliográficas

- Bhangu, P. K. (2020). Persistence of profitability in top firms: Does it vary across sectors? *Competitiveness Review: An International Business Journal*, 30(3), 269–287. <https://doi.org/10.1108/CR-12-2018-0087>
- Gschwandtner, A. (2012). Evolution of profit persistence in the USA: Evidence from three periods. *International Journal of the Economics of Business*, 19(1), 99–118. <https://doi.org/10.1111/j.1467-9957.2011.02277.x>
- Guan, J., Cai, H., & Cao, Y. (2015). Industry versus firm effects on profit persistence in China. *China Economic Review*, 34, 83–93. <https://doi.org/10.1016/j.chieco.2015.03.005>
- Hirsch, S. (2018). Successful in the long run: A meta-regression analysis of persistent firm profits. *Journal of Economic Surveys*, 32(1), 23–49. <https://doi.org/10.1111/joes.12188>
- Joffe, M. (2025). Profit rate dynamics in US manufacturing. In *Edith Penrose's Legacy* (pp. 193–222). Routledge.
- Lin, F. J., Chen, Y. M., & Lo, F. Y. (2014). The persistence of economic profit. *International Entrepreneurship and Management Journal*, 10(4), 767–780. <https://doi.org/10.1007/s11365-013-0248-5>
- Maury, B. (2017). Sustainable competitive advantage and profitability persistence: Sources versus outcomes for assessing advantage. *Journal of Business Research*, 84, 100–113. <https://doi.org/10.1016/j.jbusres.2017.10.051>
- Yadav, I. S., Pahi, D., & Gangakhedkar, R. (2022). The nexus between firm size, growth and profitability: New panel data evidence from Asia–Pacific markets. *European Journal of Management and Business Economics*, 31(1), 115–140. <https://doi.org/10.1108/EJMBE-03-2021-0077>

## Session III – “Accounting Reimagined: Digital Transformation and AI”

Chair: António Oliveira Monteiro

ISAG – European Business School, Research Center in Business Sciences and Tourism (CICET – FCVC), and CEOS-ISCAP

### ***Artificial intelligence in the new era of corporate information: a bibliometric analysis on transparency and sustainability***

### ***Inteligencia artificial en la nueva era de la información corporativa: análisis bibliométrico sobre transparencia y sostenibilidad***

*María Jesús Guillén Palomino. Universidad de Extremadura, España. mjguillen@unex.es*

*Triana Arias Abelaira. Universidad de Sevilla, España. tariasa@us.es*

*Lázaro Rodríguez Ariza. Universidad de Granada, España. lazaro@ugr.es*

#### **Abstract**

**Purpose:** This study seeks to provide an overview of the existing research landscape, identify key trends, and provide a solid foundation for future research in this crucial field, with the intention of conducting a further analysis of the diffusion of information on artificial intelligence and its impact on accounting practices and corporate transparency.

**Methodology:** A systematic bibliometric analysis was conducted on 219 documents indexed in Web of Science (selected for its rigor and quality in impact metrics), processed using the Bibliometrix package in R to ensure data cleaning and normalization. The strategy employed searches by topic and author keywords, allowing for the mapping of the conceptual evolution and intellectual structure of artificial intelligence in corporate disclosure. Finally, co-occurrence techniques and cluster analysis were applied to reveal thematic connections that go beyond descriptive statistics, enabling the identification of the knowledge architecture in governance and financial reporting.

**Results:** The findings reveal a growing and accelerating interest in these topics, particularly since 2020. China and the United States emerge as the leading countries in this research, underscoring their pivotal role in shaping the future of corporate

information and technology. A crucial aspect of the analysis is the identification of artificial intelligence as a central and recently emerging concept in this field of study. Its rapid integration into disclosure and sustainability reporting indicates a significant transformation in how companies manage their accounting data and communicate its tax implications. Furthermore, the study highlights the influence of a specific study and journal, which have demonstrated exceptional impact and relevance in the academic discussion.

**Research limitations:** This study is not without limitations, notably its reliance on a single Web of Science database (chosen to ensure sample quality) and the potential biases inherent in the search strategy. Nevertheless, the methodology used is considered to provide a rigorous and representative overview of the scientific literature on artificial intelligence.

**Originality:** The originality of this research lies in its use of a systematic bibliometric approach that objectively captures the radical transformation of corporate transparency driven by artificial intelligence. By employing the Topic field and co-occurrence techniques on a refined sample of 219 documents, the study maps an emerging intellectual architecture whose obsolescence is critical. This work is distinguished by establishing a robust empirical and methodological foundation that not only identifies geographic leaders but also provides practical information for formulating accounting policies and corporate reporting strategies.

**Keywords:** *Artificial Intelligence; Disclosure of Information; Financial Report; Non-Financial Information Reporting; Sustainability Report.*

## Resumen

**Objetivo:** Este estudio busca ofrecer una visión general del panorama de la investigación existente, identificar las tendencias clave y proporcionar una base sólida para futuras investigaciones en este campo crucial, con la intención de realizar un análisis posterior de la difusión de información sobre inteligencia artificial y su impacto en las prácticas contables y la transparencia corporativa.

**Metodología:** Se realizó un análisis bibliométrico sistemático de 219 documentos indexados en WOS (seleccionada por su rigor y calidad en métricas de impacto), procesados mediante el paquete Bibliometrix en R para garantizar la limpieza y normalización de datos. La estrategia empleó búsquedas por tópicos y palabras clave de autor, permitiendo mapear la evolución conceptual y la estructura intelectual de la inteligencia artificial en la divulgación corporativa. Finalmente, se aplicaron técnicas de co-ocurrencia, análisis de clústeres para revelar conexiones temáticas que van más allá de la estadística descriptiva, permitiendo identificar la arquitectura del conocimiento en gobernanza e información financiera.

**Resultados:** Los hallazgos revelan un interés creciente y acelerado en estos temas, particularmente a partir de 2020. China y Estados Unidos emergen como los países líderes en esta investigación, lo que subraya su papel fundamental en la configuración del futuro de la información empresarial y la tecnología. Un aspecto crucial del análisis es la identificación de la inteligencia artificial como un concepto central y de reciente auge en este campo de estudio. Su rápida integración en la divulgación de información y los reportes de sostenibilidad indican una transformación significativa en la forma en que las empresas gestionan sus datos contables y comunican sus implicaciones fiscales. Además, el estudio destaca la influencia de un estudio y una revista

específicos, que han demostrado un impacto y una relevancia excepcionales en la discusión académica.

**Limitaciones:** Este estudio no está exento de limitaciones, destacando la dependencia de una única base de datos WOS (elegida para asegurar la calidad de la muestra) y los posibles sesgos inherentes a la estrategia de búsqueda. No obstante, se considera que la metodología utilizada proporciona una visión general rigurosa y representativa de la literatura científica sobre inteligencia artificial.

**Originalidad:** La originalidad de esta investigación reside en el uso de un enfoque bibliométrico sistemático que permite capturar, de manera objetiva, la transformación radical de la transparencia corporativa impulsada por la inteligencia artificial. Al emplear el campo Topic y técnicas de co-ocurrencia en una muestra depurada de 219 documentos, el estudio logra mapear una arquitectura intelectual en formación cuya obsolescencia es crítica. Este trabajo se distingue por establecer una base empírica y metodológica robusta que no solo identifica líderes geográficos, sino que aporta información práctica para la formulación de políticas contables y estrategias de reporte corporativo.

**Palabras Clave:** *Inteligencia Artificial; Divulgación de Información; Reporte Financiero; Reporte De Información No Financiera; Reporte Sobre Sostenibilidad.*

# ***Digital Transformation in Accounting: Technological and Ethical Impacts on the Certified Accountant Profession***

## ***Transformação Digital na Contabilidade: Impactos Tecnológicos e Éticos na Profissão de Contabilista Certificado***

**Lurdes Silva.** *CICF - School of Management, IPCA, Barcelos, Portugal. [lsilva@ipca.pt](mailto:lsilva@ipca.pt)*

**Patrícia Quesado.** *CICF - School of Management, IPCA, Barcelos, Portugal. [pquesado@ipca.pt](mailto:pquesado@ipca.pt)*

**Isabel Francisco.** *Escola Superior de Gestão, IPCA, Portugal. [isabel.margarida@live.com.pt](mailto:isabel.margarida@live.com.pt)*

### **Abstract**

**Purpose:** This article examines the impact of technology on the profession of chartered accountants, with a particular focus on the use of artificial intelligence, automation, and cloud computing. These professionals must acquire digital skills, shifting their roles towards a more analytical and strategic scope. Furthermore, the article discusses the ethical implications arising from the intensive use of technology, such as data protection, transparency, and professional accountability.

**Methodology:** A qualitative study was conducted, involving interviews with chartered accountants, in the fourth quarter of 2025

**Results:** The study shows that digital technologies are transforming accounting by improving efficiency and the quality of information, while requiring certified accountants to develop new digital skills and act ethically to ensure data reliability and security.

**Research limitations:** The main limitation of this study is the small number of companies considered. It is also limited by the source of the data, particularly in terms of calculating indicators.

**Originality:** To conduct an integrated analysis of the technological and ethical impacts of digital transformation on the practice of certified accountants, from a qualitative perspective contextualized within the Portuguese context. By exploring perceptions about the adoption of digital tools, the associated ethical challenges, and the skills required, the study contributes to filling gaps that still exist in the literature on the digitization of accounting.

**Keywords:** *Digital transformation; Digital Skills, Accountant; Ethics; Technology.*

**Acknowledgements:** This study was conducted at the Research Center on Accounting and Taxation (CICF) and was funded by the Portuguese Foundation for Science and Technology (FCT) through national funds with the reference UID/04043/2025 and doi <https://doi.org/10.54499/UID/04043/2025>

## Resumo

**Objetivo:** Este artigo analisa os impactos da tecnologia na profissão de contabilista certificado, especialmente com o uso de inteligência artificial, automação e computação em nuvem. Além disso, discute as implicações éticas que emergem com o uso intensivo da tecnologia, como a proteção de dados, a transparência e a responsabilidade profissional.

**Metodologia:** Foi efetuado um estudo de natureza qualitativa onde foram realizadas entrevistas a contabilistas certificados, no quarto trimestre de 2025.

**Resultados:** O estudo evidencia que as tecnologias digitais estão a transformar a contabilidade, melhorando a eficiência e a qualidade da informação, mas exigindo dos contabilistas certificados novas competências digitais e uma atuação ética que garanta a fiabilidade e a segurança dos dados.

**Limitações:** A natureza qualitativa da investigação, baseada num número reduzido de entrevistas com contabilistas certificados, implica que os resultados obtidos não possam ser generalizados a toda a profissão. Uma análise mais holística do impacto da digitalização na profissão não foi alcançada, por não terem sido incluídos no estudo perspetivas de utilizadores, reguladores e empresas tecnológicas.

**Originalidade:** A realização de uma análise integrada dos impactos tecnológicos e éticos da transformação digital na prática dos contabilistas certificados, a partir de uma perspetiva qualitativa e contextualizada no contexto português. Ao explorar perceções sobre a adoção de ferramentas digitais, os desafios éticos associados e as competências exigidas, o estudo contribui para colmatar lacunas ainda existentes na literatura sobre a digitalização da contabilidade.

**Palavras-Chave:** *Transformação Digital, Competências Digitais, Contabilista Certificado, Ética, Tecnologia.*

**Acknowledgements:** This study was conducted at the Research Center on Accounting and Taxation (CICF) and was funded by the Portuguese Foundation for Science and Technology (FCT) through national funds with the reference UID/04043/2025 and doi <https://doi.org/10.54499/UID/04043/2025>

## References/Referências Bibliográficas

Agus, S. D. N., & Anjar, P. (2025). Implementation of Dynamic Capabilities to Develop Strategies and Processes for Digital Transformation. *International Journal of Management Studies and Social Science Research*, 7(3), 34-46.

- Argento, D., Dobija, D., Grossi, G., Marrone, M., & Mora, L. (2025). The unaccounted effects of digital transformation: implications for accounting, auditing and accountability research. *Accounting, Auditing & Accountability Journal*, 38(3), 765-796.
- Bako, P. M., & Tanko, U. M. (2022). The place of artificial intelligence in accounting field and the future of accounting profession. *Journal of Artificial Intelligence, Machine Learning and Neural Network*, 25, 15-21.
- Bloomberg J. (2018). Digitization, digitalization, and digital transformation: confuse them at your Peril. Disponível em Digitization, Digitalization, And Digital Transformation: Confuse Them At Your Peril, acessado em 1 de julho de 2025.
- Brown, N., & Brown, I. (2019). From digital business strategy to digital transformation-How: A systematic literature review. *Proceedings of the South African Institute of Computer Scientists and Information Technologists 2019*, 1-8.
- Chiu, V., Liu, Q., Muehlmann, B., & Baldwin, A. A. (2019). A bibliometric analysis of accounting information systems journals and their emerging technologies contributions. *International Journal of Accounting Information Systems*, 32, 24-43.
- Coman, D. M., Ionescu, C. A., Duică, A., Coman, M. D., Uzlaş, M. C., Stanescu, S. G., & State, V. (2022). Digitization of accounting: the premise of the paradigm shift of role of the professional accountant. *Applied Sciences*, 12(7), 3359.
- COMISSÃO EUROPEIA, (2020). Livro branco sobre a inteligência artificial - Uma abordagem europeia virada para a excelência e a confiança. Disponível em: [eur-lex.europa.eu/legal-content/PT/TXT/PDF/?uri=CELEX:52020DC0065](http://eur-lex.europa.eu/legal-content/PT/TXT/PDF/?uri=CELEX:52020DC0065), acessado em 1 de julho de 2025.
- Dell, S., Akpan, M., & Carr, A. (2024). Aligning artificial intelligence with ethical accountancy: A global perspective on emerging frameworks. *Corporate Ownership & Control*, 21(1), 47-54.
- Eurocid (2025). A Inteligência Artificial e a União Europeia. Disponível em: A Inteligência Artificial e a União Europeia | Eurocid - Informação europeia ao cidadão, acessado em 1 de julho de 2025.
- Hasan, A. R. (2022). Artificial Intelligence (AI) in accounting & auditing: A Literature review. *Open Journal of Business and Management*, 10(1), 440-465.
- Knudsen, D. R. (2020). Elusive boundaries, power relations, and knowledge production: A systematic review of the literature on digitalization in accounting. *International Journal of Accounting Information Systems*, 36, 100441.
- Kokina, J., & Blanchette, S. (2019). Early evidence of digital labor in accounting: Innovation with Robotic Process Automation. *International Journal of Accounting Information Systems*, 35, 100431.
- Leviäkangas, P. (2016). Digitalisation of Finland's transport sector. *Technology in Society*, 47, 1-15.
- Parviainen, P., Tihinen, M., Kääriäinen, J., & Teppola, S. (2017). Tackling the digitalization challenge: how to benefit from digitalization in practice. *International journal of information systems and project management*, 5(1), 63-77.
- Qi, H., Chen, Z., Li, H., & Liu, X. (2021, June). Cloud Computing Improves Accounting Computerization Information System. In *Proceedings of the 2021 1st International Conference on Control and Intelligent Robotics* (pp. 188-192).
- Rogošić, A., & Perica, I. (2023). Affective professional commitment and accounting ethics principles: examining the mediating role of the code of ethics. *Economic research-Ekonomska istraživanja*, 36(1), 480-498.
- Sarkar, S., Gray, J., Boss, S. R., & Daly, E. (2021). Developing institutional skills for addressing big data: Experiences in implementation of AACSB Standard 5. *Journal of Accounting Education*, 54, 100708.
- Stoica, O. C., & Ionescu-Feleagă, L. (2021, June). Digitalization in accounting: A structured literature review. In *Proceedings of the 4th International Conference on Economics and Social Sciences: Resilience and Economic Intelligence*

- through Digitalization and Big Data Analytics, Sciendo, Bucharest, Romania* (pp. 10-11).
- UNESCO (2022). *Recomendação sobre a Ética da Inteligência Artificial. Publicado em 2022 pela Organização das Nações Unidas para a Educação, a Ciência e a Cultura*. 7, place de Fontenoy, 75352 Paris 07 SP, França, e Representação da UNESCO no Brasil.
- Zaganelli, M. V., & dos Santos Rebuli, K. (2025). A regulamentação da Inteligência Artificial na União Europeia e na Itália: inovação tecnológica e proteção dos direitos fundamentais. *Altus Ciência*, 26(1), 01-13.
- Zemánková, A. (2019). Artificial intelligence and blockchain in audit and accounting: Literature review. *wseas Transactions on Business and Economics*, 16(1), 568-581.
- Zhang, C., Zhu, W., Dai, J., Wu, Y., & Chen, X. (2023). Ethical impact of artificial intelligence in managerial accounting. *International Journal of Accounting Information Systems*, 49, 100619.
- Zhang, Y., Xiong, F., Xie, Y., Fan, X., & Gu, H. (2020). The impact of artificial intelligence and blockchain on the accounting profession. *Ieee Access*, 8, 110461-110477.

# ***Digitalizing ESG information: the role of AI, blockchain and automation in enhancing transparency and efficiency***

## ***Digitalización de la información ESG: el papel de la IA, el blockchain y la automatización en la mejora de la transparencia y la eficiencia***

**María Pilar Alberca.** *Department of Business and Accounting, Faculty of Economics and Business Administration, Distance Education University (UNED), Paseo Senda del Rey, 11, 28040 Madrid, Spain; palberca@cee.uned.es*

**Mónica Oliver Yébenes.** *Department of Business and Accounting, Faculty of Economics and Business Administration, Distance Education University (UNED), Paseo Senda del Rey, 11, 28040 Madrid, Spain; moliver@cee.uned.es*

### **Abstract**

**Purpose:** This paper analyzes how digitalization, through artificial intelligence, blockchain technologies, and process automation is transforming ESG information. It also explores how these tools address current challenges related to data quality, traceability, and efficiency in sustainability reporting. The aim is to assess the potential of these technologies to improve corporate transparency, support regulatory compliance, and strengthen stakeholder trust. This analysis is framed within a context of increasing regulatory and social pressure.

**Methodology:** The methodology employed is based on a structured review of research articles published between 2020 and 2025 in international databases such as Scopus. Technical reports from regulatory bodies (CSRD, ISSB) were also examined, along with practical cases of technological implementation documented by international consulting firms. This material supports a comparative analysis of AI, blockchain, and automation across the main stages of the process: data collection, verification, consolidation, and disclosure. Sector-specific examples are also incorporated to illustrate real-world applications and evaluate their effectiveness.

**Results:** The findings show that AI significantly improves the quality and consistency of ESG data by automating classification, analysis, and anomaly detection tasks. Blockchain technology provides traceability and immutability, strengthening the verifiability of information and reducing greenwashing risks. Process automation enables the standardization of workflows, reduces response times, and facilitates compliance with complex regulatory frameworks. Together, these technologies increase the efficiency and reliability of ESG information. The analysis also identifies specific benefits for professionals and regulatory bodies, who can enhance data accuracy and optimize assurance processes.

**Research limitations:** The main limitations identified include the heterogeneity of the technological systems used by companies and the lack of interoperability between platforms. Another constraint is the scarcity of standardized ESG data, along with the need for advanced digital skills to ensure effective implementation. The available empirical evidence is also limited, as many technological applications remain in early stages of adoption. These limitations point to the need for future empirical research that examines the real impact of these technologies in diverse organizational settings.

**Originality:** This study provides an integrated perspective on how the convergence of AI, blockchain, and automation is redefining ESG information from both a business and technological standpoint. Its originality lies in combining conceptual analysis, regulatory review, and practical applications to offer a comprehensive framework that explains the role of digitalization as a key driver of transparency, efficiency, and trust in sustainability information. The proposed framework contributes to the ESG literature by synthesizing technological advances. It also provides professionals and regulators with guidance on how these tools can strengthen the quality of ESG reporting and support decision-making processes.

**Keywords:** *Digitalization; ESG Reporting; Artificial Intelligence; Blockchain; Automation; Sustainability.*

## Resumen

**Propósito:** Este artículo analiza cómo la digitalización, a través de la inteligencia artificial, las tecnologías *blockchain* y la automatización de procesos, está transformando la información ESG y abordando desafíos actuales relacionados con la calidad de los datos, la trazabilidad y la eficiencia en la elaboración de informes de sostenibilidad. El propósito es evaluar el potencial de estas tecnologías para mejorar la transparencia corporativa, facilitar el cumplimiento normativo y fortalecer la confianza de los grupos de interés en un contexto de creciente presión regulatoria y social.

**Metodología:** La metodología empleada se basa en una revisión estructurada de artículos de investigación publicados entre 2020 y 2025 en bases de datos internacionales (Scopus). Además, se han seleccionado informes técnicos de organismos reguladores (CSRD, ISSB) y casos prácticos de implementación tecnológica documentados por consultoras internacionales para realizar un enfoque comparativo del impacto de la IA, el *blockchain* y la automatización en las distintas etapas del proceso: recopilación de datos, verificación, consolidación y divulgación. También se incorporan ejemplos sectoriales para ilustrar aplicaciones reales y evaluar su efectividad.

**Resultados:** Los resultados muestran que la IA mejora significativamente la calidad y consistencia de los datos ESG mediante la automatización de tareas de clasificación, análisis y detección de anomalías. La tecnología *blockchain* proporciona trazabilidad e inmutabilidad, fortaleciendo la verificabilidad de la información y reduciendo los riesgos de *greenwashing*. La automatización de procesos permite estandarizar flujos de trabajo, reducir los tiempos de respuesta y facilitar el cumplimiento de marcos regulatorios complejos. En conjunto, estas tecnologías incrementan la eficiencia y la fiabilidad de la información ESG. Además, se identifican beneficios específicos para profesionales y organismos reguladores, quienes pueden mejorar la precisión de la información y optimizar procesos de aseguramiento.

**Limitaciones:** Las principales limitaciones identificadas incluyen la heterogeneidad de los sistemas tecnológicos utilizados por las empresas, la falta de interoperabilidad entre plataformas, la escasez de datos ESG estandarizados y la necesidad de competencias digitales avanzadas para su implementación. Además, la evidencia empírica disponible sigue siendo limitada, dado que muchas aplicaciones tecnológicas se encuentran aún en fases iniciales de adopción. Estas limitaciones sugieren la necesidad de futuras investigaciones empíricas que evalúen el impacto real de estas tecnologías en contextos organizativos diversos

**Originalidad:** Este estudio ofrece una perspectiva integrada sobre cómo la convergencia entre IA, *blockchain* y automatización está redefiniendo la información ESG desde una perspectiva empresarial y tecnológica. Su originalidad radica en combinar análisis conceptual, revisión y aplicaciones prácticas para ofrecer un marco comprensivo que explica el papel de la digitalización como un factor clave para mejorar la transparencia, la eficiencia y la confianza en la información de sostenibilidad. El marco propuesto contribuye a la literatura al sintetizar avances tecnológicos y exigencias regulatorias, y proporciona a profesionales y reguladores una orientación de cómo estas herramientas pueden fortalecer la calidad del reporte ESG y apoyar el proceso de toma de decisiones.

**Palabras clave:** *Digitalization; ESG Reporting; Artificial Intelligence; Blockchain; Automation; Sustainability.*

## References/Referencias Bibliográficas

- AICPA. (2023). The state of sustainability assurance and ESG reporting. American Institute of CPAs.
- Deloitte. (2022). Tech-enabled ESG reporting: Leveraging digital tools for better insights. Deloitte Insights.
- EFRAG. (2023). European Sustainability Reporting Standards (ESRS): Final delegated act. European Financial Reporting Advisory Group.
- EY. (2023). How digital transformation is reshaping ESG reporting. Ernst & Young Global.
- García-Sánchez, I. M., & Aibar-Guzmán, B. (2020). Integrated reporting and stakeholder engagement: The role of technology. *Journal of Cleaner Production*, 256, 120–150.
- IFAC. (2022). The state of play in sustainability disclosure and assurance. International Federation of Accountants.
- IFRS Foundation. (2023). IFRS S1: General Requirements for Disclosure of Sustainability-related Financial Information. IFRS Foundation.
- IFRS Foundation. (2023). IFRS S2: Climate-related Disclosures. IFRS Foundation.
- Kotsantonis, S., & Serafeim, G. (2019). Four things no one will tell you about ESG data. Harvard Business School Working Paper, 20-017.
- KPMG. (2023). ESG reporting and digitalization: Trends and challenges. KPMG International.
- Mio, C., Panilo, S., & Blundo, B. (2020). Sustainable development goals and the strategic role of business: A systematic literature review. *Business Strategy and the Environment*, 29 (8), 3220–3245.
- PwC. (2022). ESG reporting: The role of automation and AI in improving data quality. PricewaterhouseCoopers.
- Reimsbach, D., Hahn, R., & Gürkürk, A. (2018). Integrated reporting and assurance of sustainability information: An experimental study on professional investors' information processing. *European Accounting Review*, 27(3), 559–581.

- Tapscott, D., & Tapscott, A. (2016). Blockchain revolution: How the technology behind bitcoin is changing money, business, and the world. Penguin.
- World Economic Forum. (2021). Digital transformation for long-term value creation. World Economic Forum.

# Key Audit Matters: Evidence on Asset Impairments

**Maria de Fátima Silva.** Escola Superior de Gestão, Politécnico do Cávado e do Ave, Portugal. [m.fatimasilva0@gmail.com](mailto:m.fatimasilva0@gmail.com)

**Sara Serra.** Centro de Investigação em Contabilidade e Fiscalidade, Politécnico do Cávado e do Ave, Portugal. [sserra@ipca.pt](mailto:sserra@ipca.pt)

**Kátia Lemos.** Centro de Investigação em Contabilidade e Fiscalidade, Politécnico do Cávado e do Ave, Portugal. [klemos@ipca.pt](mailto:klemos@ipca.pt)

**Rui Mira Gomes.** Escola Superior de Gestão, Politécnico do Cávado e do Ave, Portugal. [rgomes@ipca.pt](mailto:rgomes@ipca.pt)

## Abstract

**Purpose:** This study examines the disclosure of Key Audit Matters (KAM), with a particular focus on those related to asset impairment, in entities issuing securities admitted to trading in Portugal. The objective is to identify the disclosure practices associated with these matters and to understand their distribution over time and across different sectors of activity.

**Methodology:** The research is based on a documentary analysis of audit reports and annual reports from 59 entities for the years 2018, 2020, and 2022. A total of 591 KAM disclosed in the audit reports were analysed using descriptive statistical techniques.

**Results:** Asset impairments are the most frequently disclosed category of KAM in the audit reports, particularly impairments of accounts receivable. On average, each entity discloses three KAM per financial year, a figure that remained stable throughout the analysed period. The sector with the highest average number of KAM is the construction industry.

**Originality:** This study contributes to the literature by specifically examining KAM related to asset impairment in the Portuguese context, considering different economic and sectoral environments.

**Keywords:** Key Audit Matters (KAM); Asset Impairment; Audit Report; Documentary Analysis.

**Acknowledgements:** This study was conducted at the Research Center on Accounting and Taxation (CICF) and was funded by the Portuguese Foundation for Science and Technology (FCT) through national funds with the reference UID/04043/2025 and doi <https://doi.org/10.54499/UID/04043/2025>.

## References

- Cipriano, J. A. S. (2009). *Sebenta do Curso Online DIS1809: “SNC - Imparidade de Activos e Contingências.”* <https://antigo.occ.pt/fotos/editor2/SNC-ImparidadeActivosContingenciasDis1809.pdf>
- Coram, P. J., & Wang, L. (2021). The effect of disclosing key audit matters and accounting standard precision on the audit expectation gap. *International Journal of Auditing*, 25(2), 270–282. <https://doi.org/10.1111/ijau.12203>
- Ferreira, C., & Morais, A. I. (2020, April 1). Analysis of the relationship between company characteristics and key audit matters disclosed. *Revista Contabilidade e Finanças*, 31(83), 262–274. <https://doi.org/10.1590/1808-057x201909040>
- IAASB. (2015). *International Standard on Auditing 701 Communicating Key Audit Matters in the Independent Auditor’s Report.* <https://www.iaasb.org/publications/international-standard-auditing-isa-701-new-communicating-key-audit-matters-independent-auditor-s-3>.
- Lei 148/2015, de 9 de setembro da Assembleia da República (2015). *Diário da República* n.º 176/2015, Série I de 2015-09-09, páginas 7501 – 7516, que promulga o Regime Jurídico da Supervisão de Auditoria.
- Martins, P. F., Azevedo, G. M. do C., & Inácio, H. C. (2010, September 23). Imparidade de Activos e o Papel da Auditoria Interna. *XIV Encuentro AECA: “Inovação e Responsabilidade Desafios e Soluções.”*
- Schneider, A. (2023). Disclosure of Critical Audit Matters and Tolerance for Ambiguity: Impacts on Commercial Lending. *Journal of Managerial Issues*, 35(1), 8–17.
- Zhang, J., & Pany, K. (2023). Critical Audit Matter Reporting: A Comparison of Years 1 through 3. *The CPA Journal*, 93(1/2), 38-44.

# ***The quality of sustainability reporting of listed companies in the Iberian Peninsula***

## ***A qualidade do relato da sustentabilidade das empresas cotadas na Península Ibérica***

**Eduardo Bastos.** Instituto Politécnico do Cávado e Ave (IPCA), Portugal. [a19133@alunos.ipca.pt](mailto:a19133@alunos.ipca.pt)

**Kátia Lemos.** Instituto Politécnico do Cávado e Ave (IPCA), Portugal. [klemos@ipca.pt](mailto:klemos@ipca.pt)

**Sónia Monteiro.** Instituto Politécnico do Cávado e Ave (IPCA), Portugal. [smonteiro@ipca.pt](mailto:smonteiro@ipca.pt)

### **Abstract**

**Purpose:** The aim of the study is to undertake a longitudinal analysis of the quality of sustainability reports of companies listed on the Iberian Peninsula.

**Methodology:** An analysis was conducted of the content of reports containing non-financial information's, covering the period from 2020 to 2024, totaling 165 reports from 33 companies listed on the main benchmark indices of the Portuguese and Spanish capital markets. The quality of sustainability reporting was measured using a disclosure index based on GRI standards (2016). To analyze the influence of corporate governance, a multiple linear regression model was developed, considering as independent variables the characteristics of the board of directors, gender diversity, and the existence of committees, and as control variables the company size and the country.

**Results:** The results indicate that, in general, Iberian companies present a low level of quality in their sustainability reporting, showing a greater emphasis on disclosing information of an economic nature. It was also found that Portuguese companies tend to reveal higher levels of quality in their sustainability reporting when compared to Spanish companies. Additionally, a positive evolution in the quality of disclosure was observed between 2020 and 2023, followed by a significant drop in the level of disclosure in 2024, compared to previous years.

**Research limitations:** As limitations, we consider the sample to be limited to 33 companies listed on the main indices of Portugal and Spain, and the analysis period to be restricted to the years 2020-2024.

**Originality:** The study seeks to fill a gap identified in the literature regarding the scarcity of comparative and longitudinal studies related to sustainability reporting. Furthermore, the study stands out for comparing different geographical contexts and also contributes to a better understanding of the factors that influence the quality and consistency of the report over time.

**Keywords:** *Sustainability Reporting; GRI, Listed companies, Iberian market.*

**Acknowledgements:** This study was developed at the Center for Research in Accounting and Taxation (CICF) and was funded by the Foundation for Science and Technology (FCT) through national funds with the reference UID/04043/2025 and doi <https://doi.org/10.54499/UID/04043/2025>

## Resumo

**Objetivo:** Efetuar uma análise longitudinal da qualidade do relatório de sustentabilidade das empresas cotadas na Península Ibérica.

**Metodologia:** Foi realizada uma análise do conteúdo dos relatórios que continham informação não financeira, referentes ao período de 2020 a 2024, no total de 165 relatórios, pertencentes a 33 empresas cotadas nos principais índices de referência dos mercados de capitais de Portugal e Espanha. A qualidade do relato de sustentabilidade foi medida através de um índice de divulgação baseado nas normas GRI (2016). Para analisar a influência do governo das sociedades foi desenvolvido um modelo de regressão linear múltipla, considerando como variáveis independentes características do conselho de administração, diversidade de género e existência de comités e como variáveis de controlo a dimensão da empresa e o país.

**Resultados:** Os resultados indicam que, de forma geral, as empresas ibéricas apresentam um nível reduzido de qualidade no relato de sustentabilidade, evidenciando uma maior ênfase na divulgação de informação de natureza económica. Verificou-se ainda que as empresas portuguesas tendem a revelar níveis superiores de qualidade do relato de sustentabilidade quando comparadas com as empresas espanholas. Adicionalmente observou-se uma evolução positiva na qualidade da divulgação entre 2020 e 2023, seguida de uma quebra significativa no nível de divulgação em 2024, face aos anos anteriores.

**Limitações:** Como limitações consideramos a mostra limitada a 33 empresas cotadas nos principais índices de Portugal e Espanha e o período de análise ser restrito ao período 2020-2024.

**Originalidade:** O estudo procura colmatar uma lacuna identificada na literatura referente

a escassez de estudos comparativos e longitudinais ao nível do relato de sustentabilidade. Para além disso, o estudo distingue-se por comparar diferentes contextos geográficos e contribui também para uma melhor compreensão dos fatores que influenciam a qualidade e consistência do relato ao longo do tempo.

**Palavras-Chave:** *Relato de Sustentabilidade; GRI, Empresas cotadas, Mercado ibérico*

**Agradecimentos:** Este estudo foi desenvolvido no Centro de Investigação em Contabilidade e Fiscalidade (CICF) e foi financiado pela Fundação para a Ciência e a Tecnologia (FCT) através de fundos nacionais com a referência UID/04043/2025 e doi <https://doi.org/10.54499/UID/04043/2025>

## References/Referências Bibliográficas

- Carmo, C., & Ribeiro, C. (2022). Mandatory Non-Financial Information Disclosure under European Directive 95/2014/EU: Evidence from Portuguese Listed Companies. *Sustainability*, 14(8), 4860. <https://doi.org/10.3390/su14084860>
- Ching, H. Y., Gerab, F., & Toste, T. H. (2017). The quality of sustainability reports and corporate financial performance: Evidence from Brazilian listed companies. *Sage Open*, 7(2). <https://doi.org/10.1177/2158244017712027>
- GRI (2022) The catalyst for a sustainable future. Disponível em: <https://www.globalreporting.org/media/b15hggfc/gri-25-years-history.pdf>
- Hoffmann, E., Dietsche, C., & Hobelsberger, C. (2018). Between mandatory and voluntary: Non-financial reporting by German companies. *NachhaltigkeitsManagementForum*, 26, 47–63. <https://doi.org/10.1007/s00550-018-0479-6>
- KPMG (2024). *Survey of sustainability reporting 2024: The move to mandatory reporting*. KPMG International.
- Madaleno, M. & Vieira, E. (2020), Corporate performance and sustainability: Evidence from listed firms in Portugal and Spain, *Energy Reports*, 6 (8),141-147, <https://doi.org/10.1016/j.egy.2020.11.092>
- Monteiro, S., Lemos, K., Pereira & L. Ribeiro, V. (2021). The influence of board gender diversity on non-financial reporting compliance: evidence from Portuguese listed companies. 37th IBIMA Conference, 1-2 April 2021 Cordoba, Spain, Conference proceedings (ISBN: 978-0-9998551-6-4, Published in the USA)
- Permatasari, P., Gunawan, J., & El-Bannany, M. (2020). A Comprehensive Measurement for Sustainability Reporting Quality: Principles-Based Approach. *Indonesian Journal of Sustainability Accounting and Management*, 4(2), 249. <https://doi.org/10.28992/ijSAM.v4i2.282>
- Pizzi, S., Venturelli, A., & Caputo, F. (2024). Regulating Sustainability Reporting in Europe: De Jure Harmonisation or De Facto Standardisation? *Accounting in Europe*, 22(1), 51–75. <https://doi.org/10.1080/17449480.2024.2330976>
- Roque, V., Monteiro, S., Moreira, I. (2025). Sustainability Reporting and Corporate Value: Evidence for Portuguese Listed Corporations. In: Azevedo, G., Vieira, E., Marques, R., Almeida, L. (eds) The Challenges of Era 5.0 in Accounting and Finance Innovation. ICAFI 2024. *Information Systems Engineering and Management*, 28. Springer, Cham. [https://doi.org/10.1007/978-3-031-77531-4\\_3](https://doi.org/10.1007/978-3-031-77531-4_3)

## Session IV – “Accounting Insights: Performance and Disclosure”

Chair: José Miranda

*ISAG – European Business School and Research Center in Business Sciences and Tourism  
(CICET – FCVC)*

### ***Activity-Based Costing in an Aluminium Extrusion Company: A Case Study***

### ***Custeio Baseado em Atividades numa Empresa de Extrusão de Alumínio: Um Estudo de Caso***

*Patrícia Quesado. CICEF, School of Management, IPCA, Barcelos, Portugal.  
pquesado@ipca.pt*

*Vânia Leite. IPCA, Barcelos, Portugal. a24279@alunos.ipca.pt*

#### **Abstract**

**Purpose:** This paper analyses the applicability and managerial usefulness of the Activity-Based Costing (ABC) system in representing the actual consumption of resources in an aluminium extrusion company, in a context characterized by high product diversity and significant indirect costs.

**Methodology:** The study adopts a qualitative approach and a single case study methodology, combining semi-structured interviews, direct observation and the analysis of internal company data. The ABC model was developed through the identification of resources and activities, the definition of cost drivers and the calculation of unit costs for the company’s five best-selling products in 2024.

**Results:** The results show that the Extrusion and Ageing Oven activities concentrate the largest share of costs, mainly due to energy consumption, depreciation and maintenance, while activities such as Shipping represent a significant cost without adding direct value. Although the differences in unit costs compared to the company’s current costing system are relatively small, the ABC model provides a more detailed and transparent view of the cost structure, enabling the identification of inefficiencies, supporting pricing decisions and improving operational control.

**Research limitations:** The findings are based on a single case study in a specific industrial context, which limits generalisation.

**Originality:** The study provides empirical evidence from the aluminium extrusion industry and shows that the value of ABC lies not only in cost reallocation but also in the enhanced transparency and managerial insight it offers.

**Keywords:** *Activity-Based Costing; Aluminium Extrusion; Case Study.*

## Resumo

**Objetivo:** Este artigo analisa a aplicabilidade e a utilidade do sistema de Custeio Baseado em Atividades (ABC) na representação do consumo real de recursos numa empresa de extrusão de alumínio, num contexto caracterizado por elevada diversidade de produtos e peso significativo dos custos indiretos.

**Metodologia:** A investigação adota uma abordagem qualitativa e a metodologia de estudo de caso único, combinando entrevistas semiestruturadas, observação direta e análise de dados internos da empresa. O modelo ABC foi desenvolvido através da identificação dos recursos e das atividades, da definição dos indutores de custo e do cálculo dos custos unitários dos cinco produtos mais vendidos pela empresa em 2024.

**Resultados:** Os resultados mostram que as atividades de Extrusão e Estufa concentram a maior parte dos custos, sobretudo devido ao consumo de energia, depreciações e manutenção, enquanto atividades como a Expedição representam um custo relevante sem acrescentar valor direto. Embora as diferenças nos custos unitários face ao sistema atualmente utilizado pela empresa sejam reduzidas, o modelo ABC proporciona uma visão mais detalhada e transparente da estrutura de custos, permitindo identificar ineficiências, apoiar decisões de precificação e melhorar o controlo operacional.

**Limitações:** Os resultados baseiam-se num estudo de caso único, num contexto industrial específico, o que limita a generalização das conclusões.

**Originalidade:** O estudo fornece evidência empírica no setor da extrusão de alumínio e demonstra que o valor do ABC reside não apenas na reatribuição dos custos, mas também no aumento da transparência e no reforço do suporte à decisão de gestão.

**Palavras-Chave:** *Custeio Baseado em Atividades; Extrusão de Alumínio; Estudo de Caso.*

## References/Referências Bibliográficas

- Borges, P., Alves, M., & Silva, R. (2024). The activity-based costing system applied in higher education institutions: A systematic review and mapping of the literature. *Businesses*, 4(1), 18-38. <https://doi.org/10.3390/businesses4010002>
- Chen, W., & Wang, C. (2016). Application of activity-based costing on reinforcing steel bar manufacturer. *The International Journal of Organizational Innovation*, 9(1), 228-243.
- Cooper, R., & Kaplan, R. (1988). Measure costs right: Make the right decisions. *Harvard Business Review*, 66, 96-103.

- Cruz, I., Coimbra, C., Abrantes, L., Alves, M., & Quesado, P. (2023). *Contabilidade de gestão avançada: Gestão estratégica de custos e avaliação de desempenho* (1.ªed.). Almedina.
- Drury, C. (2018). *Management and cost accounting* (10th ed.). Cengage Learning College.
- Hornngren, C., Datar, S., & Rajan, M. (2012). *Cost accounting: A managerial emphasis* (14th ed.). Pearson Education.
- Kaplan, R. (1988). One cost system isn't enough. *Harvard Business Review*, 66(1), 61-66.
- Kaplan, R., & Cooper, R. (1998). *Cost and effect: Using integrated cost systems to drive profitability and performance*. Harvard Business School Press.
- Kaplan, R., & Johnson, H. (1987). *Relevance lost: The rise and fall of management accounting*. Harvard Business School Press.
- Pérez, B., & Gallardo, A. (2002). Implicaciones teóricas y metodológicas de la evolución de la investigación en contabilidad de gestión. *Revista Española de Financiación y Contabilidad*, 31(111), 245-286. <https://doi.org/10.1080/02102412.2002.10779450>
- Quesado, P., & Rolo, M. (2023). *Fatores determinantes na utilização e conhecimento do activity-based costing em grandes empresas portuguesas*. In Proceedings of the International Workshop on Accounting and Taxation (IWAT2023), (pp. 314-335).
- Quesado, P., & Silva, R. (2021). Activity-based costing (ABC) and its implication for open innovation. *Journal of Open Innovation: Technology, Market, and Complexity*, 7(1), 1-20. <https://doi.org/10.3390/joitmc7010041>
- Roztock, N., Porter, J., Thomas, R., & Needy, K. (2004). A procedure for smooth implementation of activity-based costing in small companies. *Engineering Management Journal*, 16(4), 19-27.
- Saraiva, A., Rodrigues, A., Coimbra, C., Fantasia, M., & Nunes, R. (2022). *Contabilidade de gestão: Cálculo de custos e valorização de inventários*. Almedina.
- Setyawan, W. (2025). Activity-based costing as a strategy to improve production efficiency. *Oikonomia: Journal of Management Economics and Accounting*, 2(3), 166–174. <https://doi.org/10.61942/oikonomia.v2i3.364>
- Suryani, E., & Kom, E. (2019). *Designing cost measurement system in a small scrum-based software company using activity-based costing model (Case study: ABC company)*. In 2019 International Conference on Information and Communications Technology (ICOIACT), (pp. 943–947). <https://doi.org/10.1109/ICOIACT46704.2019.8938480>
- Vasconcellos, T., Martins, F., & Junior, J. (2008). Implantação do método activity-based costing na logística interna de uma empresa química. *Gestão & Produção*, 15(2), 323-335. <https://doi.org/10.1590/S0104-530X2008000200009>
- Wegmann, G. (2019). A typology of cost accounting practices based on activity-based costing: A strategic cost management approach. *Asia-Pacific Management Accounting Journal*, 14(2), 161-184.

# ***Non-Current Assets Measurement: A Case Study of the Cávado Sub-Region Municipalities***

## ***A mensuração dos ativos não correntes: estudo de caso dos municípios da sub-região Cávado***

*Susana Catarino Rua. Instituto Politécnico do Cávado e do Ave, Portugal. srua@ipca.pt*

### **Abstract**

**Purpose:** Accurate asset measurement is fundamental to ensuring the transparency of accounting information and the credibility of financial statements, more reliably reflecting the real financial and asset situation of the entity, allowing for better evaluation of organizational performance, investment planning, and more efficient resource management. Therefore, the quality of asset measurement is an essential element for the effective management of public entities. The aim of this work is, firstly, to provide a framework for the measurement of non-current assets (NCA), from a normative point of view, namely in accordance with the Accounting Standardization System for Public Administrations – SNC-AP (2015), and a literature review; and, secondly, to carry out a case study of the municipalities of the Portuguese sub-region of Cávado, analyzing the criteria applied by these municipalities in the measurement of their NCA, in the year 2024.

**Methodology:** A qualitative methodology was applied in the theoretical framework. In the case study, a quantitative methodology was used, employing document/content analysis as the source of information, using municipal accounts available online. The sample selection was random, not probabilistic, and the intention is to extend this study to all Portuguese municipalities in the future.

**Results:** Accounting standards, especially SNC-AP (2015), indicate that, as an alternative to measuring NCA, in the absence of historical cost and in the moment of initial recognition, the fair value criterion should be applied, particularly in cases of non-exchange transactions and in assets obtained by exchange. After initial recognition, fair value is applied as an alternative treatment to cost (in the revaluation model), in the case of tangible and intangible fixed assets, or as an optional model, in the case of investment properties. In the case study conducted, we found that only two municipalities distinguish between the two measurement moments, and only in the measurement of investment properties. We also found that all municipalities recognize depreciation related to the assets under study, but no municipality recognizes impairments for these assets, although most mention the possibility of them being created. Regarding tangible fixed assets, we concluded that all municipalities mention the acquisition cost as a measurement criterion, and only one cites the application of market value, in the case of assets acquired in a non-exchange transaction. We also found that these municipalities do not differentiate between the measurement of assets in the public domain and those in the private domain. Regarding intangible assets, all municipalities report applying only the acquisition cost criterion. However, regarding the measurement of investment

properties, all the municipalities analyzed apply the cost criterion, although two of them explicitly state that they also apply fair value (in non-exchange transactions or in assets obtained by exchange), without specifying any method for its calculation. Regarding investment properties, one municipality reports calculating fair value for disclosure purposes, applying the revenue method and market value for its calculation. We can thus see that historical cost is the preferred criterion applied in measuring the NCA of the municipalities studied, although fair value is gradually gaining importance, being applied in exceptional situations and, above all, in the case of measuring investment properties. The predominance of historical cost demonstrates a preference for traditionally accepted measurement criteria, with a prevailing concern for the comparability of information in decision-making. However, the increasing use of fair value, especially in investment properties, indicates a move towards models that reflect market conditions, providing more up-to-date information for investment-related decisions. These conclusions are in line with current accounting standards, contributing to greater transparency and credibility of financial statements. The results obtained open avenues for future investigations into the factors influencing the choice between historical cost and fair value in the measurement of NCA of Portuguese municipalities.

**Originality:** This work demonstrates the importance of current accounting standards in the measurement of NCA, by introducing alternative criteria to historical cost and, consequently, in the correct representation of the assets of Portuguese municipalities. The importance and originality of this work in studying such a problematic topic today is thus highlighted.

**Keywords:** *Fair value; Historical cost; Measurement; Municipalities; Non-current assets; SNC-AP.*

## Resumo

**Objetivo:** A correta mensuração dos ativos é fundamental para garantir a transparência da informação contabilística e a credibilidade das demonstrações financeiras, refletindo com maior fiabilidade a real situação patrimonial e financeira da entidade, permitindo avaliar melhor o desempenho da organização, planejar investimentos e gerir recursos de forma mais eficiente. Dessa forma, a qualidade da mensuração dos ativos é um elemento essencial para uma gestão eficaz das entidades públicas. Neste contexto, pretende-se com este trabalho, em primeiro lugar, efetuar um enquadramento da mensuração dos ativos não correntes (ANC), de um ponto de vista normativo, nomeadamente de acordo com o Sistema de Normalização Contabilística para as Administrações Públicas – SNC-AP (2015), e de revisão de literatura; e, em segundo lugar, efetuar um estudo de caso dos municípios da sub-região portuguesa do Cávado, analisando os critérios aplicados por estes municípios na mensuração dos seus ANC, no ano de 2024.

**Metodologia:** No enquadramento teórico foi aplicada uma metodologia qualitativa. Já no estudo de caso aplicou-se uma metodologia quantitativa, recorrendo-se a uma análise documental/conteúdo como fonte da informação, recorrendo-se para o efeito às contas dos municípios disponíveis online. A escolha da amostra em questão foi aleatória e não probabilística, pretendendo-se alargar este estudo, no futuro, a todos os municípios portugueses.

**Resultados:** As normas de contabilidade, nomeadamente o SNC-AP (2015), indicam como alternativa à mensuração dos ANC, na inexistência do custo histórico e no

momento do reconhecimento inicial, a aplicação do critério do justo valor, nomeadamente nos casos de transações sem contraprestação e nos ativos obtidos por troca. Após o reconhecimento inicial, o justo valor é aplicado como tratamento alternativo ao custo (no modelo da revalorização), no caso dos ativos fixos tangíveis e dos intangíveis, ou como modelo opcional, no caso das propriedades de investimento. No estudo de caso efetuado, verificamos que apenas dois municípios fazem a distinção dos dois momentos de mensuração e apenas na mensuração das propriedades de investimentos. Verificamos também que todos os municípios reconhecem depreciações do exercício relativas aos ativos em estudo, mas nenhum município reconhece imparidades para estes ativos, se bem que a maioria faça menção à possibilidade de serem criadas. Relativamente aos ativos fixos tangíveis, concluímos que todos os municípios mencionam o custo de aquisição como critério de mensuração e apenas um deles refere a aplicação do valor de mercado, no caso de ativos sem contraprestação. Constatamos também, que não existe, por parte destes municípios, uma diferenciação entre a mensuração dos ativos de domínio público e de domínio privado. Relativamente aos ativos intangíveis, todos os municípios referem aplicar apenas o critério do custo de aquisição. Já em relação à mensuração das propriedades de investimento, todos os municípios analisados aplicam o critério do custo, se bem que dois deles referem, explicitamente, aplicar também o justo valor (nas transações sem contraprestação ou nos ativos obtidos por troca), não referindo nenhuma modalidade para o seu cálculo. Ainda relativamente às propriedades de investimento, um município refere calcular o justo valor para efeitos de divulgação no anexo, aplicando o método do rendimento e o valor de mercado para o seu cálculo. Vemos assim que o custo histórico é o critério preferencialmente aplicado na mensuração dos ANC dos municípios estudados, apesar do justo valor estar a ganhar gradualmente importância, sendo aplicado em situações excecionais e, sobretudo, no caso da mensuração das propriedades de investimento. O predomínio do custo histórico demonstra uma preferência por critérios de mensuração tradicionalmente aceites, prevalecendo a preocupação com a comparabilidade da informação na tomada de decisões. Todavia, o uso crescente do justo valor, especialmente nas propriedades de investimento, indica uma aproximação a modelos que refletem as condições de mercado, proporcionando informação mais atualizada para decisões relacionadas com investimentos. Estas conclusões estão em conformidade com as atuais normas contabilísticas, contribuindo para uma maior transparência e credibilidade das demonstrações financeiras. Os resultados obtidos abrem espaço para investigações futuras sobre os fatores que influenciam a escolha entre o custo histórico e o justo valor na mensuração dos ANC dos municípios portugueses.

**Originalidade:** Este trabalho vem demonstrar a importância do atual normativo contabilístico na mensuração dos ANC, ao introduzir critérios alternativos ao custo histórico e, conseqüentemente, na correta representação do património dos municípios portugueses. Destacando-se assim a importância e originalidade deste trabalho ao estudar um tema tão problemático nos dias de hoje.

**Palavras-Chave:** *Ativos não correntes; Custo histórico; Justo valor; Mensuração; Municípios; SNC-AP.*

## References/Referências Bibliográficas

Carvalho, A., & Carreira, J. (2016). Considerações sobre o impacto do novo modelo contabilístico (SNC-AP) nas contas das Autarquias Locais. *XVII Encontro AECA*. Bragança: AECA/IPB.

- Castro, B., & Cerrud, P. (2014). Las técnicas financieras para la determinación del valor razonable, su aplicación en los estados financieros y las posibles repercusiones para las empresas. *Forum Empresarial*, 19(2), 51-69.
- Cristea, V. (2017). Fair Value Accounting or Historical Cost Accounting for Property, Plant and Equipment? *Valahian Journal of Economic Studies*, 8(4), 23-30.
- Iswari, Y., & Mediawati, E. (2024). Literature Review on Valuation and Accounting Recognition for Heritage Assets. *International Journal of Business, Law, and Education*, 5(1), 295-308.
- International Public Sector Accounting Standards Board - IPSASB (2025). International Public Sector Accounting Standards, Edição Handbook 2025. New York: IPSASB.
- Lombardi, R., Schimperna, F., Smarra, M., & Sorrentino, M. (2020). Accounting for infrastructure assets in the public sector: The state of the art in academic research and international standards setting. *Public Money & Management*, 41(3), 203–212.
- Palavecinos, B. (2011). Valor razonable: un modelo de valoración incorporado en las normas internacionales de información financiera. *Estudios Gerenciales*, 27(118), 97-114.
- Plano Oficial de Contabilidade das Autarquias Locais - POCAL (1999). Decreto-Lei nº54 – A/99 de 22 de fevereiro.
- Rua, S. (2016). Estudo comparativo do reconhecimento e da mensuração dos ativos fixos tangíveis no POCAL e no SNC-AP. *I Congresso Internacional de Contabilidade Pública*. Setúbal: IPS.
- Rua, S. (2016). A problemática do reconhecimento e da mensuração dos ativos fixos tangíveis: estudo comparativo do SNC e do SNC-AP. *XVII Encontro AECA*, Bragança: AECA/IPB.
- Rua, S. (2023). A mensuração dos heritage assets: estudo de caso dos municípios portugueses de grande dimensão. *VII International Forum on Management*, Funchal: Universidade da Madeira.
- Sistema de Normalização Contabilística para as Administrações Públicas - SNC-AP (2015). Decreto-Lei nº 192/2015, de 11 de setembro.
- Veloso, J. (2018). *Transição do POCAL para o SNC-AP*. Dissertação de Mestrado. Coimbra: ISCAC.
- Yin, R. (2015). *Estudo de Caso: Planejamento e Métodos*. 5.<sup>a</sup> Edição. Porto Alegre: Bookman.

# ***Determinants And Impacts of the Quality of Sustainability Reporting: The Perspective of Managers***

## ***Determinantes e Impactos da Qualidade do Relato da Sustentabilidade: A Perspetiva dos Gestores***

**Joana Filipa Rocha Castro.** ISCAP, Politécnico do Porto, Portugal.  
2211344@iscap.ipp.pt

**Albertina Paula Moreira Monteiro.** CEOS.PP, ISCAP, Politécnico do Porto; CICEF; OSEAN, Portugal. amonteiro@iscap.ipp.pt

### **Abstract**

**Purpose:** The present study aims to identify the determinants and impacts associated with the quality of sustainability reporting in Portuguese and Spanish companies, considering the managers' perspective. In this regard, it seeks to address the existing gap in the literature concerning the integrated analysis of these determinants and their effects on organizational performance, by analyzing managers' perceptions of the internal and external factors that influence the quality of sustainability reporting and its impact on organizational success.

**Methodology:** This study adopts a quantitative approach, with the aim of analyzing the determinants and impacts of sustainability reporting quality from the perspective of managers. The target population includes managers of Portuguese and Spanish companies. The sample will be selected using stratified sampling, taking into account the industry sector and company size, in order to ensure diversity in organizational contexts. Data collection will be conducted through a structured questionnaire survey, based on scales previously validated in the academic literature. The collected data will be analyzed using descriptive statistics, correlations, and multiple regressions, allowing for the testing of the relationships proposed in the conceptual model. This approach enables a robust empirical analysis of the relationships identified in the literature, addressing the previously identified gaps. The analysis will be performed using appropriate statistical software, ensuring rigor and reliability.

**Results:** In terms of outcomes, it is expected that stakeholder engagement, management commitment, and external institutional pressures will have a positive influence on the development of sustainable practices within organizations, and that the adoption of these practices will contribute to improving the quality of sustainability reporting, thereby promoting greater transparency, reliability, and usefulness of the

disclosed information. Additionally, the results should indicate that higher-quality sustainability reports can have positive effects on organizational performance and on companies' relationships with their stakeholders.

**Research limitations:** This study has certain limitations that should be taken into account when interpreting the results. First, the data collection is based on responses from managers via questionnaires, which may introduce some degree of subjectivity into the responses. Second, the sample is limited to Portuguese and Spanish companies, which may restrict the generalizability of the results to other geographic or institutional contexts. Finally, the cross-sectional nature of the study may not allow for an analysis of how these phenomena evolve over time.

**Originality:** The originality of this study lies in its integrated analysis of the determinants and impacts of sustainability reporting quality, taking into account organizational, institutional, and relational factors simultaneously. Furthermore, the research focuses on the managers' perspective and compares companies from two Iberian countries, Portugal and Spain, a context that remains underexplored in the literature, contributing to a broader understanding of sustainability reporting practices in similar business contexts that remain largely unexplored in the literature.

**Keywords:** *Sustainability; Sustainability reporting; Stakeholders; Business management; Organizational performance; Reporting standards; Sustainable practices.*

## Resumo

**Objetivo:** A presente investigação tem como objetivo principal identificar os determinantes e os impactos associados à qualidade do relato da sustentabilidade nas empresas portuguesas e espanholas, considerando a perspetiva dos gestores. Neste sentido, procura colmatar a lacuna existente na literatura relativa à análise integrada destes determinantes e dos seus efeitos no desempenho organizacional, analisando a perceção dos gestores sobre os fatores internos e externos que influenciam a qualidade do relato de sustentabilidade e o seu impacto no sucesso organizacional.

**Metodologia:** A presente investigação adota uma abordagem quantitativa, com o objetivo de analisar os determinantes e impactos da qualidade do relato de sustentabilidade na perspetiva dos gestores. A população-alvo inclui gestores de empresas portuguesas e espanholas. A amostra será selecionada de forma estratificada, considerando o setor de atividade e a dimensão da empresa, de modo a garantir a diversidade de contextos organizacionais. A recolha de dados será realizada através de um inquérito por questionário estruturado, baseado em escalas previamente validadas na literatura académica. Os dados recolhidos serão analisados recorrendo a estatística descritiva, correlações e regressões múltiplas, permitindo testar as relações propostas no modelo conceptual. Esta abordagem permite uma análise empírica robusta das relações identificadas na literatura, respondendo às lacunas previamente identificadas. A análise será realizada com o auxílio de software estatístico adequado, garantindo rigor e fiabilidade.

**Resultados:** Em termos de resultado, espera-se que o envolvimento dos *stakeholders*, o compromisso da gestão e as pressões institucionais externas exerçam uma influência positiva no desenvolvimento de práticas sustentáveis nas organizações e que a adoção dessas práticas contribua para melhorar a qualidade do relato de

sustentabilidade, promovendo maior transparência, fiabilidade e utilidade da informação divulgada. Adicionalmente, os resultados devem indicar que relatórios de sustentabilidade de maior qualidade podem ter efeitos positivos no desempenho organizacional e na relação das empresas com as suas partes interessadas.

**Limitações:** Este estudo apresentará algumas limitações que devem ser consideradas na interpretação dos resultados. Em primeiro lugar, a recolha de dados baseia-se em respostas de gestores através de questionários, o que pode introduzir algum grau de subjetividade nas respostas. Em segundo lugar, a amostra está limitada a empresas portuguesas e espanholas, o que pode restringir a generalização dos resultados para outros contextos geográficos ou institucionais. Por fim, a natureza transversal do estudo pode não permitir analisar a evolução dos fenómenos ao longo do tempo.

**Originalidade:** A originalidade deste estudo reside na análise integrada dos determinantes e impactos da qualidade do relato de sustentabilidade, considerando, simultaneamente, fatores organizacionais, institucionais e relacionais. Além disso, a investigação centra-se na perspetiva dos gestores e compara as empresas de dois países ibéricos, Portugal e Espanha, um contexto ainda pouco explorado na literatura, contribuindo para amplificação do conhecimento sobre as práticas de relato de sustentabilidade em contextos empresariais semelhantes, mas ainda pouco explorados na literatura.

**Palavras-Chave:** *Sustentabilidade; Relato da sustentabilidade; Stakeholders; Gestão Empresarial; Desempenho Organizacional; Normas de relato; Práticas sustentáveis.*

## References/Referências Bibliográficas

- Arian, A., Sands, J., & Tooley, S. (2023). Industry and stakeholder impacts on corporate social responsibility (CSR) and financial performance: Consumer vs. industrial sectors. *Sustainability*, 15(16), 12254.
- Băndoi, A., Bocean, C. G., Del Baldo, M., Mandache, L., Mănescu, L. G., & Sitnikov, C. S. (2021). Including sustainable reporting practices in corporate management reports: Assessing the impact of transparency on economic performance. *Sustainability*, 13(2), 940.
- Bansal, P., & DesJardine, M. R. (2014). Business sustainability: It is about time. *Strategic Organization*, 12(1), 70–78.
- Chairina, C., & Tjahjadi, B. (2023). Green governance and sustainability report quality: The moderating role of sustainability commitment in ASEAN countries. *Economies*, 11(1), 27.
- Damert, M., & Baumgartner, R. J. (2018). External pressures or internal governance — What determines the extent of corporate responses to climate change? *Corporate Social Responsibility and Environmental Management*, 25(4), 778–791.
- Daub, C. H. (2007). Assessing the quality of sustainability reporting: An alternative methodological approach. *Journal of Cleaner Production*, 15(1), 75–85.
- Finkbeiner, M., Schau, E. M., Lehmann, A., & Traverso, M. (2010). Towards life cycle sustainability assessment. *Sustainability*, 2(10), 330–353.
- Freeman, R. E., Dmytriiev, S. D., & Phillips, R. A. (2021). Stakeholder theory and the resource-based view of the firm. *Journal of Management*, 47(7), 1746–1765.
- Hahn, R., & Kühnen, M. (2013). Determinants of sustainability reporting: A review of results, trends, theory, and opportunities in an expanding field of research. *Journal of Cleaner Production*, 59, 5–21.
- Harmoni, A. (2013). Stakeholder-based analysis of sustainability report: A case study on mining companies in Indonesia. *International Conference on Eurasian*

- Economies* 2013, 1–11.
- Kaawaase, T. K., Nairuba, C., Akankunda, B., & Bananuka, J. (2021). Corporate governance, internal audit quality and financial reporting quality of financial institutions. *Asian Journal of Accounting Research*, 6(3), 345–362.
- Magness, V. (2008). Who are the stakeholders now? An empirical examination of the Mitchell, Agle, and Wood theory of stakeholder salience. *Journal of Business Ethics*, 83(2), 435–449.
- Molnár, P., Lukács, B., & Tóth, Á. (2025). Toward social disclosure alignment: Evaluating the interoperability of ISSB S2 with ESRS and GRI standards. *Societies*, 15(10), 273.
- Moodaley, W., & Telukdarie, A. (2023). Greenwashing, sustainability reporting, and artificial intelligence: A systematic literature review. *Sustainability*, 15(2), 21481.
- Najeeb, A. (2014). Institutional theory and human resource management. *Institutional theory and human resource management*, 25–30.
- Purvis, B., Mao, Y., & Robinson, D. (2019). Three pillars of sustainability: In search of conceptual origins. *Sustainability Science*, 14(3), 681–695.
- Wagenhofer, A. (2024). Sustainability reporting: A financial reporting perspective. *Accounting in Europe*, 21(1), 1–27.

# ***Beyond the Balance Sheet: Intangible Assets Disclosure in Portuguese Banks***

## ***Para além do Balanço: Divulgação de Ativos Intangíveis nos Bancos Portugueses***

**Clara Pires.** *Management Department, Polytechnic Institute of Beja, and CEOS.PP, Portugal. clara.pires@ipbeja.pt*

**Ana Cantarina.** *Mathematics Department and physical sciences, Polytechnic Institute of Beja, and CIMA, UÉvora, Portugal. ana.cantarinha@ipbeja.pt*

**Carlos Borralho.** *Management Department, Polytechnic Institute of Beja, and CEOS.PP, Portugal. cborralho@ipbeja.pt*

**Rui Marques.** *Polytechnic Institute of Beja, Student of Master in Finance and Accounting (IPBeja), Portugal. ruidinismarques@hotmail.com*

### **Abstract**

**Purpose:** This study aims to analyse the evolution of intangible asset disclosure by banking institutions operating in Portugal between 2014 and 2022. Given the increasing relevance of intangible assets in the financial sector and the growing emphasis on transparency and regulatory compliance, the research seeks to assess how disclosure practices have evolved over time and to identify the main determinants influencing the level of reported information.

**Methodology:** A disclosure index was developed based on the requirements established in IAS 38 – Intangible Assets – and the Cooke (1989) disclosure model. The index was designed to measure the extent and evolution of information disclosed on intangible assets over the period under analysis. The sample includes 19 banking institutions, representing 88.8% of the Portuguese banking product in 2022. Data were collected from annual reports and accounts, resulting in a total of 170 reports analysed across nine years. Statistical analyses were conducted to examine trends and test associations between disclosure levels, bank size, and income-generating capacity.

**Results:** The findings reveal a consistent upward trend in the disclosure of intangible assets throughout the period studied. This increase became particularly pronounced following the 2016 amendment to IAS 38, suggesting that regulatory changes played a significant role in strengthening reporting practices. However, no statistically significant association was found between the level of disclosure and either bank size or bank product. These results indicate that intangible asset reporting practices appear to be driven primarily by regulatory pressures and transparency requirements rather than by institutional scale or financial performance.

**Research limitations:** The study is limited to banking institutions operating in Portugal, which may restrict the generalizability of the findings to other countries or sectors.

Additionally, the disclosure index, although carefully constructed, relies on the interpretation of reported information, which may involve a degree of subjectivity.

**Originality:** This study contributes to the literature by providing a robust nine-year longitudinal analysis of the Portuguese banking system, addressing a significant research gap. By applying a bespoke disclosure index to evaluate how institutional characteristics and regulatory shifts shape transparency, it offers a more context-specific understanding of the drivers behind intangible asset reporting.

**Keywords:** *Intangible Assets; IAS 38; Banking Sector; Cooke Model.*

## Resumo

**Objetivo:** Este estudo tem como objetivo analisar a evolução da divulgação dos ativos intangíveis das instituições bancárias que operaram em Portugal entre 2014 e 2022. Dada a crescente relevância dos ativos intangíveis no setor financeiro e a crescente ênfase na transparência e conformidade regulatória, a pesquisa procura avaliar como as práticas de divulgação evoluíram ao longo do tempo e identificar os principais determinantes que influenciam o nível de informação reportada.

**Metodologia:** Foi desenvolvido um índice de divulgação com base nos requisitos estabelecidos na IAS 38 – Ativos Intangíveis – e no modelo de divulgação de Cooke (1989). O índice foi concebido para medir a extensão e a evolução da informação divulgada sobre ativos intangíveis ao longo do período em análise. A amostra inclui 19 instituições bancárias, as quais representam 88,8% do produto bancário português em 2022. Os dados foram recolhidos a partir dos relatórios e contas anuais, resultando num total de 170 relatórios analisados ao longo de nove anos. Foram realizadas análises estatísticas para examinar tendências e testar associações entre os níveis de divulgação, a dimensão dos bancos e o seu produto bancário.

**Resultados:** Os resultados revelam uma tendência consistente de aumento na divulgação de ativos intangíveis ao longo do período estudado. Esse aumento tornou-se particularmente pronunciado após a alteração da IAS 38 em 2016, sugerindo que as mudanças regulatórias tiveram um papel significativo no fortalecimento das práticas de reporte. No entanto, não foi encontrada qualquer associação estatisticamente significativa entre o nível de divulgação e a dimensão ou rentabilidade dos bancos. Estes resultados indicam que as práticas de reporte de ativos intangíveis parecem ser impulsionadas principalmente por pressões regulamentares e requisitos de transparência, e não pela escala institucional ou pelo desempenho financeiro.

**Limitações:** O estudo limita-se a instituições bancárias a operar em Portugal, o que pode restringir a generalização das conclusões a outros países ou setores. Além disso, o índice de divulgação, embora cuidadosamente construído, depende da interpretação da informação reportada, o que pode envolver algum grau de subjetividade.

**Originalidade:** O estudo reforça a literatura ao suprir uma lacuna relevante através de uma análise longitudinal de nove anos do sistema bancário português. A aplicação de um índice de divulgação permite avaliar com maior precisão o papel das características institucionais e das alterações regulatórias na promoção da transparência, aprofundando a compreensão dos determinantes do relato de ativos intangíveis.

**Palavras-Chave:** *Ativos Intangíveis; Divulgação; Norma IAS 38; Setor bancário; Modelo de Cooke.*

## References/Referências Bibliográficas

- Abhayawansa, S., & Guthrie, J. (2016). Does intellectual capital disclosure in analysts' reports vary by firm characteristics? *Advances in Accounting, incorporating Advances in International Accounting*, 1(1), 1-13. <https://doi.org/10.1016/j.adiac.2016.04.002>
- Agresti, A. (2013). *Categorical Data Analysis*. Wiley.
- Alhabshi, S. M., Rashid, H. M., Agil, S. K., & Ahmed, M. U. (2017). Financial reporting of intangible assets in Islamic finance. *International Journal of Islamic Finance*, 9(2), 190-195. <https://doi.org/10.1108/IJIF-08-2017-0021>
- Al-Sharawi, B. (2020). Determinants of disclosure of intangible assets for the Commercial banking sector in Egypt. *The Scientific Journal of Accounting Studies*, 2, 397-429. <https://doi.org/10.21608/sjar.2020.119394>
- Ball, R. (2006). International Financial Reporting Standards (IFRS): pros and cons for investors. *Accounting and Business Research*, 1(1), 5-27. <https://doi.org/10.1080/00014788.2006.9730040>
- Cooke, T. E. (1989). Disclosure in the Corporate Annual Reports of Swedish Companies. *Accounting and Business Research*, 19(74), 113-124. <https://doi.org/10.1080/00014788.1989.9728841>
- Couto, M. A. (2013). *Cumprimento dos Requisitos de Divulgação dos Ativos Intangíveis*. Dissertação de mestrado apresentada ao Instituto Superior de Contabilidade e Administração de Aveiro, Universidade de Aveiro.
- Gebhardt, G., & Novotny-Farkas, Z. (2011). Mandatory IFRS Adoption and Accounting Quality of European Banks. *Journal of Business Finance & Accounting*, 38(3), 289-333. <https://doi.org/10.1111/j.1468-5957.2011.02242.x>
- Gelb, D. S. (2002). Intangible Assets and Firms' Disclosures: An Empirical. *Journal of Business Finance & Accounting*, 29(3), 3-4. <https://doi.org/10.1111/1468-5957.00438>
- Hussinki, H., King, T., Dumay, J., & Steinhöfel, E. (2025). Accounting for intangibles: a critical review. *Journal of Accounting Literature*, 47(5), 27-51. <https://doi.org/10.1108/JAL-05-2022-0060>
- Lev, B. (2001). *Intangibles: Management, Measurement, and Reporting*. Brookings Institution Press. Retrieved from <https://www.jstor.org/stable/10.7864/j.ctvcj2rf2>
- Ma, C., Awan, R. U., Ren, D., Alharthi, M., Haider, J., & Kouser, R. (2022). The IFRS adoption, accounting quality, and banking performance: An evaluation of susceptibilities and financial stability in developing economies. *PLoS ONE*, 17(7), 1-16. <https://doi.org/10.1371/journal.pone.0265688>
- Ma, S., & Zhang, W. (2023). How to improve IFRS for intangible assets? A milestone approach. *China Journal of Accounting Research*, 16(1), 1-25. <https://doi.org/10.1016/j.cjar.2022.100289>
- Marôco, J. (2021). *Análise Estatística com o SPSS Statistics* (Vol. 8ª edição). ReportNumber. <https://doi.org/9789899676374>
- Mazzi, F., Slack, R., Tsalavoutas, I., & Tsoligkas, F. (2022). Exploring investor views on accounting for R&D costs under IAS 38. *J. Account. Public Policy*, 41(1), 1-24. <https://doi.org/10.1016/j.jaccpubpol.2022.106944>
- Regulamento (CE) N.º 1126/2008. (2008, Novembro 3). Adaptação de determinadas normas internacionais de contabilidade. Comissão Europeia.
- Regulamento (UE) 2015/2231. (2015, Dezembro 2). Alteração ao Regulamento (CE) n.º 1126/2008. Comissão Europeia.
- Regulamento N.º 1606/2002. (2002, julho 19). Relativo à aplicação das normas internacionais de contabilidade. Parlamento Europeu e do Conselho.

- Rodrigues, A. M., Silva, M. d., & Dueñas, M. d. (2013). Divulgação de informação sobre os ativos intangíveis: evidência empírica nos bancos em Portugal no período 2001-2009. *Sociedade, Contabilidade e Gestão*, 8(2), 127-144. [https://doi.org/10.21446/scg\\_ufrj.v8i2.13294](https://doi.org/10.21446/scg_ufrj.v8i2.13294)
- Rodrigues, J. (2025). *Sistema de Normalização Contabilística - SNC Explicado* (10.<sup>a</sup> Edição ed.). Lisboa: Porto Editora.
- Seetharaman, A., Balachandran, M., & Saravanan, A. (2004). Accounting treatment of goodwill: yesterday, today and tomorrow: Problems and prospects in the international perspective. *Journal of Intellectual Capital*, 5(1), 131-152. <https://doi.org/10.1108/14691930410512969>
- Verrecchia, R. E. (2001, Dezembro). Essays on disclosure. *Journal of Accounting and Economics*, 97-180. [https://doi.org/10.1016/S0165-4101\(01\)00025-8](https://doi.org/10.1016/S0165-4101(01)00025-8)

## Session V – “Responsible Business: ESG, Tax and Society”

Chair: Albertina Paula Monteiro

*Porto Accounting and Business School (ISCAP)*

### ***Why does the Market Applaud what Accounting Punishes in the Utilities sector?***

### ***Porque é que o mercado aplaude o que a contabilidade pune no setor das Utilities?***

**Maria Elisabete Neves.** *Polytechnic of Coimbra, Coimbra Business School|ISCAC, Quinta Agrícola - Bencanta, 3045-231 Coimbra, Portugal, & Research Centre for Natural Resources Environment and Society (CERNAS), Polytechnic Institute of Coimbra, Bencanta, 3045-601 Coimbra, Portugal & CEOS, ISCAP, Polytechnic of Porto, Porto, Portugal. mneves@iscac.pt*

**António Dias.** *Universidade de Trás-os-Montes e Alto Douros & CETRAD, Vila Real, Portugal. acgdias@gmail.com*

#### **Abstract**

**Purpose:** This study investigates the relationships between corporate governance mechanisms, Environmental, Social and Governance (ESG) practices, and financial performance in the European utilities sector. The sector is characterised by intensive capital requirements, strict regulatory oversight, and increasing pressure for sustainable transformation, placing it at the centre of the sustainability discourse. Companies operating in this field must balance the provision of essential infrastructure services with the imperative to decarbonise operations and align with ambitious climate targets, such as those outlined in the European Green Deal. Despite growing academic and professional interest in ESG and governance dynamics, empirical evidence on their implications for performance remains fragmented and contradictory. Recent research calls for more nuanced approaches that go beyond aggregate scores to examine differential effects between performance metrics and time horizons (Christensen et al., 2024; Persakis et al., 2024). This study addresses these gaps by exploring how governance attributes—such as board gender diversity, CEO duality, board size, remuneration, audit committee specialisation, and the scope of ESG reporting, affect three complementary performance measures: Return on Equity (ROE), Return on Assets (ROA), and Earnings per Share (EPS). The purpose is to uncover whether the market's

valuation of sustainability and governance practices diverges from short-term accounting returns, and to provide insights for managers, investors, and regulators regarding the temporal dynamics of value creation in a sector undergoing profound transformation.

**Methodology:** The research employs dynamic panel data analysis on 73 listed utilities from Portugal, Spain, France, Italy, and Germany over 2015–2024. These five Western European countries offer regulatory homogeneity with sufficient cross-country variation in governance practices. The system GMM estimator (Arellano & Bover, 1995; Blundell & Bond, 1998) addresses endogeneity and captures performance dynamics, given potential reverse causality and performance persistence. Three dependent variables capture different performance dimensions: ROE (shareholder perspective), ROA (operational efficiency), and EPS (market valuation). Independent variables include ESG reporting scope, gender diversity, CEO duality, board size, remuneration, and audit committee specialisation. Company size and solvency serve as controls. This multi-dimensional approach enables comparative analysis of how governance and sustainability factors influence different performance metrics within the same firms, responding to calls for more nuanced empirical strategies (Christensen et al., 2024; Menicucci & Paolucci, 2024).

**Results:** The empirical results reveal that the relationship between governance mechanisms, ESG practices, and financial performance is neither uniform nor straightforward, varying systematically across performance metrics in ways that invite careful interpretation. Considering first the scope of ESG reporting, a compelling divergence emerges; while it negatively affects Return on Equity, it simultaneously enhances both Return on Assets and Earnings per Share. This pattern suggests that the compliance costs associated with comprehensive sustainability reporting, documented by Imperiale et al. (2023) as particularly burdensome for utilities, initially pressure shareholder returns. Yet these same investments appear to generate operational efficiencies that improve asset utilisation and, crucially, are recognised by financial markets as value-relevant, consistent with Christensen et al. (2024), who find that investors price environmental performance, and with Veeravel et al. (2023), who interpret such practices as signals of management quality. The implication is that ESG reporting imposes short-term accounting costs while building long-term market value, a temporal decoupling that managers and investors should acknowledge. A remarkably similar pattern emerges for gender diversity on corporate boards. Increased female representation depresses both ROE and ROA, pointing to short-term adaptation costs as boards adjust their dynamics and priorities, a finding that resonates with Shakil (2021) and Almarayeh (2023). However, the strongly positive effect on EPS tells a different story: markets appear to value diversity as a governance quality signal, anticipating long-term benefits in risk management and stakeholder relations. This interpretation gains theoretical weight from Menicucci and Paolucci (2024), who, drawing on critical mass theory, show that diversity's positive effects in European utilities materialise only beyond certain thresholds, and from Liu (2023), who links diverse boards to fewer environmental violations. Once again, what accounting temporarily penalises, the market rewards. The effects of leadership structure are more ambivalent. CEO duality positively influences ROE, offering support for stewardship theory and echoing Sun et al. (2023), who find that unified leadership can foster innovation by streamlining decisions. Yet duality simultaneously depresses EPS, revealing market scepticism about concentrated power—an agency theory concern validated by Persakis et al. (2024), who show that powerful CEOs may compromise reporting quality. This tension suggests, as La Rocca et al. (2024) argue, that the optimal leadership configuration depends on context, including the characteristics of the leader and the presence of countervailing governance mechanisms. Board size presents yet another trade-off. Larger boards enhance ROE and ROA, consistent with Menicucci and Paolucci (2024) and Febe Christine et al. (2024), who emphasise the value of diverse expertise in the technically complex utilities sector. However, the negative relationship with EPS indicates market concerns about

coordination costs and decision-making inefficiencies, a concern empirically grounded in Chindasombatcharoen et al. (2022), who identify a threshold beyond which larger boards become counterproductive. Here, the benefits of breadth must be weighed against the costs of complexity. Finally, remuneration and audit committee expertise yield more contained effects. Higher board compensation associates negatively with EPS, signalling potential agency problems as theorised by Wu (2013) and Kweh et al. (2022), while audit committee expertise reduces ROE, possibly reflecting the compliance costs of rigorous oversight, a nuance captured by Zalata et al. (2018) and Neville et al. (2019). Neither variable significantly affects the other performance metrics, suggesting their influence is primarily channelled through market perceptions rather than operational channels. Taken together, these findings weave a coherent narrative: governance and sustainability practices often impose short-term accounting costs while simultaneously building long-term market value. The market's willingness to look beyond temporary earnings pressure and reward strategic commitments to diversity, sustainability, and sound governance suggests a sophisticated valuation perspective that managers would do well to emphasise in their communications, and that investors should integrate into their analysis. The utilities sector, with its long investment horizons and intense stakeholder scrutiny, may be precisely the context where such temporal divergences are most pronounced and most meaningful.

**Research Limitations:** This study is limited by its geographic scope (five Western European countries) and sectoral focus (utilities only), which restrict generalisability to other contexts. Unobservable factors such as corporate culture and regulatory enforcement could not be fully captured, while aggregate ESG scores mask nuanced effects of individual pillars.

**Originality:** This research shows that governance and ESG effects vary across performance metrics within the same firm, challenging the view of performance as a single construct. It provides novel evidence of time lags between short-term accounting costs and long-term market recognition. ESG reporting and gender diversity reduce short-term returns yet increase market valuations. The study also advances a contingency perspective on leadership structures, showing that optimal configurations depend on firm-specific circumstances. Methodologically, three complementary performance measures in a dynamic panel framework address endogeneity and enable nuanced analysis. Practically, the findings support framing sustainability as long-term strategy, reinforce EU diversity directives, and suggest regulatory transition periods between ESG costs and benefits.

**Keywords:** *Corporate Governance; ESG; Financial Performance; Utilities Sector; Dynamic Panel Data.*

## References

- Almarayeh, T. (2023). Board gender diversity and firm performance: The moderating role of financial constraints. *International Journal of Finance & Economics*.
- Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of Econometrics*, 68(1), 29-51.
- Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics*, 87(1), 115-143.
- Chindasombatcharoen, P., Chatjuthamard, P., Jiraporn, P., & Treepongkaruna, S. (2022). Achieving sustainable development goals through board size and innovation. *Corporate Social Responsibility and Environmental Management*, 29(5), 1359-1371.

- Christensen, H. B., Serafeim, G., & Sikochi, A. (2024). Why is corporate virtue in the eye of the beholder? The case of ESG ratings. *The Accounting Review*, 99(2), 123-150.
- Febe Christine, F., Bukhori, I., & Sari, R. C. (2024). Governance mechanisms and ESG performance in global energy companies. *Energy Economics*, 120, 106-125.
- Imperiale, F., Pizzi, S., & Lippolis, S. (2023). ESG and financial performance in the utilities sector: A compliance cost perspective. *Journal of Cleaner Production*, 385, 135-152.
- Kweh, Q. L., Ting, I. W. K., Lu, W. M., & Le, H. T. M. (2022). Executive compensation and firm performance: The role of corporate governance. *Managerial and Decision Economics*, 43(6), 2345-2362.
- La Rocca, M., Fasano, F., & Campanella, F. (2024). Women in dual leadership roles and firm performance in Europe. *Corporate Governance: An International Review*, 32(1), 78-102.
- Liu, C. (2023). Board gender diversity and environmental violations: International evidence. *Business Strategy and the Environment*, 32(4), 1567-1585.
- Menicucci, E., & Paolucci, G. (2024). Gender diversity and ESG performance in European utilities: A critical mass perspective. *Journal of Sustainable Finance & Investment*, 14(2), 245-268.
- Neville, F., Byron, K., Post, C., & Ward, A. (2019). Board independence and corporate misconduct: A cross-national meta-analysis. *Journal of Management*, 45(6), 2338-2368.
- Persakis, A., Tsakalos, I., & Georgakopoulos, G. (2024). CEO power, ESG commitment and earnings management. *Journal of International Financial Management & Accounting*, 35(1), 89-124.
- Shakil, M. H. (2021). Environmental, social and governance performance and financial risk: Moderating role of ESG controversies and board gender diversity. *Resources Policy*, 72, 102-144.
- Sun, X., Zhang, T., & Zhu, M. (2023). CEO duality, social capital and corporate innovation in state-owned enterprises. *Journal of Business Research*, 158, 113-132.
- Veeravel, V., Tyagi, P., & Yadav, S. S. (2023). ESG practices as signals of management quality in emerging markets. *Journal of Business Ethics*, 185(3), 567-591.
- Wu, C. H. (2013). Executive compensation and firm performance: Evidence from the banking industry. *Journal of Banking & Finance*, 37(8), 2825-2841.
- Zalata, A. M., Tauringana, V., & Tingbani, I. (2018). Audit committee financial expertise, gender diversity, and earnings management. *Journal of Accounting in Emerging Economies*, 8(4), 456-48

# ***Hybrid welfare provision in Portugal: institutional configurations and distributional effects on public service delivery (1925 - 2025)***

## ***Provisão híbrida de bem-estar em Portugal: configurações institucionais e efeitos distributivos na prestação de serviços públicos (1925 - 2025)***

**Rita Almeida Silva.** *Lisbon Accounting & Business School - Instituto Superior de Contabilidade e Administração de Lisboa - Instituto Politécnico de Lisboa, Portugal.*  
risilva@iscal.ipl.pt

### **Abstract**

**Purpose:** This study analyses the evolution of hybrid welfare provision in Portugal between 1925 and 2025. It seeks to identify the institutional frameworks through which interactions between the state, private sector, and third sector produce different distributional outcomes in public service provision. Specifically, the study aims to understand the influence of the interaction between the commodification of provision, the state's regulatory capacity, and the macroeconomic context on equity of access to public services.

**Methodology:** The study combines a systematic literature review conducted in accordance with PRISMA guidelines with a qualitative comparative analysis (QCA). The review focused on scientific literature relating to the Portuguese context that was published between 1925 and 2025, and that was identified in databases such as Scopus, Google Scholar, and Semantic Scholar. Following application of the eligibility criteria, 25 studies were analysed. A case matrix and a truth table were constructed based on the systematic coding of the literature, enabling the identification of combinations of institutional conditions associated with different outcomes in the provision of public services.

**Results:** The results suggest that hybrid welfare provision does not have consistent distributional effects. In contexts of austerity and weak state regulatory capacity, these models tend to reinforce socio-economic and territorial inequalities, primarily through cost-sharing with users and the territorial concentration of private providers. However, when accompanied by robust regulatory capacity and adequate public funding, the participation of private or third-sector actors can be compatible with the objectives of universal access and organisational efficiency improvements.

**Research limitations:** The analysis is based exclusively on previously published studies; consequently, the results depend on the scope and focus of the existing literature. Furthermore, coding institutional variables involves interpreting the results reported in the analysed studies, which is an inherent limitation of systematic review-based approaches.

**Originality:** This article contributes to the literature on welfare mixes and hybrid governance by proposing an approach based on the institutional configurations of welfare provision in Portugal. Combining a systematic review of the literature with Qualitative Comparative Analysis (QCA), the study shows that the effects of distributing welfare through hybrid provision depend on the specific institutional combinations involved, offering a more comprehensive analysis than approaches that examine the participation of the private or third sectors in providing public services in isolation.

**Keywords:** *Hybrid Welfare Provision; Welfare Mix; The State's Regulatory Capacity; Social Economy; Public Services; Portugal.*

## Resumo

**Objetivo:** O estudo analisa a evolução da provisão híbrida de bem-estar em Portugal entre 1925 e 2025, procurando identificar as configurações institucionais sob as quais a articulação entre Estado, setor privado e terceiro setor produz diferentes resultados distributivos na prestação de serviços públicos. Em particular, pretende compreender de que forma a interação entre mercantilização da provisão, capacidade reguladora do Estado e contexto macroeconómico influencia a equidade no acesso aos serviços públicos.

**Metodologia:** O estudo combina uma revisão sistemática da literatura conduzida segundo as orientações do protocolo PRISMA com análise comparativa qualitativa (Qualitative Comparative Analysis – QCA). A revisão incidiu sobre literatura científica relativa ao contexto português publicada entre 1925 e 2025 e identificada em bases de dados como Scopus, Google Scholar e Semantic Scholar. Após aplicação dos critérios de elegibilidade, foram analisados 25 estudos. Com base na codificação sistemática da literatura, foi construída uma matriz de casos e uma tabela de verdade, permitindo identificar combinações de condições institucionais associadas a diferentes resultados na provisão de serviços públicos.

**Resultados:** Os resultados indicam que a provisão híbrida de bem-estar não produz efeitos distributivos uniformes. Em contextos de austeridade e fraca capacidade reguladora do Estado, os modelos híbridos de provisão tendem a reforçar desigualdades socioeconómicas e territoriais, nomeadamente através da partilha de custos com os utilizadores e da concentração territorial de prestadores privados. Em contrapartida, quando acompanhada por capacidade reguladora robusta e financiamento público adequado, a participação de atores privados ou do terceiro setor pode coexistir com objetivos de universalidade no acesso e com melhorias de eficiência organizacional.

**Limitações:** A análise baseia-se exclusivamente em estudos previamente publicados, pelo que os resultados dependem da disponibilidade e do foco empírico da literatura existente. Adicionalmente, a codificação das variáveis institucionais implica um processo interpretativo dos resultados reportados nos estudos analisados, o que constitui uma limitação inerente às abordagens baseadas em revisão sistemática.

**Originalidade:** O artigo contribui para a literatura sobre welfare mix e governação híbrida ao propor uma abordagem baseada em configurações institucionais da provisão de bem-estar em Portugal. Ao combinar revisão sistemática da literatura com Qualitative Comparative Analysis (QCA), o estudo demonstra que os efeitos distributivos da provisão híbrida dependem das combinações institucionais específicas em que esta

ocorre, ultrapassando abordagens que analisam isoladamente a participação do setor privado ou do terceiro setor na prestação de serviços públicos.

**Palavras-Chave:** *Provisão Híbrida De Bem-Estar; Welfare Mix; Capacidade Reguladora Do Estado; Economia Social; Serviços Públicos; Portugal.*

## References/Referências Bibliográficas

- Almeida, V. (2016). Portuguese private institutions for social solidarity in the context of austerity: The network of social canteens. *Interações: Sociedade e as Novas Modernidades*, (30), 5–23.
- Billis, D. (2010). *Hybrid organizations and the third sector: Challenges for practice, theory and policy*. Bloomsbury Publishing.
- Botelho, M. C., Mauritti, R., Nunes, N., & Craveiro, D. (2014). *A mão esquerda e a mão direita do Estado português: Que atuais tendências?* (Observatório das Desigualdades e-Working Paper N° 4/2014). Observatório das Desigualdades (CIES-Iscte).
- Bode, I. (2025). Hybrid care and bifurcated welfare state development: The case of homeless assistance in Germany. *Berliner Journal für Soziologie*, 1-15.
- Brandsen, T., & Pestoff, V. (2006). Co-production, the third sector and the delivery of public services. *Public Management Review*, 8(4), 493–501.
- Cardoso, J. L., & Rocha, M. M. (2009). O seguro social obrigatório em Portugal (1919–1928): Acção e limites de um Estado previdente. *Análise Social*, 44(192), 439–470.
- Caria, T. H. (2013). Serviço social em organizações não lucrativas: Um estudo empírico quantitativo sobre o trabalho profissional burocrático em Portugal. *Textos & Contextos (Porto Alegre)*, 12(1), 173–195.
- Cerdeira, L., Cabrito, B., & Mucharreira, P. R. (2024). Os desafios da educação superior: Os sucessos e as tensões dos 50 anos de democracia em Portugal. *Contribuciones a las Ciencias Sociales*, 17(13), e13965.
- Costa, N., & Valente, M. J. A. P. (2016). A influência da gestão público-privada no setor das águas em Portugal. *Egitania Scientia*, 2(19), 35–50.
- Cunha, A. C. S. (2019). *A evolução das parcerias público-privadas hospitalares em Portugal* [Dissertação de mestrado integrado, Universidade do Porto, Faculdade de Medicina].
- Diogo, V. (2010). *Dinâmicas de inovação social e suas implicações no desenvolvimento espacial: Três iniciativas do terceiro sector no Norte de Portugal* [Dissertação de mestrado].
- Esping-Andersen, G. (1999). *Social foundations of postindustrial economies*. Oxford university press.
- Esping-Andersen, G. (2019). *Social foundations of postindustrial economies*. In *Social Stratification, Class, Race, and Gender in Sociological Perspective*, Second Edition (pp. 830-845). Routledge.
- Escoval, A., Santos, A. T. L., & Barbosa, P. (2016). Contributo para a compreensão do financiamento da saúde em Portugal: O caso dos cuidados de saúde primários, dos cuidados hospitalares e dos cuidados continuados. *Tempus – Actas de Saúde Coletiva*, 10(1), 17–27.
- Evers, A. (2005). Mixed welfare systems and hybrid organizations: Changes in the governance and provision of social services.
- Farnsworth, K., & Irving, Z. M. (Eds.). (2015). *Social policy in times of austerity*. Bristol: Policy Press.
- Ferreira, S. (2015). New paths for third-sector institutions in a welfare state in crisis: The case of Portugal. *Nonprofit Policy Forum*, 6(2), 213–241.

- Garcia, C. M. S. (2016). Governança: Uma estratégia para o terceiro setor face ao contexto de austeridade. *Revista de Psicologia da Criança e do Adolescente*, 7(1-2), 171-191.
- Guerra, I. (2011). As políticas de habitação em Portugal: À procura de novos caminhos. *Cidades, Comunidades e Territórios*, (22), 41-68.
- Goiana-da-Silva, F., Sá, J., Cabral, M., Guedes, R., Vasconcelos, R., Sarmiento, J. & Araújo, F. (2024). The Portuguese NHS 2024 reform: transformation through vertical integration. *Frontiers in Public Health*, 12, 1389057.
- Hespanha, P. (2024). A dignidade do trabalho ea Economia Social em Portugal. *Cadernos EBAPE. BR*, 22(3), 2023-0027.
- Hodge, G., & Greve, C. (2021). What can public administration scholars learn from the economics controversies in public-private partnerships?. *Asia Pacific Journal of Public Administration*, 43(4), 219-235.
- Imbó, K. A. dos S. (2023). Cooperação para o desenvolvimento e terceirização da ajuda bilateral: Uma análise da Fundação Fé e Cooperação. *Jornal de Políticas Educacionais*, 17(2), e87103.
- Jorge, S. (2022). Mais e melhor habitação pública: Um olhar a partir da Amadora e do outrora Bairro de Santa Filomena. *Cidades, Comunidades e Territórios*, (45), 1-16.
- Kazepov, Y., & Cefalo, R. (2022). The territorial dimension of social investment in Europe. In *Handbook on urban social policies* (pp. 55-71). Edward Elgar Publishing.
- Kickert, W. (2011). Public management reform in continental Europe: National distinctiveness. *Public Administration*, 89(3), 801-818.
- Le Grand, J. (2009). *The other invisible hand: Delivering public services through choice and competition*. Princeton University Press.
- Lopes, A. (2001). Lógicas do terceiro sector português na gestão do complexo VIH/SIDA. *Revista Crítica de Ciências Sociais*, (61), 169-206.
- Mendes, A. (2020). Relevance of Human Communities in the Social Economy Sector in Portugal and the Responses to Covid-19. *Economia Social – Leituras & Debates*, 11.
- Marques, A. P. (2023). Sentidos de (des)regulação do mercado de trabalho no setor da saúde em Portugal. *Saúde e Sociedade*, 32(2), e220855pt.
- Marques, A. P., & Falleiros, I. (2017). Metamorfoses na política, valores empresariais e governação em saúde em Portugal. *Configurações*, (19), 72-88.
- Maurício, C., & Vicente, J. (2022). O papel do Serviço Social num serviço de apoio domiciliário em tempos de pandemia: Uma experiência no contexto português. *Emancipação*, 21, 1-16.
- Maximiano Lopes, I., Bracons, H., & Espírito Santo, I. (2022). A intervenção do Serviço Social nas Unidades de Cuidados Continuados Integrados em tempo de pandemia: Estudo realizado nas ULDM da Comunidade Intermunicipal do Oeste. *Revista Temas Sociais*, (2), 87-106.
- Monteiro, A. A. (2022). The Social Economy in Portugal: legal regime and socio-economic characterization. *CIRIEC-España, revista de economía pública, social y cooperativa*, (106), 85-121.
- Nunes, A., & Matos, A. (2017). Análise do desempenho dos hospitais em parceria público privada no Serviço Nacional de Saúde português. *Jornal Brasileiro de Economia da Saúde*, 9(3), 304-309.
- Nunes, M. C. C., & Ramalho, N. (2023). O impacto da pandemia COVID-19 nas organizações do terceiro setor da região algarvia (Portugal). *Temporalis*, 23(45), 310-324.
- Osborne, S. (2020). *Public service logic: Creating value for public service users, citizens, and society through public service delivery*. Routledge.
- Padeira, M., & Ferreira, R. (2023). Geografia das respostas sociais para as pessoas idosas em Portugal. *Serviço Social & Sociedade*, 146(3), e- 6628349.

- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ*, 372(71), 1-9. <https://doi.org/10.1136/bmj.n71>.
- Pato, I., & Pereira, M. (2013). Habitação Social na Área Metropolitana de Lisboa: Tendências da gestão municipal contemporânea. *Cidades, Comunidades e Territórios*, (26), 1–15.
- Pettricrew, M., & Roberts, H. (2006). *Systematic reviews in social sciences*. Blackwell Oxford.
- Pollitt, C., & Bouckaert, G. (2017). *Public management reform: A comparative analysis-into the age of austerity*. Oxford university press.
- Powell, M., & Miller, R. (2016). Seventy years of privatizing the British national health service?. *Social Policy & Administration*, 50(1), 99-118.
- Ragin, C. C. (2009). *Redesigning social inquiry: Fuzzy sets and beyond*. University of Chicago press.
- Sampieri, R. H., Collado, C. F., & Lucio, P. B. (2022). *Metodologia de pesquisa*. (5th Ed). Mc Graw-Hill.
- Sarmiento, J. M., & da Silva, D. N. (2020). A Eficiência Dos Hospitais Em Regime PPP Em Portugal. *De Concorrência e Regulação Competition And Regulation*, 15, 15-48.
- Streeck, W. (2020). *Critical encounters: Capitalism, democracy, ideas*. Verso Books.
- Schneider, C. Q., & Wagemann, C. (2012). *Set-theoretic methods for the social sciences: A guide to qualitative comparative analysis*. Cambridge University Press.
- Santos, M. G., & Neto-Mendes, A. A. (2024). Gestão privada das escolas públicas: Percepções de docentes portugueses. *Revista de Estudos Teóricos y Epistemológicos en Política Educativa*, 9, 1–22.
- Simões, J. (2004). A avaliação do desempenho de hospitais. *Revista Portuguesa de Saúde Pública* (Volume temático, Nº 4), 91–120.
- Truninger, M., Teixeira, J., Horta, A., Alexandre, S., & Silva, V. A. (2013). Estado social e alimentação escolar: Criatividade na austeridade. *Forum Sociológico*, (23), 11–19.
- Vilarinho, E. (2020). Articulações entre o público e o privado na educação de infância em Portugal. *Educação em Revista*, 36.

## ***Personal income taxation in Portugal: progressive versus flat tax***

### ***A tributação do rendimento das pessoas singulares em Portugal: imposto progressivo versus flat tax***

**Liliana Ivone da Silva Pereira.** *Politécnico do Cávado e do Ave, Portugal.*  
lpereira@ipca.pt

**Bruna Abreu Barbosa.** *Politécnico do Cávado e do Ave, Portugal.*  
a24269@alunos.ipca.pt

#### **Abstract**

**Purpose:** This article examines the perception of Certified Accountants regarding the application of a flat tax system for personal income tax in Portugal (PIT), evaluating its potential impact on tax equity, income redistribution, and tax efficiency. The research seeks to answer the question: 'Is a flat tax a viable alternative for personal income taxation in Portugal?'

**Methodology:** The approach combines a review of national and international literature on progressive and proportional tax systems, which includes an analysis of the experience of some European countries that have adopted the flat tax (such as Estonia, Romania, Bulgaria or Hungary), and it also includes an empirical study conducted via a questionnaire administered to chartered accountants registered with their respective professional associations (n = 107). Descriptive analysis of the data assessed perceptions of fairness and the constitutionality of the PIT, as well as the potential acceptance of a reform based on a single rate.

**Results:** The results show that approximately half of those surveyed believe that the current income tax system does not fully fulfil its constitutional objective of reducing inequalities. Some respondents identified a flat tax as a possible solution. However, the majority recognise significant risks, such as reduced tax revenue and less income redistribution. An international review shows that countries that have adopted a flat tax have often reversed the decision due to difficulties with public financing and increased inequality.

**Research limitations:** The sample size is small and not representative of the entire professional group. International data varies depending on economic and demographic contexts that differ from those in Portugal.

**Originality:** The article takes a multidisciplinary approach, combining legal, economic, fiscal and empirical perspectives to provide up-to-date evidence on the views of professionals working directly within the Portuguese tax system. There is still a lack of research on the subject of the flat tax in the national literature.

**Keywords:** *Income Tax; Flat Tax; Progressive Taxation; Tax Fairness; Chartered Accountants; Portuguese Tax System.*

## Resumo

**Objetivo:** O presente artigo analisa a perceção dos Contabilistas Certificados sobre a aplicação de um sistema de *flat tax* em sede de Imposto sobre o Rendimento das Pessoas Singulares (IRS) em Portugal, avaliando os impactos potenciais sobre a equidade fiscal, redistribuição do rendimento e eficácia tributária. A investigação procura responder à questão: poderá a *flat tax* constituir uma alternativa adequada ao modelo progressivo atualmente em vigor?

**Metodologia:** A abordagem combina uma revisão de literatura nacional e internacional sobre sistemas progressivos e proporcionais, que inclui a análise da experiência de alguns países europeus que adotaram a *flat tax* (como Estónia, Roménia, Bulgária ou Hungria), e um estudo empírico desenvolvido através de um questionário aplicado a Contabilistas Certificados inscritos na respetiva Ordem profissional (n=107). Os dados foram analisados de forma descritiva, avaliando perceções sobre equidade, constitucionalidade do IRS português e potencial aceitação de uma reforma baseada numa taxa única.

**Resultados:** Os resultados mostram que cerca de metade da amostra considera que o IRS atual não cumpre plenamente o objetivo constitucional de diminuição das desigualdades, sendo que parte dos inquiridos identifica a *flat tax* como solução possível. Contudo, a maioria reconhece riscos significativos como a redução das receitas fiscais e menor redistribuição de rendimentos. A revisão internacional evidencia que países que adotaram *flat tax* frequentemente recuaram devido a dificuldades de financiamento estatal e aumento de desigualdades.

**Limitações:** A amostra é limitada e não representativa de toda a classe de profissionais. Dados internacionais variam consoante contextos económicos e demográficos distintos de Portugal.

**Originalidade:** O artigo integra simultaneamente uma perspetiva jurídica, económico-fiscal e empírica, oferecendo evidência atualizada sobre as perceções dos profissionais que operam diretamente no sistema fiscal português. Há um contributo ainda escasso na literatura nacional sobre o tema da *flat tax*.

**Palavras-Chave:** *IRS; Flat Tax; Tributação Progressiva; Equidade Fiscal; Contabilistas Certificados; Sistema Fiscal Português.*

## References/Referências Bibliográficas

- Andrade, F. (2020). Os Aspetos Chatos do “Flat Tax”.  
<https://www.jornaldenegocios.pt/opiniao/colunistas/fernando-rocha-andrade/detalhe/os-aspetos-chatos-do-flat-tax>.
- Andrade, F. (2021). Flat Tax: O Que É e Quem Ganha com Ele?.  
[https://www.revistarespublica.com/uploads/1/3/3/9/133951517/andrade\\_1.pdf](https://www.revistarespublica.com/uploads/1/3/3/9/133951517/andrade_1.pdf)

- Barrios, S., Ivaškaitė- Tamošiūnė, V., Maftei, A., Narazani, E. & Varga, J. (2018). Progressive Tax Reforms in Flat Tax Countries. <https://www.econstor.eu/bitstream/10419/202253/1/jrc-wptrs201802.pdf>
- Blum, W. & Kalven, H. (1953). *The Uneasy Case for Progressive Taxation*. Chicago: Chicago University Press.
- Bonga-Bonga, L., & Perold, M. (2014). A CGE simulation of a flat tax as a possibility for tax reform in South Africa. *The Journal of applied Business Research*, 30(6), 1693-1708. <https://doi.org/10.19030/jabr.v30i6.8883>.
- Brzezinski, M. & Akarsu, M. Z. (2025). "The impact of flat taxes on income and wealth inequality, Working Papers 406, Leibniz Institut für Ost- und Südosteuropaforschung (Leibniz Institute for East and Southeast European Studies). Available at <https://www.econstor.eu/bitstream/10419/316317/1/1924592576.pdf>.
- Casalta Nabais, J. (2008). *Por um Estado Fiscal Suportável – Estudos de Direito Fiscal*, Volume II. Almedina
- Casalta Nabais, J. (2013). *Direito Fiscal*. 7.<sup>a</sup> Edição. Almedina.
- Diamond, P. & Saez, E. (2011). The Case for a Progressive Tax: From Basic Research to Policy Recommendations. <https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.25.4.165>
- Duncan, D. & Sabirianova, K. Z. (2010): Does labor supply respond to a flat tax? Evidence from the Russian tax reform, IZA Discussion Papers, No. 4257, Institute for the Study of Labor (IZA), Bonn, <https://nbn-resolving.de/urn:nbn:de:101:1-20090720231>
- Fernandes, A. (2010). *A Economia das Finanças Públicas*. Almedina.
- Fischer, D.- H., & Ferraro, S. (2019). A proposal for a simple average- based progressive taxation system. *Public Sector Economics*, 43(2), 141–165. DOI: 10.3326/pse.43.2.2.
- Freixo, M.J.V (2012). *Metodologia científica: fundamentos, métodos e técnicas*,4. Instituto Piaget.
- Fuest, C., Peichl, A. & Schaefer, T. (2008). Is a flat tax reform feasible in a grown-up democracy of Western Europe? A simulation study for Germany. *International Tax and Public Finance*, 15, 620–636. <https://doi.org/10.1007/s10797-008-9071-2>.
- Hall, R. & Rabushka, A. (1995). *The Flat Tax*. 2nd edition. Stanford: Hoover Institution Press.
- Iniciativa Liberal (2024). Programa Eleitoral Legislativas 2024. <https://iniciativoliberal.pt/wp-content/uploads/2024/02/Por-um-Portugal-com-Futuro-Programa-Eleitoral-IL-2024.pdf>
- Keen, M., Kim, Y. & Varsano, R. (2006). The Flat Tax(es): Principles and Evidence. *IMF Working Paper No. WP/06/218*. International Monetary Fund.
- Mengden, A. (2024). International Tax Competitiveness Index 2024. <https://taxfoundation.org/research/all/global/2024-international-tax-competitiveness-index/>.
- Morais, R. (2004). *Os Impostos no Século XXI*. Universidade Católica Portuguesa.
- Nunes, A. (2006). *Os Impostos no Parlamento Português – Sistemas Fiscais e Doutrinas Fiscais nos Séculos XIX e XX*. Publicações Dom Quixote.
- Paulus, A. & Peichl, A. (2009). Effects of Tax Reforms in Western Europe. *Journal of Policy Modeling*, 31(5), 620-636.
- Peichl, A. (2014). Flat-Rate Tax Systems and Their Effect on Labor Markets. <https://wol.iza.org/articles/flat-rate-tax-systems-and-their-effect-on-the-economy/long>
- Pereira, P. (2007). *Estudos sobre o IRS: Rendimentos de Capitais e Mais-Valias*. Almedina.

- Piketty, T., Saez, E. & Stantcheva, S. (2014). Optimal Taxation of Top Labor Incomes: A Tale of Three Elasticities. *American Economic Journal: Economic Policy*, 6(1), 230–271. <http://dx.doi.org/10.1257/pol.6.1.230>.
- Popescu, M., Militaru, E., Stanila, L., Vasilescu, M. & Cristescu, A. (2019). Flat-Rate Versus Progressive Taxation? An Impact Evaluation Study for the Case of Romania. <https://www.mdpi.com/2071-1050/11/22/6405>
- Rawls, J. (2001). *Uma Teoria da Justiça*. 2ª edição. Editorial Presença.
- Reis, F.L. (2011). *Como elaborar uma dissertação de mestrado: segundo bolonha*, 2. Pactor
- Stanchev, K. (2023). *The fate of flat tax in the EU countries* (mBank-CASE Seminar Proceedings N. 175). CASE – Center for Social and Economic Research. Available at <https://case-research.eu/publications/the-fate-of-flat-tax-in-the-eu-countries/>.
- The Law Library of Congress. (2006). Estonia: Taxation System and Implementation of Flat Income Tax. <https://tile.loc.gov/storage-services/service/ll/llgldr/2019669497/2019669497.pdf>.
- Wheaton, B. (2023). “The Macroeconomic effects of tax progressivity: Evidence from the Eastern European flat-tax reforms.”, available at [http://www.anderson.ucla.edu/sites/default/files/document/2024-03/flat\\_tax.pdf](http://www.anderson.ucla.edu/sites/default/files/document/2024-03/flat_tax.pdf).
- Wheaton, B. (2020). The Macroeconomic Effects of Flat Taxation: Evidence from a Panel of Transition Economies.

# ***ESG Performance across Traditional, Renewable, and Energy Transition Firms: A Comparative Firm-Level Analysis***

## ***Desempenho ESG através de Empresas Tradicionais, Renováveis e de Transição Energética: Uma Análise Comparativa ao Nível da Empresa***

**Naima Bentouir.** University of Ain Temouchent, (LMELSPM), Algeria and CICET-FCVC Portugal. [naima.bentouir@univ-temouchent.edu.dz](mailto:naima.bentouir@univ-temouchent.edu.dz)

**Ana Pinto Borges.** ISAG - European Business School, Porto, Portugal & Research Center in Business Sciences and Tourism (CICET-FCVC), Porto, Portugal; E-mail address: [anaborges@isag.pt](mailto:anaborges@isag.pt)

**Elvira Vieira.** ISAG - European Business School, Research Center in Business Science and Tourism (CICET-FCVC), Porto, Portugal & IPVC-Polytechnic Institute of Viana do Castelo and Applied Management Research Unit (UNIAG), and Instituto Politécnico de Bragança, Portugal. [elvira.vieira@isag.pt](mailto:elvira.vieira@isag.pt)

### **Abstract**

**Purpose:** This study examines the relationship between Environmental, Social, and Governance (ESG) performance and financial outcomes in the energy sector, with a particular emphasis on accounting-based performance measurement, sustainability reporting, corporate governance, and regulatory and taxation-related implications. At the firm level, the study compares three companies representing distinct energy business models and stages of the energy transition: a traditional oil and gas firm (Exxon Mobil), a renewable energy utility (EDP), and an energy transition technology provider (Siemens). The analysis highlights how differences in ESG performance translate into variations in accounting indicators, disclosure practices, and market valuation, which are increasingly relevant for financial reporting standards, ESG assurance, and tax-related incentive frameworks.

**Methodology:** The study adopts a descriptive and exploratory empirical design using secondary annual data for the period 2020–2024. ESG performance is measured using composite ESG scores obtained from a well-established international ESG data provider widely used in academic research and professional ESG assessment, ensuring methodological consistency and comparability.

Financial performance is assessed using accounting-based indicators (ROA and ROE), derived from audited financial statements, and a market-based valuation proxy (Tobin's Q). The reliance on accounting data ensures alignment with financial reporting

frameworks and allows ESG performance to be interpreted in relation to profitability, capital structure, and value creation key concerns in accounting and taxation research.

The selection of Exxon Mobil, EDP, and Siemens is theoretically justified, as each firm represents a distinct regulatory environment, governance structure, and ESG reporting model within the energy sector. The analysis relies on comparative trend and tabular methods, which are appropriate for exploratory research on ESG disclosure and value relevance across heterogeneous business models.

**Results:** The findings reveal substantial heterogeneity in the ESG financial performance relationship across energy business models. Exxon Mobil exhibits declining environmental performance alongside volatile ROA and ROE driven by commodity price cycles. Despite weaker environmental scores, Tobin's Q increases during high-profit periods, indicating that short-term accounting profitability outweighs environmental considerations in market valuation for carbon-intensive firms.

EDP demonstrates consistently strong ESG performance, particularly in social and governance dimensions, reflecting compliance-oriented sustainability reporting within a regulated utility framework. However, high leverage and moderate profitability result in a Tobin's Q below unity, suggesting that ESG performance functions primarily as a risk-management and regulatory compliance mechanism rather than an immediate value driver.

Siemens achieves high and stable ESG scores across all pillars, supported by strong environmental innovation and governance quality. This is associated with improved accounting profitability, lower leverage, and a consistently high Tobin's Q, indicating that markets positively price ESG information when it is embedded in innovation-driven business models and transparent governance structures.

Overall, the results show that ESG performance does not uniformly enhance firm value. Its accounting and market relevance depends on business model characteristics, innovation capacity, governance quality, and the regulatory and fiscal context in which firms operate.

**Research Limitations:** This study is limited by the small number of firms, reliance on a single ESG data provider, and the descriptive nature of the analysis, which does not allow causal inference. Differences in regulatory and taxation regimes affecting ESG disclosure, environmental taxation, and sustainability incentives are not explicitly controlled for and may influence both ESG scores and financial outcomes.

**Originality:** This study contributes to the literature by providing a firm-level comparative analysis linking ESG performance to accounting indicators, sustainability reporting, governance structures, and market valuation within the energy sector. It advances accounting and taxation research by illustrating how ESG performance interacts with financial reporting outcomes and by offering insights relevant to regulators, standard setters, investors, and policymakers concerned with ESG disclosure requirements, green taxation, and sustainability-linked financial regulation.

**Keywords:** *ESG Score; Financial indicators; Energy Sector; Sustainability Reporting; Comparative Analysis.*

# ***Determinants and Impacts of Financial Reporting Quality***

**Cláudia Filipa Freitas de Sousa.** ISCAP, Politécnico do Porto, Portugal. 2221743@iscap.ipp.pt

**Albertina Paula Moreira Monteiro.** CEOS.PP, ISCAP, Politécnico do Porto; CICF; OSEAN, Portugal. amonteiro@iscap.ipp.pt

## **Abstract**

**Purpose:** This study aims to develop and evaluate a model that examines the determinants and impacts of financial reporting quality. Specifically, the study will assess whether ethical leadership, corporate governance, new technologies, external audit quality, and internal control systems positively contribute to the quality of financial information, and whether this, in turn, has a direct impact on organizational performance and competitiveness.

**Methodology:** This study uses a questionnaire survey administered to managers of Portuguese and Spanish companies. The collected data are analyzed using Structural Equation Modelling to assess the proposed conceptual model.

**Results:** Based on the existing literature, this study expects that companies with stronger ethical leadership, effective corporate governance, higher technological intensity, greater external audit quality, and more robust internal control systems will exhibit higher levels of financial reporting quality. In turn is expected to contribute positively to their overall business performance.

**Research limitations:** Due to the large number of firms, the study will use a non-probability convenience sample, which may limit the generalizability of the results.

**Originality:** This study develops and assessment a complex causal model that examines the relationships between key determinants of financial reporting quality and the business success of Portuguese and Spanish firms.

**Keywords:** *Financial Reporting Quality; Business Performance; Competitive Advantage; New Technologies; Ethics; Corporate Governance; Technological Intensity; Audit Quality.*

## **References**

- Barth, M. E., Beaver, W. H., & Landsman, W. R. (2001). The relevance of the value relevance literature for financial accounting standard setting: Another view. *Journal of Accounting and Economics*, 31(1–3), 77–104. [https://doi.org/10.1016/S0165-4101\(01\)00019-2](https://doi.org/10.1016/S0165-4101(01)00019-2)
- Barth, M. E., Landsman, W. R., & Lang, M. H. (2007). International accounting standards and accounting quality. *Journal of Accounting Research*, 46(3), 467–498. <http://ssrn.com/abstract=1029382>

- Brown, M. E., & Treviño, L. K. (2006). Ethical leadership: A review and future directions. *The Leadership Quarterly*, 17(6), 595–616. <https://doi.org/10.1016/j.leaqua.2006.10.004>
- Brown, M. E., Treviño, L. K., & Harrison, D. A. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97(2), 117–134. <https://doi.org/10.1016/j.obhdp.2005.03.002>
- Bushman, R. M., Landsman, W. R., & Smith, A. J. (2010). The pros and cons of regulating corporate reporting: A critical review of the arguments. *Accounting and Business Research*, 40(3), 259–273. <https://doi.org/10.1080/00014788.2010.9663400>
- Bushman, R. M., & Smith, A. J. (2001). Financial accounting information and corporate governance. *Journal of Accounting and Economics*, 32(1–3), 237–333. [https://doi.org/10.1016/S0165-4101\(01\)00027-1](https://doi.org/10.1016/S0165-4101(01)00027-1)
- Chen, J. (2019). The augmenting effects of artificial intelligence on marketing performance (Doctoral dissertation, University of Texas at El Paso). [https://digitalcommons.utep.edu/open\\_etd/1976](https://digitalcommons.utep.edu/open_etd/1976)
- Christensen, H. B., Hail, L., & Leuz, C. (2021). Mandatory CSR and sustainability reporting: Economic analysis and literature review. *Review of Accounting Studies*, 26, 1176–1248. <https://doi.org/10.1007/s11142-021-09609-5>
- Comissão de Normalização Contabilística. (2013). Sistema de normalização contabilística. <https://www.cnc.min-financas.pt/snc2016.html>
- Darmawan, A. (2023). Audit quality and its impact on financial reporting transparency. *Golden Ratio of Auditing Research*, 3(1), 32–45. <https://doi.org/10.52970/grar.v3i1.375>
- Dechow, P. M., Ge, W., & Schrand, C. M. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, 50(2–3), 344–401. <https://doi.org/10.1016/j.jacceco.2010.09.001>
- Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *Journal of Law and Economics*, 26(2), 327–349. <https://doi.org/10.1086/467038>
- Financial Accounting Standards Board (FASB). (2010). Conceptual framework for financial reporting. <https://www.fasb.org>
- Hamza, M., & Damak Ayadi, S. (2023). The perception of audit quality among financial statements users, preparers and auditors in Tunisia. *Journal of Accounting and Management Information Systems*, 22(2). <https://doi.org/10.24818/jamis.2023.02002>
- Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, 31(1–3), 405–440. [https://doi.org/10.1016/S0165-4101\(01\)00018-0](https://doi.org/10.1016/S0165-4101(01)00018-0)
- International Accounting Standards Board (IASB). (2018). Conceptual framework for financial reporting. <https://www.ifrs.org/content/dam/ifrs/publications/pdf-standards/english/2021/issued/part-a/conceptual-framework-for-financial-reporting.pdf>
- Jarne-Jarne, J. I., Callao-Gastón, S., Marco-Fondevila, M., & Llana-Macarulla, F. (2022). The impact of organizational culture on the effectiveness of corporate governance to control earnings management. *Journal of Risk and Financial Management*, 15(9). <https://doi.org/10.3390/jrfm15090379>
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*,

- 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
- Kalita, N., & Tiwari, R. K. (2023). Audit quality review: An analysis projecting the past, present, and future. *Scientific Annals of Economics and Business*, 70(3), 353–377. <https://doi.org/10.47743/saeb-2023-0032>
- Leuz, C., & Wysocki, P. D. (2016). The economics of disclosure and financial reporting regulation: Evidence and suggestions for future research. *Journal of Accounting Research*, 54(2), 525–622. <https://doi.org/10.1111/1475-679X.12115>
- Li, S., Ragu-Nathan, B., Ragu-Nathan, T. S., & Subba Rao, S. (2006). The impact of supply chain management practices on competitive advantage and organizational performance. *Omega*, 34(2), 107–124. <https://doi.org/10.1016/j.omega.2004.08.002>
- Pareek, S., Soni, V., & Maidullah, S. (2025). Corporate governance practices and the quality of financial reporting in Indian companies. *Academy of Marketing Studies Journal*, 29(5).
- Phornlaphatrachakorn, K. (2019). Internal control quality, accounting information usefulness, regulation compliance, and decision-making success: Evidence from canned and processed foods businesses in Thailand. *International Journal of Business*, 24(2).
- Powell, T. C. (2001). Competitive advantage: Logical and philosophical considerations. *Strategic Management Journal*, 22(9), 875–888. <https://doi.org/10.1002/smj.173>
- Richard, P. J., Devinney, T. M., Yip, G. S., & Johnson, G. (2009). Measuring organizational performance: Towards methodological best practice. *Journal of Management*, 35(3), 718–804. <https://doi.org/10.1177/0149206308330560>
- Sawaya, C., Jabbour Al Maalouf, N., Hanoun, R., & Rakwi, M. (2025). Impact of auditor independence, expertise, and industry experience on financial reporting quality. *Asia Pacific Management Review*, 30(1). <https://doi.org/10.1016/j.apmr.2025.100357>
- Soudani, S. N. (2012). The usefulness of an accounting information system for effective organizational performance. *International Journal of Economics and Finance*, 4(5), 136–145. <https://doi.org/10.5539/ijef.v4n5p136>
- Van Beest, F., Braam, G., & Boelens, S. (2009). Quality of financial reporting: Measuring qualitative characteristics. Nijmegen Center for Economics Working Paper. <http://www.ru.nl/nice/workingpapers2>

