



**International Conference on
Sustainable Finance
(ICSF22)
Madrid, 15th-16th September**

Coordinadores:

Ana B. Alonso-Conde, URJC

Javier Rojo-Suárez, URJC

José Manuel Vassallo, UPM

Proceedings of the International Conference on Sustainable Finance (ICSF22)

*“Ensuring economic growth and quality of life
across generations”*

Madrid, 15th-16th September, 2022

Rey Juan Carlos University
Facultad de Ciencias Jurídicas y Sociales
Paseo de los Artilleros s/n 28032 Madrid (Spain)

International Conference on Sustainable Finance (ICSF22)

Madrid, 15th-16th September, 2022

ICSF22 Proceedings

Edited by Ana B. Alonso-Conde and Javier Rojo-Suárez



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Sustainable investment is experiencing a boom characterized by high growth rates in activity and firm support from investors and issuers, even under the uncertainty derived from the COVID19 pandemic. Simultaneously, a lot of regulation related to climate change and sustainable principles is being developed, which is also directly affecting the financial sector. This environment implies changes in the business model of companies, meaning that the entire value chain is progressively integrating ESG objectives. This fact emphasizes the importance of environmental risks, as well as social and governance issues, in order to properly manage them and ensure the necessary balance.

Importantly, the transition towards a sustainable economy, which considers the reduction of environmental damage and translates into positive effects on the environment and climate, requires large investments and innovation in infrastructure, as well as greater progress in the development of analytical tools that allow a better evaluation of specific financing projects. Furthermore, apart from policies promoting renewable energies and other sustainable investments, it should be noted that transport accounts for almost one third of the European Union's greenhouse gas emissions and that the decarbonization of the mobility sector is one of its main objectives. Therefore, in addition to important topics directly related to sustainability, such as **ESG, green financing**, operational risks or renewables, the conference has **specific sessions on infrastructure management and financing such as transport**.

Hence, ICSF22 aims to analyze investment and financing policies that account for the ESG factors of economic activity and investments. In this framework, the conference discussed research on ESG, **renewable energies and their impact on economic growth**, the financing of the transition to a green economy through innovative financial mechanisms such as **green bonds**, the **financing of renewable energy, transport and other essential infrastructures**, the **management of environmental, social and governance risks**, among other related topics. There was also a debate on the implementation of these issues in the curricula of higher degree students.

Remarkably, sustainable finance is being strongly promoted at the institutional, scientific, and academic levels. On this basis, the challenge of this Conference is both to create a forum for the discussion of changes and trends in this context, as well as to promote the exchange and dissemination of scientific knowledge in research on sustainable economics, green finance and infrastructure development.

Ana B. Alonso Conde and Javier Rojo-Suárez
Program Co-Chairs ICSF22
Rey Juan Carlos University

Madrid, September 16 2022



ICSF22. "Ensuring economic growth and quality of life across generations"

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Miguel Vázquez-Vázquez (Rey Juan Carlos University)

Instituto Español de Analistas Financieros



Cátedra de Economía y Finanzas Sostenibles. University of Málaga.



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Rey Juan Carlos University



Vicerrectorado de Extensión Universitaria

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PROGRAMA / PROGRAMME

Universidad Rey Juan Carlos
Salón de Grados Edificio Departamental
Paseo de los Artilleros s/n 28032, Madrid

| Día 15 de septiembre de 2022 / 15th September 2022: | |
|--|---|
| 9:00 - 9:30 h | Registro y recogida de documentación (Salón de Grados Edificio Departamental) / Registration |
| 9:30 - 10:00 h | Acto Inaugural por Andrés Martínez Fernández, Vicerrector de Calidad y Estrategia URJC/ Opening Ceremony |
| 10:00 - 10.30 h | Conferencia inaugural de José Manuel Vassallo-Magro, Universidad Politécnica de Madrid: "Funding and Financing to Ensure Sustainable Mobility" Inaugural lecture by José Manuel Vassallo-Magro, Universidad Politécnica de Madrid: "Funding and Financing to Ensure Sustainable Mobility" |
| 10:30 - 11.00 h | Pausa café / Coffee break |
| 11:00 - 11:30 h | Conferencia de Antonio Lara-Galera, Universidad Politécnica de Madrid: "¿Es el coste financiero de los proyectos de infraestructura consistente con su nivel de riesgo? El caso de las autopistas de peaje" Lecture by Antonio Lara-Galera, Universidad Politécnica de Madrid: "¿Es el coste financiero de los proyectos de infraestructura consistente con su nivel de riesgo? El caso de las autopistas de peaje" |
| 11:30 - 13:00 h | Sesión de comunicaciones 1 / Session 1 |
| 13:00 - 13:30 h | Conferencia de María de los Ángeles Baeza-Muñoz, Universidad de Granada: "Reflexiones sobre la viabilidad económico-financiera de los contratos de concesión" Lecture by María de los Ángeles Baeza-Muñoz, Universidad de Granada: "Reflexiones sobre la viabilidad económico-financiera de los contratos de concesión" |
| 13.45 - 15:00 h | Comida / Lunch |
| 15:00 - 16:30 h | Sesión de comunicaciones 2 / Session 2 |
| 16:30 - 17:30 h | Mesa redonda "Los ratings ESG y su importancia para las PYMEs", moderada por Jesús López Zaballos, Instituto Español de Analistas Financieros Alfredo Echevarría – Director de Análisis – Lighthouse. IEAF Javier Ruiz Capillas Zarranz- Gestor de fondos – Santander AM Teresa Royo – Directora, Governance, Risk and Compliance KPMG en España Round Table "Los ratings ESG y su importancia para las PYMEs", chaired by Jesús López Zaballos, Instituto Español de Analistas Financieros |
| 17:30 - 17:45 h | Descanso / Break |
| 17:45 - 19:15 h | Sesión de comunicaciones 3 / Session 3 |
| 19:15 - 20:00 h | Cóctel de bienvenida / Cocktail |

| Día 16 de setiembre de 2022 / 16th September 2022: | |
|---|--|
| 09:00 - 10:30 h | Sesión de comunicaciones 4 / Session 4 |
| 10:30 - 11:00 h | Pausa café / Coffee break |
| 11:00 - 11:30 h | Conferencia de Juan Carlos Reboredo, Universidad de Santiago de Compostela: "The Impact of Climate Transition Risks on Financial Stability. A Systemic Risk Approach" Lecture by Juan Carlos Reboredo, University of Santiago de Compostela: "The Impact of Climate Transition Risks on Financial Stability. A Systemic Risk Approach" |
| 11:30 - 13:30 h | Sesión de comunicaciones 5 / Session 5 |
| 13.45 - 15:00 h | Comida / Lunch |
| 15:00 - 16:30 h | Sesión de comunicaciones 6 / Session 6 |
| 16:30 - 17:30 h | Mesa redonda "Desafíos de la transformación del sector bancario: la sostenibilidad como eje estratégico", moderada por Juan David González-Ruiz, Universidad Nacional de Colombia. Juan Carlos Delrieu - Director of Strategy and Sustainability, Asociación Española de Banca. Sandra Abella - Eco Business Fund. Mauricio Velez. Director Sostenibilidad Asobancaria, Colombia. Carolina Lopez - UNEP FI - Principios de Banca Responsable Carlos Serrano - International Finance Corporation - Climate Finance LAC Round Table "Desafíos de la transformación del sector bancario: la sostenibilidad como eje estratégico", chaired by Juan David González-Ruiz, Universidad Nacional de Colombia |
| 17:30 - 18:00 h | Entrega del premio del congreso y clausura / Prize-giving ceremony and closing sesión |
| 21:00 - 23:00 h | Cena en el <i>Jardín de Arzábal</i> (Museo Reina Sofía) / Dinner at <i>Jardín de Arzábal</i> (Reina Sofía Museum) |

Programa detallado por sesiones de comunicaciones/ Detailed programme by sessions:

| | |
|-----------------|--|
| 9:30 - 10:00 h | Acto Inaugural por Andrés Martínez Fernández, Vicerrector de Calidad y Estrategia URJC/ Opening Ceremony |
| 10:00 - 10.30 h | Conferencia inaugural de José Manuel Vassallo-Magro, Universidad Politécnica de Madrid: "Funding and Financing to Ensure Sustainable Mobility" Inaugural lecture by José Manuel Vassallo-Magro, Universidad Politécnica de Madrid: "Funding and Financing to Ensure Sustainable Mobility" |
| 11:00 - 11:30 h | Conferencia de Antonio Lara-Galera, Universidad Politécnica de Madrid: "¿Es el coste financiero de los proyectos de infraestructura consistente con su nivel de riesgo? El caso de las autopistas de peaje" Lecture by Antonio Lara-Galera, Universidad Politécnica de Madrid: "¿Es el coste financiero de los proyectos de infraestructura consistente con su nivel de riesgo? El caso de las autopistas de peaje" |

Sesión 1 (15 septiembre de 11:30 a 13:00) moderada por María del Mar Miralles Quirós (Universidad de Extremadura):
Session 1 (15 September from 11:30 to 13:00) chaired by María del Mar Miralles-Quirós (University of Extremadura):

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| <p>Carmen Orden-Cruz Universidad Rey Juan Carlos, Spain</p> <p>Pedro Luis Vega pedroluis.vega@uva.es Universidad de Valladolid, Spain</p> | Climate change and the corporate financing decision: the role of green growth options. |
| <p>Andreas Lichtenberger andreas.lichtenberger@newschool.edu The New School, New York, USA</p> <p>Joao Paulo Braga The New School, New York, USA</p> <p>Willi Semmler The New School, New York, USA</p> | Green Bonds for the Transition to a Low Carbon Economy |

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|---|---|
| <p>Florinda Silva fsilva@eeg.uminho.pt School of Economics and Management, University of Minho, Portugal</p> <p>André Ferreira School of Economics and Management, University of Minho, Portugal</p> <p>Maria Ceu Cortez School of Economics and Management, University of Minho, Portugal</p> | <p>The performance of green bond portfolios under climate uncertainty: a comparative analysis with conventional and black bond portfolios</p> |
| <p>Félix Javier Villalba Romero felix.villalba@urjc.es Universidad Rey Juan Carlos, Spain</p> <p>Champika Liyanage University of Central Lancashire, United Kingdom</p> <p>Angela Vodden AVAC Limited, United Kingdom</p> | <p>Funding and Financing Limitations in Transport Infrastructure Projects Procured through Public Private Partnerships.</p> |
| <p>José Luis Miralles-Quirós miralles@unex.es Universidad de Extremadura, Spain</p> <p>María del Mar Miralles Quirós Universidad de Extremadura, Spain</p> | <p>Promoting green investment with an alternative trading strategy.</p> |

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| <p>13:00 - 13:30 h</p> | <p>Conferencia de María de los Ángeles Baeza-Muñoz, Universidad de Granada: "Reflexiones sobre la viabilidad económico-financiera de los contratos de concesión" Lecture by María de los Ángeles Baeza-Muñoz, Universidad de Granada: "Reflexiones sobre la viabilidad económico-financiera de los contratos de concesión"</p> |
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Sesión 2 (15 de septiembre de 15:00 a 16:30) moderada por María Concepción Chamorro Domínguez (Universidad Rey Juan Carlos):

Session 2 (15 September from 15:00 to 16:30) chaired by María Concepción Chamorro-Domínguez (Rey Juan Carlos University):

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| <p>Mario La Torre Sapienza University of Rome, Italy</p> <p>Mavie Cardi m.cardi@unilink.it Link Campus University, Italy</p> <p>Sabrina Leo Sapienza University of Rome, Italy</p> <p>Jacopo Schettini Standard Ethics, Italy</p> | <p>ESG Ratings, scores, and opinions. The state of the art in literature.</p> |
| <p>Laura Garrido Maza l.garrido@upm.es Universidad Politécnica de Madrid, Spain</p> | <p>Evaluating the sustainability of government support for Spanish shadow toll highways.</p> |
| <p>Juan David González-Ruiz jdgonza3@unal.edu.co Universidad Nacional de Colombia, Colombia</p> <p>Juan Camilo Mejía-Escobar Universidad Nacional de Colombia, Colombia</p> <p>Javier Rojo-Suárez Universidad Rey Juan Carlos, Spain</p> <p>Ana Belén Alonso-Conde Universidad Rey Juan Carlos, Spain</p> | <p>Green bonds for renewable energy in Latin America and the Caribbean.</p> |

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| <p>Félix Javier Villalba Romero felix.villalba@urjc.es Universidad Rey Juan Carlos, Spain</p> <p>Champika Liyanage University of Central Lancashire, United Kingdom</p> | <p>Applying a Performance Measurement System (PMS) to evaluate key factors in European PPP Road Projects.</p> |
| <p>Clara I. González clara.gonzalez@bde.es Banco de España, Spain</p> <p>Ricardo Gimeno Banco de España, Spain</p> | <p>The Role of a Green Factor in Stock Prices. When Fama & French Go Green.</p> |
| <p>16:30 - 17:30 h</p> | <p>Mesa redonda “Los ratings ESG y su importancia para las PYMEs”, moderada por Jesús López Zaballos, Instituto Español de Analistas Financieros Alfredo Echevarría – Director de Análisis – Lighthouse. IEAF Javier Ruiz Capillas Zarranz- Gestor de fondos – Santander AM Teresa Royo – Directora, Governance, Risk and Compliance KPMG en España Round Table “Los ratings ESG y su importancia para las PYMEs”, chaired by Jesús López Zaballos, Instituto Español de Analistas Financieros</p> |

Sesión 3 (15 de septiembre de 17:45 a 19:15) moderada por José Ángel Zúñiga Vicente (Universidad Rey Juan Carlos)
Session 3 (15 September from 17:45 to 19:15) chaired by José Ángel Zúñiga-Vicente (Rey Juan Carlos University)

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| <p>Karen Gloria Vargas Santander kg.vargassantander@um.es Universidad de Murcia, Spain</p> <p>Samuel Baixauli-Soler Universidad de Murcia, Spain</p> <p>Susana Álvarez-Diez Universidad de Murcia, Spain</p> <p>María Belda-Ruiz Universidad de Murcia, Spain</p> | <p>Corporate social responsibility, country sustainability and firm performance: A multilevel analysis</p> |
| <p>María de la Concepción Chamorro Domínguez concepcion.chamorro@urjc.es Universidad Rey Juan Carlos, Spain</p> | <p>Integration of sustainability into the director's duty of care in large companies</p> |
| <p>Maria Luisa Vercher-Ferrandiz Universitat Politècnica de Valencia, Spain</p> <p>Ana Maria Garcia-Bernabeu Universitat Politècnica de Valencia, Spain</p> <p>Adolfo Hilario-Caballero Universitat Politècnica de Valencia, Spain</p> <p>David Pla-Santamaria Universitat Politècnica de Valencia, Spain</p> | <p>Sustainable Finance and multi-criteria decision making approaches: a review</p> |

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| <p>Javier Perote Peña perote@usal.es Universidad de Salamanca, Spain</p> <p>José David Vicente Lorente Universidad de Salamanca, Spain</p> <p>José Ángel Zúñiga Vicente Universidad Rey Juan Carlos, Spain</p> | <p>The nonlinear impact of Covid-19 on ESG indices</p> |
| <p>Lourdes Arco Castro Universidad de Granada, Spain</p> <p>Almudena Macías Guillén Universidad Rey Juan Carlos, Spain</p> <p>María Victoria López Pérez mvlopez@ugr.es Universidad de Granada, Spain</p> <p>Lázaro Rodríguez Ariza Universidad de Granada, Spain</p> | <p>¿Influyen los inversores socialmente responsables en la proactividad y reactividad del desempeño medioambiental corporativo?</p> |

16 de septiembre (September, 16):

Sesión 4 (16 de septiembre de 9:00 a 10:30) moderada por María Victoria López Pérez (Universidad de Granada)

Session 4 (16 September from 9:00 to 10:30) chaired by María Victoria López-Pérez (University of Granada)

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| <p>Ángela María Callejón Gil Universidad de Málaga, Spain</p> <p>José Ramón Sánchez Serrano Universidad de Málaga, Spain</p> <p>Ana María Rosales Pérez anamrp@uma.es Universidad de Málaga, Spain</p> <p>Macarena Torroba Díaz Universidad de Málaga, Spain</p> | <p>El comportamiento pro-ambiental de los futuros profesionales financieros: Una perspectiva de género.</p> |
| <p>Rubén Lago Balsalobre ruben.lago@urjc.es Universidad Rey Juan Carlos, Spain</p> | <p>Impact and trends for areas of special interest in the field of sustainable finance.</p> |
| <p>Inés López López ineslop@um.es Universidad de Murcia, Spain</p> <p>Clara Álvarez de Toledo Martínez Universidad de Murcia, Spain</p> <p>Longinos Marín Rives Universidad de Murcia, Spain</p> | <p>ODSesiones, un proyecto de gobernanza medioambiental y social en la universidad de Murcia.</p> |

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| <p>Sara Rodríguez Gómez Universidad de Granada, Spain</p> <p>María Angustias Navarro Ruiz Universidad de Granada, Spain</p> <p>Raquel Garde Sánchez Universidad de Granada, Spain</p> <p>Lázaro Rodríguez Ariza Universidad de Granada, Spain</p> | <p>Incidencia de la formación universitaria en la ética en los negocios sobre la visión social empresarial.</p> |
| <p>Jorge Aracil-Jordá jaracil@takeblc.com International University of La Rioja, Spain</p> <p>Inés González-González International University of La Rioja, Spain</p> <p>José Antonio Clemente-Almendros International University of La Rioja, Spain</p> <p>Ana Isabel Jiménez-Zarco Open University of Catalonia, Spain</p> | <p>Sostenibilidad Social en mujeres emprendedoras a través de la implantación de estrategias de marketing en redes sociales para mejorar el performance en sus empresas.</p> |
| <p>11:00 - 11:30 h</p> | <p>Conferencia de Juan Carlos Reboredo, Universidad de Santiago de Compostela: "The Impact of Climate Transition Risks on Financial Stability. A Systemic Risk Approach" Lecture by Juan Carlos Reboredo, University of Santiago de Compostela: "The Impact of Climate Transition Risks on Financial Stability. A Systemic Risk Approach"</p> |

Sesión 5 (16 de septiembre de 11:30 a 13:30) moderada por Ana Belén Alonso Conde (Universidad Rey Juan Carlos)
Session 5 (16 September from 11:30 to 13:30) chaired by Ana Belén Alonso-Conde (Rey Juan Carlos University)

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| <p>María del Mar Miralles-Quirós marmiralles@unex.es Universidad de Extremadura, Spain</p> <p>José Luis Miralles-Quirós Universidad de Extremadura, Spain</p> | <p>How do Ibex-35 companies communicate their commitment to the Sustainable Development Goals?</p> |
| <p>Elena Ferrer elena.ferrer@unavarra.es Public University of Navarre, Spain</p> <p>Cristina del Río Public University of Navarre, Spain</p> <p>Francisco J. López-Arceiz Public University of Navarre, Spain</p> | <p>Investors' optimism and market sentiment: Evidence from European companies disclosing sustainability reports.</p> |
| <p>Virginia Martínez Torres virgim05@ucm.es Universidad Complutense de Madrid, Spain</p> | <p>Optimización del tratamiento fiscal para favorecer la rentabilidad de las finanzas sostenibles.</p> |
| <p>Javier Rojo-Suárez javier.rojo@urjc.es Universidad Rey Juan Carlos, Spain</p> <p>Ana Belén Alonso Conde Universidad Rey Juan Carlos, Spain</p> | <p>Short-run and long-run effects of ESG policies on value creation and the cost of equity of firms.</p> |

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| <p>Khairieh Amarneh Universidad de Granada, Spain</p> <p>María Victoria López Pérez mvlopez@ugr.es Universidad de Granada, Spain</p> <p>Raquel Garde Sánchez Universidad de Granada, Spain</p> <p>Lázaro Rodríguez Ariza Universidad de Granada, Spain</p> | <p>The impact of CSR disclosure on cost of debt and equity capital.</p> |
| <p>Lucía Galicia Sanguino lucia.galicia@urjc.es Universidad Rey Juan Carlos, Spain</p> | <p>Valoración del contrato de cesión del servicio de bicicleta pública BiciMAD mediante opciones reales.</p> |

Sesión 6 (16 de septiembre de 15:00 a 16:30) moderada por Lázaro Rodríguez Ariza (Universidad de Granada)
Session 6 (16 September from 15:00 to 16:30) chaired by Lázaro Rodríguez Ariza (University of Granada)

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| <p>Jesús Mauricio Flórez Parra jmfp@ugr.es Universidad de Granada, Spain</p> <p>Gracia Rubio Martín Universidad Complutense de Madrid, Spain</p> <p>Carmen Rapallo Serrano Universidad Complutense de Madrid, Spain</p> | <p>El crowdfunding y sus implicaciones con la Responsabilidad Social Corporativa.</p> |
| <p>Miguel Vázquez Vázquez miguel.vazquez@urjc.es Universidad Rey Juan Carlos, Spain</p> | <p>Evolution of cost of capital for renewable energy projects under a dynamic approach.</p> |

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| <p>Nini Johana Marín-Rodríguez Universidad Nacional de Colombia, Colombia</p> <p>Juan David González-Ruiz jdgonza3@unal.edu.co Universidad Nacional de Colombia, Colombia</p> <p>Sergio Botero Universidad Nacional de Colombia, Colombia</p> | <p>Dynamic linkages between green bonds, CO2 emissions, and oil prices.</p> |
| <p>Diego F. Raza-Carrillo diego.raza@uasb.edu.ec Universidad Andina Simón Bolívar, Ecuador</p> <p>David A. Grey-Castillo Universidad San Francisco de Quito, Ecuador</p> <p>Wilson E. Araque-Jaramillo wilson.araque@uasb.edu.ec Universidad Andina Simón Bolívar, Ecuador</p> | <p>Una banca sostenible sí es posible: el caso de un banco ecuatoriano.</p> |

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| <p>16:30 - 17:30 h</p> | <p>Mesa redonda “Desafíos de la transformación del sector bancario: la sostenibilidad como eje estratégico”, moderada por Juan David González-Ruiz, Universidad Nacional de Colombia. Juan Carlos Delrieu - Director of Strategy and Sustainability, Asociación Española de Banca. Sandra Abello - Eco Business Fund. Mauricio Velez. Director Sostenibilidad Asobancaria, Colombia. Carolina Lopez - UNEP FI - Principios de Banca Responsable Carlos Serrano - International Finance Corporation - Climate Finance LAC Round Table “Desafíos de la transformación del sector bancario: la sostenibilidad como eje estratégico”, chaired by Juan David González-Ruiz, Universidad Nacional de Colombia</p> |
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| <p>17:30 - 18:00 h</p> | <p>Entrega del premio Cátedra de Economía y Finanzas Sostenibles Universidad de Málaga y clausura del congreso/ Prize-giving ceremony and closing session</p> |
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CLIMATE CHANGE AND THE CORPORATE FINANCING DECISION: THE ROLE OF GREEN GROWTH OPTIONS

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Abstract: Since World Commission on Environment and Development -the Brundtland Commission- in the 1980s and its call for inter-generational equity, Sustainable Finance has expanded and progressively incorporated ESG (Environmental, Social, and Governance) principles into business decisions. This paper explores the effect of climate change on the capital structure and whether firms' green growth options moderate this relationship in a panel of all non-financial listed U.S. firms from 2007 to 2021.

The results show that financial leverage is positively related to climate change, being moderated by green growth options through new technologies and environmentally friendly products. This finding implies that climate change widens the informational gap between firm insiders and investors. Complementarily, firms' capacity to create market opportunities exerts a negative moderating effect on the relationship between climate change and leverage, as equity better protects future green growth options. Moreover, the results are reinforced in climate-sensitive industries. This research has an interesting implications. Managers should not only by paying attention to climate change but also protect future green growth options, especially in industries heavily affected by climate change. Additionally, policymakers should improve the effectiveness and disclosure of climate policy to facilitate investor alignment with climate objectives.

Keywords: sustainable finance, capital structure, climate change, ESG, environmental innovation, growth options

GREEN BONDS FOR THE TRANSITION TO A LOW CARBON ECONOMY

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Abstract:

The green bond market is emerging as an impactful financing mechanism in climate change 2 mitigation efforts. The effectiveness of the financial market for this transition to a low carbon economy 3 depends on attracting investors and removing financial market roadblocks. This paper investigates the 4 differential bond performance of green vs non-green bonds with (1) a dynamic portfolio model that integrates 5 negative, as well as positive externality effects and via (2) econometric analyses of aggregate green bond 6 and corporate energy time-series indices; as well as a cross-sectional set of individual bonds issued between 7 Jan 1, 2017, and Oct 1, 2020. The asset pricing model demonstrates that in the long-run the positive 8 externalities of green bonds benefit the economy through positive social returns. We use a deterministic and 9 a stochastic version of the dynamic portfolio approach to obtain model-driven results and evaluate those 10 through our empirical evidence using harmonic estimations. The econometric analysis of this study focuses 11 on volatility and the risk-return performance (Sharpe ratio) of green and non-green bonds and extends 12 recent econometric studies that focused on yield differentials of green and non-green bonds (evidence on the 13 yield differentials is presented in the appendix). A modified Sharpe ratio analysis, cross-sectional methods, 14 harmonic estimations, bond pairing estimations as well as regression tree methodology, indicates that green 15 bonds tend to show lower volatility and deliver superior Sharpe Ratios (while the evidence for green premia 16 is mixed). As a result, green bond investment can protect investors and portfolios from oil price and business 17 cycle fluctuations, and stabilize portfolio returns and volatility. Policymakers are encouraged to make use of 18 the financial benefits of green instruments and increase the financial flows towards sustainable economic 19 activities to accelerate a low-carbon transition.

Keywords: green bonds, innovation, climate finance, dynamic portfolio decisions

INVESTING IN GREEN BONDS, CONVENTIONAL BONDS AND THEIR “BLACK PEERS”: A PORTFOLIO PERFORMANCE COMPARISON

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Abstract: This research evaluates and compares the financial performance of green bonds, conventional bonds and “black” bonds issued on the international bond market. Based on a dataset composed of 1118 green bonds, 91939 conventional bonds and 560 black bonds we form four matched portfolios: a green bond portfolio with 302 bonds that matches with a conventional bond portfolio with 302 bonds, and a green bond portfolio with 273 bonds that matches with a black bond portfolio with 273 bonds. The performance of the bond portfolios for the period January 2015 to March 2021 is evaluated using a four factor model. The results show some evidence of underperformance of the all black bonds portfolio relative to the market and also of the matched green bond portfolio compared to the matched conventional bond portfolio when the excess returns on the conventional bond market index is used as the bond market factor. Considering the green bond market index, the results show no abnormal performance for none of the portfolios, and there are no differences regarding the performance of green, black or conventional bond portfolios. In terms of risk, the black bond portfolios have a higher exposure to the default risk factor. The analysis for different sub-periods suggest that in more recent periods the green bond portfolios perform worse than the matched conventional bond portfolio.

Keywords: green bonds, black bonds, conventional bonds, portfolio performance evaluation, sustainable and green finance.

Acknowledgments: «This paper is financed by National Funds of the FCT – Portuguese Foundation for Science and Technology within the project «UIDB/03182/2020»

**FUNDING AND FINANCING LIMITATIONS IN TRANSPORT
INFRASTRUCTURE PROJECTS PROCURED THROUGH PUBLIC PRIVATE
PARTNERSHIPS**

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Abstract: This paper aims to identify why and when governments procure transportation infrastructure projects (TIPs), through public private partnership (PPP) mechanisms, funding, and financing by private sector financiers is limited. It is believed that the reticence shown by finance institutions to invest in TIPs is directly linked to the procurement behaviours of the PPP stakeholders both during the procurement process, and the final operations phase. This research is being undertaken using a combination of quantitative and qualitative methods of data collection, predominantly utilising literature reviews, based on grounded theory, case study research as a desktop analysis, followed by a series of questionnaires to fill any gaps in information relating to the financing and funding elements of each case study. A direct consequence of the key findings emanated from the research will be the ability to recommend policy solutions which can be implemented to progress the EU Transport 2050 agenda.

Keywords: funding and financing; limitations; Public Private Partnerships (PPPs); public projects; Transport Infrastructure Projects (TIPs)

Acknowledgments: This research has been supported by the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 635973.

PROMOTING GREEN INVESTMENT WITH AN ALTERNATIVE TRADING STRATEGY

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Abstract: The popularity of green assets (stocks and bonds) has increased in recent years and especially since the launch of the 17 Sustainable Development Goals (SDGs). In that context, there are investors who want to make their conventional portfolios “greener” but do not know how. In this study, we show that the best way to improve portfolio performance is not simply to add green assets to a conventional portfolio but rather to select the best ones and choose the right proportions for them by using a two-stage approach which combines a screening test and an optimization model.

Keywords: green investment, conventional assets, performance measures, screening test, portfolio Optimization.

Acknowledgments: The authors gratefully acknowledge support from the Junta de Extremadura (Counselling of Economy, Science and Digital Agenda) and the European Regional Development Fund (“A way of doing Europe”) through grant GR21019.

ESG RATINGS, SCORES, AND OPINIONS. THE STATE OF THE ART IN LITERATURE

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Abstract:

The heterogeneity of ESG rating outcomes, due to different methodologies adopted by ESG rating providers and an unclear distinction between ratings, scores, and opinions, leads to multidimensionality of information. This study aims to analyze the state of the art of the scientific literature on ESG ratings, scores, and opinions. The analysis was conducted using both bibliometric and systematic reviews of the literature, using data visualization techniques. Our main research question is: what are the main trends analyzed in the literature on ESG ratings, scores, and opinions? Our initial hypothesis is that the existing literature tends to focus on specific issues and leaves other areas of inquiry uncovered, e.g., by not drawing appropriate distinctions in terms of methodologies, definitions, and relationships to ESG risks, while also placing less focus on the specific implications of the ESG topic for banks and financial intermediaries. Our results indicate, first, a lack of clear demarcation between the different methodologies and definitions used to assign ESG ratings and scores; implications relate to disclosure profiles and investors' use of information. Secondly, our analysis shows that -although ESG issues play an essential and growing role for the financial sector - there are still rather few studies that explicitly focus on the effects of ESG profiles from a purely banking and finance perspective.

Keywords: ESG Rating; ESG Scores; Divergence; Environmental, Social and Governance; ESG performance; ESG; Rating Process.

EVALUATING THE SUSTAINABILITY OF GOVERNMENT SUPPORT FOR SPANISH SHADOW TOLL HIGHWAYS

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Abstract: Budgetary constraints are prompting many governments to encourage private financing of transportation infrastructure through Public Private Partnerships (PPPs). Fiscal support measures have been often used to improve the financial feasibility of these projects, but also to rebalance the economics of the contracts to compensate for changes imposed by the government. This paper analyzes the awarding of subordinated public participation loans (SPPLs) to ten brownfield shadow-toll highway PPPs in Spain after additional works were imposed by the government. SPPLs are government loans, subordinated to the senior debt, that were intended to facilitate the PPP contractors the financing of the aforementioned works. This paper evaluates the financial and social impacts of the awarding of these loans to three of these projects. To that end, the participation loan repayment capacity of the PPP and the social benefits derived from the improvement in road safety are estimated in order to evaluate whether the government's decision to support these projects was justified from a social perspective. The results show that, although the government's decision was reasonable, the design of the SPPL and its awarding conditions should be improved to guarantee the public interest.

Keywords: government support; financial sustainability; infrastructure financing; public-private partnerships; shadow-toll road.

GREEN BONDS FOR RENEWABLE ENERGY IN LATIN AMERICA AND THE CARIBBEAN

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Abstract: This paper comprehensively analyzes the status of the green bond market in Latin America and the Caribbean (LAC) for the renewable energy sector, by studying all green bond issuances carried out in LAC from 2014 to 2020. Our results show that, in most cases, green bond issuers are non-financial corporations. Despite LAC's low perception of transparency, 78% of the volume issued for renewables have been externally reviewed, although these values are relatively low concerning other countries due to the important presence of private placements. Our results allow us to conclude that the barriers imposed on issuances by local governments constraint the green bond market in LAC. Furthermore, although the presence of development institutions in fostering the issuance of green bonds has improved in recent years, it is mandatory to continue making progress in this area. For that purpose, closer cooperation and alliances are essential to share responsibilities and knowledge.

Keywords: renewable energy; Latin America and Caribbean; green finance; green bonds; sustainability; sustainable development goals

APPLYING A PERFORMANCE MEASUREMENT SYSTEM (PMS) TO EVALUATE KEY FACTORS IN EUROPEAN PPP ROAD PROJECTS.

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Abstract: The objective of the paper is to illustrate how project success could be evaluated in Public Private Partnership (PPP) projects using a number of road case studies across Europe. The analysis is based on a Performance Measurement System (PMS) using a step-by-step approach. Herein, 29 performance measures (PMs) and 9 key performance indicators (KPIs) have been considered. Altogether 30 road projects developed in 16 European countries under the PPP model were selected for the analysis from a larger database that also contains projects developed under traditional contracting methods. This research offers a structured methodology to evaluate success and to explore links between different projects' performance levels and different PPP schemes and provisions. The results, which suggest a preference for small, less complex and exclusive projects, that include funding based on direct payments by the granting agencies, are consistent enough to extract recommendations for policy makers involved in PPP projects, based on experiences in Europe; it could be used as a benchmarking tool to compare success both within and across projects.

Keywords: roads; case studies; Key Performance Indicators (KPIs); Performance Management System (PMS); project success analysis; Public Private Partnership (PPP); PPP road models

ACKNOWLEDGEMENTS: The findings presented in the paper are taken from the case study database developed, COST ACTION TU1001, BENEFIT and OMEGA Centre, as part of the aforementioned projects. Their great support in completing the case study database and analysis is also very much acknowledged. Without this information, the overall European approach would not have been completed

THE ROLE OF A GREEN FACTOR IN STOCK PRICES. WHEN FAMA & FRENCH GO GREEN

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Abstract: Concerns over climate change are now mainstream, and the risks involved for financial assets have become more evident. Investors are increasingly aware of the need to incorporate climate-related considerations in their investment decisions. All this have had an impact on market valuations. In this paper, we extend the framework on the factors explaining the expected return of stocks models to add a climate change exposure factor. In order to do so, we built a portfolio that is long in companies with low carbon emissions, and short in companies with high carbon emissions. We show that this factor is relevant in the market, and allows for an approximation of climate change exposure of firms with poor disclosure of their green performance. Thus, the betas of this factor could be a useful tool for investors that want to incorporate these aspects in the management of their portfolios, and analyst interested in corporate exposure to climate change risks.

Keywords: climate change; carbon footprint; factor model; asset pricing; disclosure

Acknowledgments: We are especially thankful to Adrian van Rixtel, Alfredo Ibáñez, Andrés Alonso, Angel Gavilán, Christoph Meinerding, David Toscano, Elisa Ossola, Elsa Allman, Emiliano González, José Manuel Marques, Juan Ayuso, Juan Nave, Julio Gálvez, Lina Xie, Lucia Alessi, María Nieto, Roberto Panzica, Soledad Núñez, an anonymous referee and the attending people to the seminars of Banco de España, ICADE, the IV Workshop on Economics and Finance (UNIA – UHU), World Finance Conference, the Globally Sustainable Banking and Finance Conference, the 5th Annual Workshop of ESCB Research Conference Cluster 3 on Financial Stability, Macroprudential Regulation and Microprudential Supervision and the World Finance and Banking Symposium for their comments and suggestions, as well as to Carlos Ubaldó González and Roberto Pascual for their help. The views expressed in this article are those of the authors and do not necessarily reflect those of the Banco de España or the Eurosystem.

CORPORATE SOCIAL RESPONSIBILITY, COUNTRY SUSTAINABILITY AND FIRM PERFORMANCE: A MULTILEVEL ANALYSIS

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Abstract:

Moral legitimacy has ethical and moral judgments as components, and these judgments are issued by individuals, stakeholders, or society as a whole, which is fully consistent with institutional theory. The relationship between corporate social responsibility (CSR) and corporate financial performance (CFP) may thus vary depending on the institutional context in which the firm is located. Through an integrated international vision –combining CSR with national environmental, social, and governance sustainability performance– this study shows that in countries with a high level of sustainability, firms use CSR activities to maintain the moral legitimacy they have gained, although it is more difficult for them to gain competitive advantage through CSR and to increase their value. In contrast, in countries with a low level of sustainability, it will be easier to obtain competitive advantages by signalling CSR activities. Our findings also show that country sustainability has a direct and positive impact on CFP, regardless of CSR activities and performance, thereby supporting the thesis that the institutional environment influences corporate results. Additionally, when applying country sustainability in a disaggregated manner the pillars do not show the same behaviour. In this sense, social and governance sustainability are the pillars that exert significant and negative moderation on the CSR-CFP relationship, while environmental pillars only have a direct and positive effect on CFP. Our study also contributes to the existing literature as well as to current understanding of the relationship between country-level sustainability and the CSR-CFP relationship.

Keywords: corporate social responsibility; country sustainability; e, s and g pillars; corporate financial performance

INTEGRATION OF SUSTAINABILITY INTO THE DIRECTOR'S DUTY OF CARE IN LARGE COMPANIES

Incorporación de la sostenibilidad al deber de diligencia de los administradores
de las grandes sociedades

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Abstract: Achieving sustainability goals requires involving large corporations across all sectors of the economy in the commitment and responsibility of incorporating those goals into the companies' decisions and activities. The Proposal for a Directive on Corporate Sustainability Due Diligence and amending Directive (EU) 2019/1937, published on February 23, 2022, establishes the obligation for large companies to incorporate due diligence into all their corporate policies and have in place a due diligence policy for the prevention, mitigation and termination of adverse impacts on sustainability arising from their own operations or those of their subsidiaries and, where related to their value chains, from their established business relationships. The Proposal also introduces the director's duty of large companies to consider the consequences their decisions may have on sustainability, including, if applicable, the impact on human rights, climate change and the environment in the short, medium and long term (duty of care). These provisions make it necessary to reinterpret and redefine the content of the directors' duty of care in large companies. The purpose of this paper is to analyse the main implications of these developments in the Spanish current regulation of the directors' duties and responsibilities.

Keywords: due diligence, sustainability, duty of care, directors, good corporate governance

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SUSTAINABLE FINANCE AND MULTI-CRITERIA DECISION MAKING APPROACHES: A REVIEW

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Abstract: In recent years, sustainable finance has become increasingly relevant because of the growing awareness of climate change and the need to align financial flows with projects contributing to sustainable development. Multi-criteria Decision-Making approaches have proven to be a useful tool for incorporating sustainability into financial decisions. In this article, we first analyze current trends in the sustainable finance field to understand the financial sector's change by introducing the sustainability variable. We then offer a comprehensive review of the existing research on sustainable finance supported by multi-criteria tools. From the survey research, we have identified two main research lines: the first related to the performance evaluation of sustainable investments; and the second to the problem of integrating sustainability into the portfolio selection process, where multi-objective optimization techniques prevail.

Keywords: Sustainable Finance; Sustainable Development; Multi-criteria decision making; Literature review

THE NONLINEAR IMPACT OF COVID-19 ON ESG INDICES

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Social concern on sustainability has rapidly spread through the economy with the application of Environmental, Social and Government (ESG) goals. However, the success of sustainable investment lies in the robustness of new ESG-driven assets to financial crises. This paper analyzes this issue by studying the potential effect of the Covid-19 pandemic on ESG indices. Using a comprehensive database of US daily returns on green ESG indices (including core, climate, carbon efficient, thematic, fixed income and real estate) and World Bank daily statistics on the evolution of the Covid-19 pandemic, we explore the impact of the new Covid-19 cases on financial ESG variables. After controlling for economy and market conditions, we find a significant non-linear effect: A mild/sharp increase in the cases exerts a positive/negative impact on the markets. The latter effect may also be captured by the severity of policies implemented to fight the virus (stringency index), although it is the ineffectiveness of such policies what really drives the markets downward. Therefore, this evidence show that ESG investment is positively impacted by the stationary evolution of the pandemic and the effective stringency measures, probably because of the recovery and growth expectations generated by the sustainable investment.

Keywords: ESG scores, Covid-19 pandemic, stringency index, market efficiency

**DO SOCIALLY RESPONSIBLE INVESTORS INFLUENCE THE
PROACTIVITY AND REACTIVITY OF CORPORATE ENVIRONMENTAL
PERFORMANCE?**

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Abstract: The effects of climate change have prompted international organisations, such as the United Nations and the European Union, to undertake initiatives that encourage companies to reduce the volume of emissions and waste, reduce their environmental footprint and use efficient systems. At the same time, proactive environmental practices aimed at clean energy and environmental remediation are encouraged.

Research has focused on the effect of environmental performance on financial indicators. A further step would be to analyse factors that lead to greater environmental commitment. Among them, the existence of socially responsible investors (SRI) that could determine the adoption of environmental measures, not only reactive, but proactive in order to achieve long-term sustainability.

To achieve this objective, we study the majority sustainable investors of European companies listed in the Dow Jones Sustainability Index during the period 2015-2019. Using generalised least squares, the results of the panel data regression analysis show that the shareholding, stability and market value of shares held by sustainable investors determine the pro-activeness and reactivity of corporate environmental performance.

Keywords: Corporate environmental performance; proactivity; reactivity; socially responsible investors; generalised least squares

Funding: This research was funded by R&D Projects. European Regional Development Fund (ERDF) Andalusia 2014–2020 Operational Program, grant number B1-SEJ-387-UGR18

EL COMPORTAMIENTO PRO-AMBIENTAL DE LOS FUTUROS PROFESIONALES FINANCIEROS: UNA PERSPECTIVA DE GÉNERO

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Abstract: This study aims to empirically determine the levels of knowledge, attitudes and proenvironmental behaviors that future professionals in the financial industry present from a gender perspective.. To do this, a sample of university students from the area of Finance and Accounting has been selected, who completed a questionnaire on 3 environmental knowledge, attitude and behaviour based on previous literature. Using parametric and non-parametric statistical techniques, the results confirmed that the proenvironmental behaviour of future financial professionals is determined by both their levels of pro-environmental attitude and their degree of environmental knowledge. The results also confirm that women have higher levels of pro-environmental attitudes than men, but that this gender difference is not significant with respect to behaviour and knowledge. The results obtained present important theoretical and practical implications for promoting the improvement of the sustainable behaviour of future financial professionals, indicating that educational programmes should integrate strategies to help internalise sustainability and foster students' motivation, ensuring a global vision of the impacts of sustainable behaviour in the financial and business areas.

Keywords: sustainable finance, pro-environmental behaviour, education for sustainable development, university students, Sustainable Development Goals.

IMPACT AND TRENDS FOR AREAS OF SPECIAL INTEREST IN THE FIELD OF SUSTAINABLE FINANCE

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Abstract: Due to both social and scientific evolution in terms of different factors such as environmental concerns, the discipline of finance has once again demonstrated its high capacity to adapt to investment decisions. In recent years there has been a sharp increase in studies related to so-called sustainable finance, concerning about investor preferences for socially responsible assets. Based on the growing number of articles on this topic, we conducted a bibliometric analysis using a co-wording analysis to track the evolution of the topic. For this purpose, we use different tools known in the bibliometric analysis literature, such as strategy maps or clusters network. The query is performed in the Web of Science database with the following criteria: TS= (“Sustainable finance” or “ESG Invest*” or “Sustainable corporate finance” OR “Responsible investment”). We obtained 737 academic articles after filtering them by economics, business, and finance. To observe the evolution of the research in sustainable finance between 2008 and 2022, we divided the sample into five periods. Based on the results we can assure that the subject is in constant evolution, being interesting to continue the research in ESG investments as well as in the relationship of the environment with finance and economy.

Keywords: co-wording, sustainable finance, bibliometric analysis, clustering.

FUNDING: This work is supported by the Ministry of Science, Innovation and Universities of Spain (RTI2018-AAA), and the Rey Juan Carlos University (C1PREDOC2020-AAA).

ODSESIONES, UN PROYECTO DE GOBERNANZA MEDIAOMBIENTAL Y SOCIAL EN LA UNIVERSIDAD DE MURCIA

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Abstract

The role universities must play in the pursuit of sustainable development is out of question nowadays. Besides teaching and research, universities are expected to provide their students with values and civic engagement. The 2030 Agenda offers the perfect blueprint to do so as it represents an integrative framework where the main issues faced by the world are highlighted. Thus, with the firm conviction that universities must play their part, the University of Murcia implemented a project called ODSesionesTM, a multi-stakeholder initiative to promote sustainability by raising awareness about the Sustainable Development Goals (SDGs) and participating in field interventions to improve the local community. In addition to the determined commitment from the different internal target groups (students, administrative staff and professors) and units (volunteering, culture, sustainable campus,...), the project also brought together external agents that contributed to its success. Thus, in line with the spirit of SDG 17, which emphasizes the need for strong partnerships, a diverse array of NGOs as well as public administrations and private companies collaborated to make the project a reality. On a monthly basis, the 17 SDGs were addressed and discussed through a program of activities which included talks, workshops, exhibitions and outdoor activities, among others.

Keywords: Sustainable Development Goals, governance, university, multi-stakeholder

INCIDENCIA DE LA FORMACIÓN UNIVERSITARIA EN ÉTICA EN LOS NEGOCIOS SOBRE LA VISIÓN SOCIAL EMPRESARIAL

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Abstract: Las estrategias de Responsabilidad Social Corporativa (RSC) que incorporan las empresas dependen, en gran medida, del compromiso y las decisiones que tomarán las generaciones venideras en la medida que serán los futuros líderes empresariales. Las instituciones universitarias, cuya principal misión es educarlos y formarlos, deben fomentar las competencias que incidan sobre el comportamiento y decisiones éticas entre sus estudiantes. En el mundo empresarial este comportamiento ético se articula a través de la RSC, por lo que necesario considerar qué factores contribuyen a que mediante la formación ética los estudiantes orienten sus decisiones conforme a los principios de RSC.

El objetivo de este estudio es analizar la incidencia de la formación universitaria en ética empresarial sobre la visión económica y social de los estudiantes y el efecto sobre su orientación hacia la RSC.

Sobre una muestra de 151 alumnos y a partir de las respuestas a un cuestionario de los estudiantes, se delimitan los factores y se analizan a través de un modelo de ecuaciones estructurales, que posibilita establecer relaciones diversas entre las variables. Los resultados obtenidos muestran que la formación impartida, el nivel educativo de los padres y la visión social se asocian positivamente con la orientación hacia la RSC de los estudiantes, mientras que la visión economicista, que se transmite a través de las materias del grado, se asocia negativamente con una actitud proactiva al compromiso hacia la responsabilidad social.

Keywords: competencias éticas, formación universitaria, ética de los negocios, Responsabilidad Social Corporativa.

SOSTENIBILIDAD SOCIAL EN MUJERES EMPRENDEDORAS A TRAVÉS DE LA IMPLANTACIÓN DE ESTRATEGIAS DE MARKETING EN REDES SOCIALES PARA MEJORAR EL PERFORMANCE EN SUS EMPRESAS

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Abstract: El mundo empresarial, y en particular las microempresas dirigidas por mujeres emprendedoras, se enfrenta a un entorno económico y social complicado debido a la pandemia de COVID-19. Las mujeres emprendedoras necesitan adaptarse para evitar el deterioro de sus negocios y muy probablemente la pérdida de sus puestos de trabajo. La transformación digital puede ser una solución. Por tanto, el objetivo de este trabajo es analizar qué variables influyen en los resultados económicos de las micropymes españolas lideradas por mujeres cuando realizan estrategias de marketing en las redes sociales. Nuestros resultados muestran que las acciones de marketing en redes sociales tienen efectos significativos en el desempeño financiero. Palabras clave: mujeres emprendedoras, marketing en redes sociales, desempeño financiero, transformación digital.

Keywords: Mujeres emprendedoras, marketing en redes sociales, desempeño financiero, transformación digital

HOW DO IBEX-35 COMPANIES COMMUNICATE THEIR COMMITMENT TO THE SUSTAINABLE DEVELOPMENT GOALS?

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Abstract: The Sustainable Development Goals (SDGs) of the 2030 Agenda must be met so that we can live in a more sustainable, just and prosperous world. To do so, governments, social groups, international organizations and, above all, large companies must do their part, due to their influence on society, the environment and the economy. Therefore, this paper analyzes how Ibex-35 companies communicate their commitment to the SDGs to their stakeholders, through the information provided on their websites, annual reports and Twitter. From this analysis we will be able to check if there is a real commitment of these companies to the SDGs and if they are consistent and transparent in their communication with their stakeholders.

Keywords: Corporate communication, Sustainable Development Goals, Ibex-35, Sustainability reports, Twitter.

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INVESTORS' OPTIMISM AND MARKET SENTIMENT: EVIDENCE FROM EUROPEAN COMPANIES DISCLOSING SUSTAINABILITY REPORTS

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Abstract: This study analyzes the potential effect of investor sentiment in the financial analysts' optimism bias for a set of European companies that disclose high-quality non-financial reports (HSRs). Optimism in stock recommendations for this type of firm should not be affected by investor sentiment because of the content of the reports disclosed by these firms. Under this proposal, we observe that sustainability disclosure reduces the optimism bias present in stock recommendations due to the effect of high investor sentiment. We go further and analyze the informative value of stock recommendations in periods of low/high investor sentiment taken into consideration this sustainability reporting quality of firms. We observe that buy stock recommendations issued for high sustainability reporters during periods of investor sentiment has not informative value. However, in the contrasting period of low sentiment, it is possible to find informative recommendations, that is, the sell recommendations forecasted by low sustainability reporters.

Keywords: Financial analysts, optimism bias, investor sentiment, sustainability

OPTIMIZACIÓN DEL TRATAMIENTO FISCAL PARA FAVORECER LA RENTABILIDAD DE LAS FINANZAS SOSTENIBLES

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Abstract: The introduction of new market theories promise higher profitability through long-term planning and investment, while the actions necessary for the maintenance and proper development of environmental sustainability principles seem to compromise the stability of companies. Investors need strong arguments based on economic profitability to sustain long-term implications, which in turn will be a strong enough reason for companies to correct their corporate governance strategies. This could be made possible through the timely linking of these policies and rules to the tax system, which would make taxation a risk factor for investors to consider. The methodology followed for the development of the work has been the analysis from the legal-economic perspective through the review of the historical evolution, the applicable regulations and recent doctrinal proposals.

Keywords: ASG, finanzas sostenibles, derecho tributario e Información No Financiera.

SHORT-RUN AND LONG-RUN EFFECTS OF ESG POLICIES ON VALUE CREATION AND THE COST OF EQUITY OF FIRMS

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Abstract: Despite the general trend to include ESG scores in the evaluation of firm performance, the effect of ESG policies on the market value of companies is currently a subject of debate. In this paper we propose a dynamic version of Ohlson's model under time-varying discount rates consistent with the Campbell-Shiller present value identity, in order to differentiate between short term and long term implications of ESG performance on value creation, as well as income and substitution effects. Our results suggest that, although ESG policies imply almost no effects in the short-run, at longer horizons, better ESG performance results in lower value creation, mainly due to substitution effects channeled to market value via higher long-term discount rates. Our results are consistent with ESG strategies implying transitory effects on the cost of equity and the market value, which may result from time-varying investor preferences, long-term reputational penalties, or market misvaluation.

Keywords: ESG; CSR; Value creation; Cost of equity; Dynamic Ohlson Model

THE IMPACT OF CSR DISCLOSURE ON COST OF DEBT AND EQUITY CAPITAL

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Abstract: Shareholders and stakeholders are putting increasing pressure on companies to restructure their operations in a sustainable manner. This includes evaluating financing options such as issuing green bonds, obtaining loans with ESG limits, determining which projects to invest in, and allocating investment portfolios in a sustainable manner (Freeman et al, 2010). In addition, corporations have been attempting to quantify the impact of CSR issues on their financing operations (Chava, 2014). Accordingly, concentrating on how CSR disclosure may affect a company's financing costs is critical. Debt and equity capital are the two main sources of funding for businesses. The cost of debt financing is the yield to maturity applied in the operation. Shareholders are the source of equity capital. The cost of equity is the expected rate of return on an investment in a company's stock. The main objective of this study is to examine if CSR can help to achieve a competitive advantage.

Our findings show that there is a negative association between corporate social responsibility disclosure and the cost of debt, implying that lenders appreciate socially responsible enterprises by reducing interest rates. In contrast, there is a positive association between corporate social performance and the cost of

equity, which means that investors penalize socially responsible firms by increasing the required rate of return.

Regarding to real earnings management, the results show that it can be seen that earnings management has a positive relationship with cost of debt before introducing CSR disclosure as a moderator variable. This result shows that lenders are aware to and penalize companies that participate in real earnings management which lead them to increase cost of debt. After introducing CSR disclosure as moderator variable, the relationship converted to be negative, denoting that CSR disclosure distort accounting information and mislead creditors and is used in an opportunistic way. In addition, even though the

company carries out earnings management, creditors have more confidence in the quality of information on the companies committed to CSR disclosure, so that the interest rate demanded by creditors is low.

Keywords: Cost of capital, cost of debt, corporate Social Responsibility, accounting manipulation

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VALORACIÓN DEL CONTRATO DE CESIÓN DEL SERVICIO DE BICICLETA PÚBLICA BICIMAD MEDIANTE OPCIONES REALES.

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Abstract: This paper applies the real options methodology to the valuation of the assignment contract of the public bicycle-sharing system in Madrid (BiciMAD). It is said that a real option exists in an investment project when there is a possibility to act in the future, after have known the consequences of some factor that, at the moment, is under uncertainty. That is precisely one of the biggest challenges that managers face in the estimation of public transport use. We identify and calculate the value of two real options to expand BiciMAD that were not included in the valuation process. The results indicate that real options can have increased the value of the contract by 194% under the pessimistic scenario of revenues. Therefore, we conclude that real options represent an efficient tool in decision making for projects under a high level of uncertainty and volatility.

Keywords: Real options, transportation, public bicycle-sharing, BiciMAD, sustainable finance

EL CROWDFUNDING Y SUS IMPLICACIONES CON LA RESPONSABILIDAD SOCIALES CORPORATIVA

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Abstract: The traditional parameters of investment and profitability are shifting towards new and sophisticated ways of seeking funding, sustainable crowdfunding ends up being one of the elements, which helps to eliminate financial barriers and intermediaries, bringing entrepreneurs' projects closer to funders, thus providing a network of collective funding. Among these indicators, sustainable business performance and its relationship with Corporate Social Responsibility (CSR) could be a relevant factor to grade the cost of financing, explain ROA and, consequently, have an impact on ROE. In this context, this paper takes as a reference the Crowdfunding platform called Colectual and analyses 101 projects that are part of the loans it makes. We identify factors on the sustainability of the projects (CSR implementation and social responsibility index), the financial characteristics of the firm (liquidity, leverage and solvency), as well as the characteristics of the loans related to crowdfunding (loan amount, maturity and collection rate). Our study provides empirical evidence that, in addition to financial characteristics, CSR engagement can improve crowdfunding lending, resource management and capital wealth of firms by improving shareholder returns or ROE.

Keywords: Crowdfunding, empresas, ranking, plataforma Colectual.

EVOLUTION OF COST OF CAPITAL FOR RENEWABLE ENERGY PROJECTS UNDER A DYNAMIC APPROACH.

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Abstract: Renewable energy technologies have a growing importance in the generation of electricity and transactions related to renewable energy plants have increased significantly in the last years. The purpose of this paper is to study the evolution of the Cost of Capital for renewable energy projects in Western Europe in recent years. Applying the CAPM model we compare results for renewable energy with other energy related activities and analyze the relationship between evolution of cost of capital with prices for renewable energy projects observed in the market to establish a link between project prices and discount rates applied. Additionally, we focus on the impact of leverage in the cost of capital. In this sense a dynamic cost of capital calculation is proposed to capture the incidence of the variation leverage level in a renewable energy project. This analysis shows how evolution of leverage may impact on the project value and its less impact in cost of equity compare with other business.

Keywords: renewable energy; cost of capital; project valuation; project finance; leverage ratio

DYNAMIC LINKAGES BETWEEN GREEN BONDS, CO2 EMISSIONS, AND OIL PRICES

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Abstract: Green bonds play a pivotal role in financing new sustainable infrastructure systems. Likewise, CO2 emissions and oil prices could have an impact on the green bonds market. In order to have a better understanding of this concern, this study analyzes the relationship between green bonds, CO2, and oil prices using a data set that includes 2182 observations corresponding to information about brent oil price several green bonds index, and the Global Carbon Beta Index for the period from 2014 to 2022. To conduct our analysis, Dynamic Conditional Correlation model and Granger Causality test were estimated. According to the results, the correlations between the brent oil price with the green bonds index selected and the Global Carbon Beta Index considered are between -0.4 and 0.8, presenting a strong correlation in uncertainty periods. The results for the Granger Causality test are mixed. This study represents a breakthrough in explaining the relationship between these variables. Finally, the current study presents further research in this field.

Keywords: commovements, dependence, oil price, green bonds, CO2 emissions, sustainability

SUSTAINABLE BANKING IS FEASIBLE: THE CASE FOR AN ECUADORIAN BANK

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Abstract: The research carried out for this paper was descriptive from a post-positivist perspective and through a case study. Based on interviews with representatives of the bank chosen for the study and the review of its documentation and information on environmental performance, its main initiatives were identified both to reduce its environmental impact and that of its clients. In particular, the strategy called "biocredit" is reviewed and its results are presented in terms of three important indicators: reduction of CO2 emissions, reduction of water consumption, and reduction of energy consumption. The results were taken from the reports of the different environmental certifiers that review the bank's management, verified in terms of their validation by auditors and included in its sustainability report. Significant levels of reduction were found in these three indicators, which leads to the conclusion that it is necessary to implement this type of initiative in banking in a more generalized and sustained manner.

Keywords: banking, sustainability, green finance



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