

Sustainable Economic Growth

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Abstract

Sustainable economic growth is a way of developing while caring for the environment and improving people's lives. It aims to increase productivity and wealth without exhausting natural resources, causing climate change, or creating unfair situations for people now and in the future. This idea is vital for changing how we think about traditional economic growth, as it makes long-term sustainability, a crucial part of economic success. This special issue editorial discusses the implications of those policies before introducing the three papers published in the special issue dedicated to economic growth and sustainability. The papers significantly contribute to the evolving discourse on how sustainability is linked with economic performance, financial markets, and corporate practices. Consequently, this special issue provides work for further economic growth and sustainability nexus studies.

Keywords: Sustainability, Economic growth, Green bonds, Circularity, Tax policies

1. Sustainable economic growth

It is well known that the three main pillars of sustainability are principal aspects of everyday life. Economic growth refers to rising per capita national output that improves material living standards, while sustainable development refers to "*meeting the needs of the present generation without compromising the ability of future generations to meet their own needs*" (Hess, 2016). Thus, sustainability is a requirement for a better life for future generations. Green growth is based upon and extends the idea of economic growth (Ahmed et al., 2022), confirming that financial development is an important pillar of sustainable economic growth. At the same time, achieving sustainability may depend on the countries' taxation rates and policies (Halim and Rahman, 2022). Of course, circularity is a must for sustainability, and this relationship is one of the most significant challenges faced by policymakers, producers, and consumers nowadays (Arauzo-Carod et al., 2022). Recognizing that sustainable development is a concept that aligns with economic growth but enhances human development and minimizes environmental impacts, this special issue seeks to discover how sustainable economic growth can contribute to the achievement of the Sustainable Development Goals (SDGs).

2. An overview of the contributions of the special issue

The 3rd Symposium on Circular Economy and Sustainability was jointly organized by the Technical University of Crete, the Harokopio University of Athens and INFER (International Network for Economic Research). This EEEP symposium comes from this event and brings together different (but complementary) perspectives on the influence of environmental and economic factors on financial and corporate performance through advanced econometric methods. All three papers highlight growing global dynamics, including environmental agreements, business strategies, and tax policies. More specifically, the papers study the risk assessment and opportunities by examining financial market co-movements, the circular economy indices and metrics, and the productivity implications of tax avoidance.

Albulescu (2025) investigates the asymmetric association between corporate tax avoidance and total factor productivity (TFP), employing data from 141 European oil and gas firms between 2007 and 2015. The paper relies on a new tool provided by Rovigatti and Mollisi (2018) to calculate firms' TFP. It applies a panel data fixed-effect quantile regression model to assess the possible asymmetric effects of tax avoidance on firms' productivity. The main findings show that there are main proxies for tax avoidance, namely firms' holding structures and tax haven locations. This shows that tax avoidance impacts TFP differently depending on the firm's productivity level. It is also demonstrated that the organization of firms into holding structures has a mixed impact on TFP (usually being counterproductive), whereas location in tax havens consistently enhances productivity, especially for already highly productive firms.

This paper contributes to the empirical literature on productivity by expounding the asymmetric impacts of tax avoidance on business productivity and demonstrating the connection complexity that varies across different levels of productivity within firms. In this context, high-productivity enterprises derive more significant advantages from tax avoidance strategies, such as profit offshore to tax havens, enhancing their internal investment capital. Conversely, holding structures may experience high operational costs and adverse potential tax savings. These findings have relevant policy implications, showing that regulatory frameworks should consider these asymmetric effects when designing tax policies that balance corporate growth with fair tax practices.

Dimitriou et al. (2025) investigate the relationships between the green bond index and several financial indices, including the S&P 500 (US), FTSE 100 (UK), Nikkei 225 (Japan), and ASE (Greece), from January 2014 to June 2022. Empirically, this paper uses a dynamic conditional correlation (DCC) model and wavelet coherence analysis and presents significant growing co-movement effects, highlighting green bonds' influence in financial markets, especially after implementing the 2016 Paris Agreement. Also, the paper makes a relevant empirical contribution to the literature on financial markets by applying advanced econometric techniques that capture the dynamic relationships of green bonds. Overall, the empirical findings recommend that stockholders should consider the increasing interdependence of green bonds with financial markets to improve portfolio management. In this sense, it is worth noting that environmentally friendly investments and green bonds can significantly influence portfolio risk and return dynamics.

Woźna et al. (2025) study the indicators that evaluate circular economy (CE) practices in manufacturing activities. In particular, this study conducts a systematic literature review identifying the leading CE indicators and organizes them into a framework. The framework is designed to help manufacturing firms enhance their circularity practices by aligning them with specific evaluation criteria, thus facilitating strategic decision-making. This paper also discusses the advantages and disadvantages of these CE indicators, highlighting all the barriers that prevent a significant standardization of CE metrics in manufacturing industries. Furthermore, it highlights that tailored CE indicators are required to capture the specificities of manufacturing industries. Concretely, CE indicators are grouped into several categories (general, performance, material-related, energy-related, sustainability, and integrative) to get an overall perspective of CE performance. The focus of this paper on the absence of standardized indicators is of key importance, according to the existing barriers to the implementation of CE practices and the positive role that a group of commonly accepted CE indicators may play in favoring the transition to more sustainable manufacturing activities.

3. Concluding remarks

Sustainable economic growth is the engine of improving living standards while supporting environmental quality and social needs. The papers in this special issue are interrelated and

involve important facets of sustainable economic growth by analyzing various and interlinked sectors of financial and industrial systems. The trend noted in these three papers is the rising role of the environmental dimension in financial and corporate decisions. In this regard, Dimitriou et al. (2025) examine relations between green bonds and prominent financial markets. Similarly, Woźna et al. (2025) highlight the necessity of developing specific circularity indices for measuring sustainable performance as part of the overall transition towards placing environmental concerns at the heart of business strategies. As highlighted in both papers, environmental factors play a significant role in determining the financial results and strategic business initiatives.

Another similarity includes the intensity of complications of effects and the variety of their findings within all three papers; all the authors apply refined econometric techniques to detect relations. Dimitriou et al. (2025) employ dynamic conditional correlation and wavelet coherence analysis to capture the shifts in the market relationship, while Woźna et al. (2025) identify different CE indicators and follow a structured approach to assess their appropriateness. Albulescu (2025) also uses the quantile regression technique to establish evidence of asymmetrical impacts on productivity based on the level of performance, although firm characteristics affect productivity differentially depending on specific conditions, including firm size and affiliations with tax havens.

Moreover, all three papers argue that new and evolving trends, including green finance, circular economy business models, and the issue of tax avoidance, are challenging conventional investment benchmarks and corporate strategy frameworks. These dimensions entail the development of new tools and techniques to cope with these emerging trends. We expect that these studies will create much debate on economic growth issues in the bid to realize the Sustainable Development Goals.

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