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THE ROLE OF DIGITAL INVESTMENT IN ACHIEVING SUSTAINABLE FINANCIAL STRATEGIES AND COMPETITIVE GROWTH

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Abstract

The article explores how strategic investments in digital tools and infrastructure support sustainable financing mechanisms while also fostering sustainable competitiveness. It investigates current trends in sustainable investing and the role of digital technologies in driving economic productivity. The framework of the EU Competitiveness Compass is examined to determine strategic directions for advancing sustainable finance.

Keywords: sustainable competitiveness, digital technologies, sustainable financing, sustainable development, digitalization

The emergence of the digital economy is reshaping how economic activities are integrated within today's information-driven society, largely enabled by digital platforms and the Internet. Digital technologies are the essential drivers of the ongoing transformation across traditional sectors of the global economy. Within this digital society, digitalization functions as a key driver for achieving the sustainable development, boosting both the speed and scale of economic and social progress. It plays a pivotal role in enabling innovative, interconnected, and cross-sectoral approaches to sustainable development, thus influencing society in a comprehensive manner. The impact of digitalization on sustainability is complex, highlighting its crucial role in directing the future course of social and economic advancement [1].

Sustainable competitiveness emphasizes economic competitiveness as a catalyst of prosperity and sustained growth, while simultaneously recognizing the imperative of addressing environmental and social concerns. Having a multidimensional character, the concept of sustainable development is based on economic, environmental and social principles to promote social wellbeing and prosperity [2]. Regional sustainable industry involves creating conditions for firms to develop in order to make a sustainable contribution to society and overall industrial activity in a particular region.

Worldwide, interest in sustainable investment is growing at a remarkable pace. Sustainable investment remains a key driver of improving societal well-being and achieving a more resilient and sustainable future. The sustainable finance sector is experiencing dynamic growth, presenting new opportunities while also posing a range of challenges for major financial market participants. A critical factor in this transformation is the ongoing evolution and broadening of approaches to classifying sustainable competitiveness factors. Market participants are increasingly moving beyond traditional investment models that focused exclusively on fully sustainable or inclusive assets and projects, embracing more diverse and adaptive strategies aligned with long-term development goals.

As the digital economy is the main source of innovation in the economy, its development becomes a strategic interest for national economic systems. While nearly all countries are intensifying efforts to attract digital-related FDI, the degree of engagement varies [3]. The proportion of FDI directed toward the IT sector differs widely among OECD countries (Fig. 1). Although the IT sector does not fully capture the entire scope of the digital economy, it offers a useful indication of the scale and direction of digital FDI flows across the OECD.

From a strategic standpoint, digitalization fosters innovation ecosystems that support research, human capital development, and entrepreneurship. Digital tools facilitate stakeholder engagement, sustainable supply chains, and transparency – each a critical component of sustainability governance. Total sustainable investing assets under management increased from USD 81,948 billion in 2016 to USD 124,487 billion in 2022 (Fig. 2). The total growth over the years can be attributed to a combination of regulatory, market-driven, social, and environmental factors, including corporate ESG integration, improved data availability, institution commitment and other factors [5].

This progress has also been made possible by recent developments in sustainability reporting standards, particularly through the work of the International Sustainability Standards Board (ISSB) and the European Sustainability Reporting Standards (ESRS). These frameworks have

contributed to higher levels of transparency and accountability, enabling more predictable and measurable performance outcomes. The availability of standardized disclosures and high-quality data empowers businesses to align their strategic planning with long-term sustainability goals. In contrast, the absence of consistent reporting structures and trustworthy data can create barriers to market access and slow down the adoption of sustainable practices.

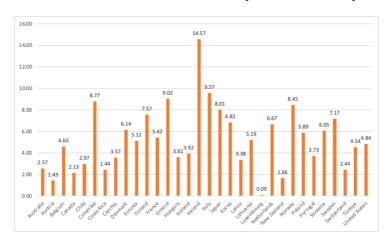


Figure 1. FDI stock in Information and Technology in OECD countries, 2023

Source: compiled by the authors based on the data from [4]

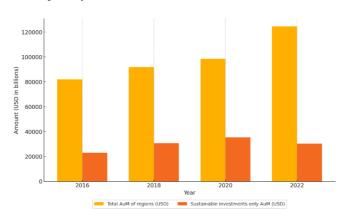


Figure 2. Snapshot of global sustainable investing assets under management, 2016-2022

Source: compiled by the authors based on the data from [5]

The EU Competitiveness Compass, recently introduced by the European Commission, provides a forward-looking framework that evaluates member states' competitiveness based on innovation, environmental sustainability, and macroeconomic stability [6]. The Compass emphasizes a long-term, inclusive understanding of competitiveness – fully aligned with the principles of digital and green transitions.

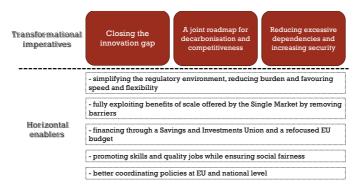


Figure 3 – Strategic pillars of the EU's Competitiveness Compass Source: compiled by the authors based on the data from [6]

Digital transformation is explicitly highlighted as a cornerstone of productivity and environmental sustainability. The Compass focuses on enhanced investment in digital public infrastructure, widespread adoption of advanced technologies, and stronger digital skills across the workforce. Moreover, it encourages member states to leverage digital tools to support sustainable financial systems and innovative business models. Digital tools can not only improve resource efficiency and advance environmental targets, but at the same time drive fairness and economic participation for SMEs [7]. The Competitiveness Compass recognizes that resilience to future shocks (economic, environmental, or geopolitical) requires robust digital and financial ecosystems. Digital investment, when strategically aligned with sustainability goals, therefore contributes not only to compliance with EU frameworks but also to a competitive advantage on the global stage.

Based on the analysis performed, the following strategic directions were determined by the authors to be critical for advancing sustainable finance among leading innovative nations:

- Development of Sustainable Finance Strategies. Modern approaches to sustainable investment serve as innovative instruments for strengthening the role of the private sector in achieving sustainable competitiveness, as they combine economic efficiency with the resolution of socially significant challenges. While several finance strategies are widely used (impact investing, positive/negative screening, ESG integration), development of new digital assets and digitalization of existing sustainable assets will be the new source of digital innovation. For example, blockchain and distributed ledger technologies are being leveraged to issue digital green bonds and tokenize sustainable assets [8].
- Development of digital infrastructure for sustainable data collection and analysis. Reliable, real-time sustainability data is foundational for informed sustainable investment decisions. Establishing digital platforms that collect, process, and standardize ESG-related data enables investors and regulators to assess risks and opportunities more accurately.
- Use of AI-driven investment decision tools to enhance sustainable competitiveness. Artificial intelligence and machine learning models could be used to further integrate sustainability considerations into investment decisions, enabling more robust and accountable investment practices [9].
- Regulatory Sandboxes for Green Fintech. Financial regulators in various countries are establishing green fintech sandboxes to test and scale innovative digital financial products in a controlled environment. These sandboxes encourage experimentation with climate-focused fintech solutions while ensuring compliance with sustainability standards and financial regulations [10].
- Utilization of Public-Private Partnerships. Collaborative efforts between governments, institution investors, international organizations and the private sector are essential for financing digital sustainable finance, such as open banking systems, sustainable data hubs, and cross-border digital payment systems.

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