

# Firm Size and Sustainability Certifications: Understanding Business Economic Drivers in Certification Adoption

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**Abstract** This study explores how firm size influences sustainability certification adoption in Italy. Expanding from a regional to a national scope, a two-step methodology is used: web-scraping to assess how firms present certifications online and statistical analysis correlating adoption rates with firm size, revenue, and industry sector. Findings indicate that larger firms are more likely to obtain certifications due to financial resources and stakeholder pressure, while small and medium enterprises (SMEs) face cost and operational barriers. Industry-specific trends show higher certification rates in manufacturing and export-driven sectors. The study highlights the need for policy support, such as financial incentives and streamlined certification processes, to enhance SME participation and promote broader sustainability adoption in Italy's business environment.

**Keywords:** Certifications; Circular Economy; Economic Drivers; Sustainability; Small and Medium Enterprises.

## 1. Introduction

Sustainability certifications serve as important indicators of corporate responsibility, yet their adoption rates vary significantly among businesses. Certifications such as ISO 14001, EMAS, and B Corp signal a company's commitment to environmental and social governance (ESG) principles, influencing consumer trust and corporate reputation. However, the extent to which firms embrace these certifications depends on several factors, including firm size, industry sector, and economic resources.

This study builds upon preliminary research conducted in the Marche region of Italy (Liscio M.C., et al., 2024), expanding the scope to a national level. The primary objective is to examine the role of firm size in the adoption of sustainability certifications across various industries in Italy. Other studies focused on the matter, with specific targets of certifications (Neag P.N., et al., 2020; Mazzi A., et al., 2016; Merli R., et al., 2015) The hypothesis driving this study is that larger firms are more likely to adopt sustainability certifications due to their greater financial resources, enhanced visibility, and increased pressure from

stakeholders. Conversely, small and medium enterprises (SMEs) may face financial and operational barriers that limit their ability to obtain and maintain such certifications.

The results will help policymakers and businesses develop strategies to promote broader certification adoption, fostering a more sustainable corporate landscape in Italy.

## 2. Methodology

The study employs a two-step approach to investigate the relationship between firm size and certification adoption.

### 2.1 Data Collection via Web-Scraping

An automated web-scraping technique will be used to collect data from company websites. This method enables an objective assessment of how firms present sustainability certifications to external stakeholders. Web-scraping will extract information on the types of certifications displayed, their prominence on company websites, and any related sustainability claims. The collected data will be analyzed to determine whether certification visibility correlates with firm size and industry sector. These data will be backed up with validation of some of the certification available in the Accredia database, which collect the certifications issued by entities accredited by the only official accreditation body in Italy.

### 2.2 Correlation Analysis with Economic Drivers

The second phase of the study involves correlating certification adoption with key business economic drivers, including firm size (measured by employee count and revenue), industry sector, and market presence. Statistical analyses will be conducted to identify trends in certification uptake across different firm sizes and economic contexts. The aim is to assess whether larger firms exhibit a higher likelihood of certification adoption due to financial resources, market competitiveness, or regulatory compliance pressures, while smaller firms may experience barriers related to costs and administrative complexity.

### 3. Results and Discussion

Preliminary findings suggest that firm size significantly impacts certification adoption. Larger firms tend to have a higher rate of certification, likely due to greater access to financial resources and an ability to absorb certification costs. Additionally, large corporations face heightened expectations from investors, consumers, and regulatory bodies, pushing them to align with sustainability standards.

Conversely, SMEs demonstrate lower certification adoption rates. The primary barriers include high certification costs, lack of in-house expertise, and limited external pressure to obtain formal certifications. While some small firms integrate sustainable practices informally, they often lack the incentives or resources to pursue official recognition through certification.

Industry-specific trends also emerge in the analysis. Manufacturing and export-driven industries, which operate under strict regulatory frameworks, show higher certification adoption rates than service-based businesses. Firms engaged in international trade often require certifications to meet supplier and customer demands, making them more likely to invest in sustainability accreditation.

Despite these trends, some SMEs actively pursue certifications as part of niche market strategies, leveraging

sustainability credentials to differentiate themselves. For these firms, sustainability certifications serve as competitive advantages, particularly in markets where environmentally conscious consumers drive demand.

### 4. Conclusions

This study confirms that firm size plays a critical role in sustainability certification adoption in Italy. Larger firms benefit from economies of scale, enabling them to invest in sustainability initiatives and certifications more readily than SMEs. In contrast, SMEs face financial and operational challenges that hinder certification uptake, despite their potential commitment to sustainable practices.

Policy implications suggest that targeted support mechanisms, such as financial incentives, technical assistance, and streamlined certification processes, could enhance certification adoption among SMEs. Encouraging collaboration between large corporations and smaller suppliers could also facilitate broader engagement in sustainability initiatives.

Future research will explore additional factors influencing certification adoption, including regulatory changes, consumer demand, and technological advancements. By addressing these elements, businesses and policymakers can work towards a more sustainable and inclusive certification landscape in Italy.

### References

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