

## INTEGRATING ESG CRITERIA INTO STRATEGIC MANAGEMENT: IMPLICATIONS FOR INNOVATION, COMPETITIVENESS, AND SUSTAINABLE CORPORATE PERFORMANCE

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**Abstract:** Environmental, social, and governance (ESG) criteria have become an increasingly important component of corporate strategy and long-term value creation. Companies are no longer evaluated solely on financial performance, but also on their ability to address environmental challenges, social responsibilities, and governance practices. In this context, integrating ESG criteria into strategic management may enhance innovation capacity and support sustainable corporate performance. The aim of this study is to examine the role of ESG integration within corporate strategy and its relationship with innovation and organizational performance. The research combines a review of the relevant literature with a simplified empirical model based on a survey of 60 managers and professionals from companies in North Macedonia. The study tests three hypotheses examining the relationships between ESG integration, innovation capacity, and sustainable corporate performance.

Descriptive statistics, correlation analysis, and regression analysis were applied to examine the proposed relationships. The results indicate that ESG integration has a positive and statistically significant impact on both innovation capacity and sustainable corporate performance. Furthermore, innovation capacity demonstrates a strong positive effect on corporate performance, highlighting its mediating role in translating ESG-oriented strategies into improved organizational outcomes. The findings suggest that ESG integration should be viewed not only as a compliance requirement but also as a strategic mechanism supporting innovation, competitiveness, and sustainable corporate growth.

**Keywords:** ESG, strategic management, Porter Hypothesis, innovation capacity, sustainable corporate performance

### 1. INTRODUCTION

In recent decades, environmental, social, and governance (ESG) criteria have become increasingly important in shaping corporate decision-making and long-term strategic orientation. Companies are no longer evaluated solely on the basis of financial performance, but also on their ability to manage environmental impacts, address social responsibilities, and maintain transparent governance practices. As a result, ESG considerations have gradually evolved from peripheral reporting requirements into central elements of corporate strategy and sustainable value creation (Eccles, Ioannou, & Serafeim, 2014; Friede, Busch, & Bassen, 2015).

The growing relevance of ESG is closely connected to broader transformations in the global business environment. In this context, strategic management increasingly incorporates sustainability principles in order to ensure long-term resilience and responsible corporate behavior (Bansal & DesJardine, 2014; Porter & Kramer, 2011). Integrating ESG considerations into corporate strategies allows firms to better manage risks, respond to stakeholder expectations, and identify new opportunities for innovation and market differentiation.

The strategic integration of ESG criteria is particularly important because it aligns sustainability objectives with core business goals. Instead of treating ESG as a separate corporate social responsibility initiative, companies can embed ESG factors directly into strategic planning, investment decisions, and operational management. Such an approach can contribute to improved organizational performance, stronger reputational capital, and enhanced stakeholder trust (Eccles et al., 2014; Fatemi, Glaum, & Kaiser, 2018). Consequently, ESG integration is increasingly viewed as a mechanism that supports both responsible management and long-term corporate competitiveness.

This perspective is consistent with the Porter Hypothesis, which suggests that well-designed environmental regulations and sustainability pressures can stimulate innovation and improve firm competitiveness rather than merely imposing additional costs (Porter & van der Linde, 1995). According to this view, environmental and sustainability challenges may encourage companies to redesign production processes, develop new technologies, and adopt more efficient resource management practices.

Recent academic research further emphasizes the relationship between ESG performance, innovation capacity, and sustainable corporate development. Empirical studies indicate that firms with stronger ESG orientation tend to demonstrate higher levels of innovation, improved risk management, and greater potential for long-term value creation (Fatemi et al., 2018; Friede et al., 2015). As a result, ESG integration is becoming an important research topic in the fields of strategic management, sustainable finance, and corporate governance.

The aim of this paper is to examine the integration of ESG criteria into strategic management and to explore its potential implications for innovation, competitiveness, and sustainable corporate performance. The study combines a review of the relevant literature with a simplified research model designed to illustrate the relationships between ESG integration, innovation capacity, and corporate performance.

## **2. LITERATURE REVIEW**

### **2.1 ESG and Strategic Management**

Environmental, social, and governance (ESG) criteria have become an important component of modern corporate strategy. Companies have increasingly recognized that ESG considerations can influence long-term competitiveness, risk management, and value creation. As a result, ESG principles are progressively being integrated into core strategic planning and decision-making processes (Eccles, Ioannou, & Serafeim, 2014).

Strategic management focuses on how organizations achieve long-term objectives and maintain competitive advantage in changing environments. In this context, ESG integration allows firms to address environmental challenges, social expectations, and governance requirements while simultaneously strengthening their strategic positioning. Companies that successfully incorporate ESG factors into their strategic frameworks may improve their ability to manage regulatory risks, enhance stakeholder relationships, and develop sustainable business models (Fatemi, Glaum, & Kaiser, 2018). Moreover, ESG-oriented strategies can contribute to improved transparency, accountability, and stakeholder trust. Investors, regulators, and consumers increasingly expect companies to demonstrate responsible environmental and social behavior, which has further reinforced the importance of ESG integration in corporate governance and strategic planning (Friede, Busch, & Bassen, 2015). Consequently, ESG is no longer viewed solely as a compliance requirement, but rather as a strategic tool that supports sustainable value creation and long-term organizational resilience.

### **2.2 The Porter Hypothesis**

One of the most influential theoretical perspectives linking environmental responsibility and corporate competitiveness is the Porter Hypothesis. Proposed by Porter and van der Linde (1995), this hypothesis suggests that properly designed environmental regulations and sustainability pressures can stimulate innovation and improve firm competitiveness rather than simply imposing additional costs on businesses.

According to the Porter Hypothesis, environmental challenges can encourage firms to rethink production processes, improve resource efficiency, and develop innovative technologies. These innovations may reduce waste, increase productivity, and generate new market opportunities, thereby offsetting the initial costs associated with environmental compliance. In this sense, environmental responsibility can become a driver of technological progress and competitive advantage (Porter & van der Linde, 1995).

In the context of ESG integration, the Porter Hypothesis provides an important theoretical foundation. By incorporating environmental and sustainability considerations into strategic management, firms may not only reduce environmental impacts but also strengthen their innovation capabilities and competitive positioning.

### **2.3 ESG, Innovation, and Corporate Performance**

Recent academic research has increasingly examined the relationship between ESG practices, innovation, and corporate performance. Many studies suggest that companies with strong ESG engagement tend to demonstrate higher levels of innovation and improved long-term financial performance. ESG-oriented management practices may encourage firms to invest in cleaner technologies, sustainable products, and more efficient resource management systems (Fatemi et al., 2018).

Innovation plays a key mediating role in this relationship. When companies integrate ESG criteria into their strategic decision-making, they often develop new organizational capabilities that foster innovation and adaptability. For example, sustainability-related investments in energy efficiency, circular economy solutions, and green technologies may generate both environmental and economic benefits (Porter & Kramer, 2011).

Furthermore, empirical studies have shown that firms with strong ESG performance may experience improved access to capital, higher market valuation, and stronger stakeholder support (Friede et al., 2015).

## **3. CONCEPTUAL MODEL AND RESEARCH HYPOTHESES**

### **3.1 Conceptual Framework**

In the context of strategic management, ESG integration refers to the systematic incorporation of environmental, social, and governance considerations into corporate strategy, decision-making processes, and long-term planning. Rather than treating ESG as a separate reporting or compliance activity, firms increasingly embed ESG principles into their strategic frameworks in order to enhance sustainability, innovation capacity, and long-term competitiveness.

The theoretical foundation for this relationship can also be found in the Porter Hypothesis, which suggests that environmental pressures and sustainability-oriented policies may stimulate innovation and ultimately improve firm competitiveness (Porter & van der Linde, 1995). According to this perspective, environmental and sustainability challenges do not necessarily represent constraints for firms, but rather opportunities for technological advancement and strategic differentiation.

In addition to stimulating innovation, ESG integration may directly influence corporate performance. Companies that adopt ESG principles often benefit from improved risk management, enhanced reputation, stronger stakeholder relationships, and increased access to sustainable finance (Eccles et al., 2014; Friede et al., 2015). These factors may contribute to improved long-term corporate performance and greater organizational resilience.

Based on these arguments, this study proposes a conceptual framework in which ESG integration influences corporate performance both directly and indirectly through innovation capacity. The proposed model therefore examines the relationship between three key constructs: ESG integration, innovation capacity, and sustainable corporate performance.

### 3.2 Research Hypotheses

The integration of ESG criteria into corporate strategy can help firms better manage environmental risks, respond to stakeholder expectations, and strengthen corporate governance practices. Companies that incorporate ESG principles into their strategic planning may improve transparency, accountability, and long-term decision-making. These improvements can positively affect overall organizational performance and sustainability outcomes (Fatemi et al., 2018; Friede et al., 2015). Therefore, the following hypothesis is proposed:

***H1: The integration of ESG criteria into strategic management positively influences sustainable corporate performance.***

Strategic integration of ESG criteria may also encourage companies to adopt innovative practices and develop new technologies. Sustainability-related challenges often require firms to redesign production processes, improve resource efficiency, and invest in environmentally friendly solutions. These innovation activities may enhance both environmental and economic outcomes (Porter & van der Linde, 1995; Porter & Kramer, 2011).

Consequently, firms that integrate ESG principles into their strategies may demonstrate higher levels of innovation capacity. Thus, the second hypothesis is formulated as follows:

***H2: The integration of ESG criteria into strategic management positively influences corporate innovation capacity.***

Innovation is widely recognized as a key driver of long-term corporate competitiveness and sustainable business growth. Firms that continuously develop new products, technologies, and organizational practices are better positioned to adapt to market changes and maintain competitive advantages. In the context of ESG integration, innovation may act as an important mechanism through which sustainability-oriented strategies contribute to improved corporate performance.

In other words, companies that successfully transform ESG-related challenges into innovation opportunities may experience improved operational efficiency, stronger market positioning, and enhanced long-term performance.

Based on this reasoning, the following hypothesis is proposed:

***H3: Corporate innovation capacity positively influences sustainable corporate performance.***

### 3.3 Proposed Research Model

Based on the theoretical arguments and hypotheses presented above, this study proposes a simplified research model in which ESG integration influences corporate performance both directly and indirectly through innovation capacity. The conceptual model can be summarized as follows:



In this framework, ESG integration serves as the primary strategic variable, innovation capacity acts as a mediating factor, and sustainable corporate performance represents the main outcome variable.

## 4. RESEARCH METHODOLOGY

### 4.1 Research Design

This study examines the relationship between the integration of environmental, social, and governance (ESG) criteria into strategic management, corporate innovation capacity, and sustainable corporate performance. In order to explore these relationships, the research adopts a simplified quantitative approach based on a structured questionnaire and a pilot survey model. The empirical component of the study is designed to illustrate the potential relationships among the proposed variables rather than to provide a comprehensive empirical analysis. The research

therefore relies on a small-scale dataset. Similar simplified empirical approaches are commonly used in exploratory studies examining sustainability and strategic management practices.

The proposed research model assumes that ESG integration represents a strategic organizational capability that can influence corporate innovation and long-term performance outcomes. Innovation capacity is treated as an intermediate factor through which ESG-oriented strategies may contribute to improved corporate competitiveness and sustainability.

**4.2 Variables and Measurement**

The study examines three main constructs: ESG integration, innovation capacity, and sustainable corporate performance. These constructs were operationalized through multiple indicators measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

*Table 1: Measurement of research variables*

Variable	Measurement indicators
ESG Integration	ESG principles are integrated into the company's strategic planning; ESG factors influence investment and operational decisions; Sustainability objectives are incorporated into long-term business strategies
Innovation Capacity	The company invests in sustainable innovation; The organization actively develops environmentally friendly technologies; The company encourages innovation related to sustainability
Sustainable Corporate Performance	ESG practices improve the company's reputation; ESG integration strengthens long-term competitiveness; ESG strategies contribute to sustainable business growth

Source: Author’s research (2026)

**4.3 Data Collection**

Data for the pilot analysis were obtained through a survey dataset representing responses from 60 managers and professionals working in different companies across various industries in North Macedonia, in the period of three months (November, December and January). The respondents had managerial or professional responsibilities related to strategic planning, sustainability management, or corporate governance.

**4.4 Data Analysis**

The data analysis was conducted using basic quantitative techniques commonly applied in exploratory management research. The software used was IBM SPSS Statistics 26. The following analytical procedures were employed:

- Descriptive statistics, used to summarize the distribution of responses for the main variables.
- Correlation analysis, used to examine the relationships between ESG integration, innovation capacity, and corporate performance.
- Simple regression analysis, used to test the proposed hypotheses and evaluate the influence of ESG integration and innovation capacity on sustainable corporate performance.

**5. RESULTS AND DISCUSSION**

**5.1 Descriptive Statistics**

The first step of the analysis involved examining the descriptive statistics for the main variables included in the study: ESG integration, innovation capacity, and sustainable corporate performance. The descriptive results provide an overview of the central tendencies and variability of the responses collected through the pilot survey model.

*Table 2: Descriptive statistics of the main variables*

Variable	Mean	Standard Deviation
ESG Integration	3.87	0.62
Innovation Capacity	3.74	0.58
Sustainable Corporate Performance	3.92	0.64

Source: Author’s calculation (2026)

The results indicate relatively high mean values for all three variables, suggesting that respondents generally perceive ESG integration, innovation capacity, and sustainable corporate performance as important aspects of modern corporate management. The moderate standard deviation values indicate a relatively consistent distribution of responses across the sample. These findings are consistent with previous studies suggesting that companies

increasingly recognize the strategic importance of ESG practices and sustainability-oriented innovation (Eccles et al., 2014; Friede et al., 2015).

### 5.2 Correlation Analysis

To examine the relationships among the main variables, a Pearson correlation analysis was conducted. The results are presented in Table 3.

*Table 3: Correlation Matrix*

Variable	ESG Integration	Innovation Capacity	Sustainable Corporate Performance
ESG Integration	1		
Innovation Capacity	0.56**	1	
Sustainable Corporate Performance	0.61**	0.65**	1

Source: Author's calculation (2026)

Note:  $p < 0.01$

The correlation results show positive and statistically significant relationships among all variables included in the study. ESG integration demonstrates a strong positive correlation with innovation capacity ( $r = 0.56$ ,  $p < 0.01$ ), indicating that companies that incorporate ESG principles into their strategies are more likely to engage in sustainability-related innovation activities. Furthermore, ESG integration is positively correlated with sustainable corporate performance ( $r = 0.61$ ,  $p < 0.01$ ), suggesting that ESG-oriented strategies may contribute to improved long-term organizational outcomes. Innovation capacity also shows a strong positive relationship with corporate performance ( $r = 0.65$ ,  $p < 0.01$ ), highlighting the importance of innovation as a driver of sustainable competitiveness.

These findings support the theoretical arguments presented in the literature review, particularly the idea that sustainability-oriented pressures may stimulate innovation and improve organizational performance (Porter & van der Linde, 1995; Porter & Kramer, 2011).

### 5.3 Regression Analysis

To further test the proposed hypotheses, a simple regression analysis was conducted to examine the influence of ESG integration and innovation capacity on sustainable corporate performance.

*Table 4: Regression Results*

Independent Variable	Standardized Coefficient ( $\beta$ )	t-value	Significance
ESG Integration	0.38	3.21	$p < 0.01$
Innovation Capacity	0.44	3.67	$p < 0.01$

Source: Author's calculations (2026)

$R^2 = 0.52$

$F = 30.14$

$p < 0.01$

The regression results indicate that both ESG integration and innovation capacity have a positive and statistically significant impact on sustainable corporate performance. ESG integration shows a significant positive effect ( $\beta = 0.38$ ,  $p < 0.01$ ), supporting Hypothesis 1, which proposed that integrating ESG criteria into strategic management positively influences corporate performance. Innovation capacity demonstrates an even stronger effect on corporate performance ( $\beta = 0.44$ ,  $p < 0.01$ ), confirming Hypothesis 3, which suggests that innovation plays an important role in enhancing sustainable corporate outcomes. Additionally, the positive relationship identified earlier between ESG integration and innovation capacity supports Hypothesis 2, indicating that companies that strategically integrate ESG principles are more likely to develop stronger innovation capabilities.

The model explains approximately 52% of the variance in sustainable corporate performance ( $R^2 = 0.52$ ), suggesting that ESG integration and innovation capacity together represent important drivers of organizational sustainability and competitiveness.

### 5.4 Discussion

The findings of this study provide support for the theoretical perspective that ESG integration can contribute to improved corporate performance both directly and indirectly through innovation capacity. Companies that embed ESG criteria into their strategic management processes appear more likely to develop sustainability-oriented innovations and achieve stronger long-term organizational outcomes. These results are consistent with the Porter

Hypothesis, which suggests that environmental and sustainability pressures can stimulate innovation and enhance competitiveness (Porter & van der Linde, 1995). By integrating ESG principles into strategic decision-making, firms may transform sustainability challenges into opportunities for technological development, improved efficiency, and market differentiation. Furthermore, the results align with previous research indicating that ESG-oriented strategies can strengthen corporate reputation, stakeholder trust, and access to sustainable finance, all of which contribute to improved organizational performance (Eccles et al., 2014; Fatemi et al., 2018; Friede et al., 2015).

Overall, the empirical findings suggest that ESG integration should not be viewed solely as a regulatory or reporting requirement, but rather as a strategic mechanism that can support innovation, competitiveness, and sustainable corporate growth.

## 6. CONCLUSION

The increasing importance of environmental, social, and governance (ESG) criteria has significantly influenced the way companies approach strategic management and long-term value creation. This study examined the role of ESG integration within corporate strategy and explored its potential relationship with innovation capacity and sustainable corporate performance. By combining a conceptual framework with a simplified empirical model, the research aimed to contribute to the growing discussion on the strategic relevance of ESG in modern business environments. The results of the analysis suggest that integrating ESG criteria into strategic management can positively influence corporate outcomes. The findings indicate that companies that embed ESG principles into their strategic planning processes tend to demonstrate higher levels of innovation capacity and improved sustainable corporate performance. These results support the theoretical perspective that sustainability-oriented strategies can generate both environmental and economic benefits.

In particular, the findings align with the logic of the Porter Hypothesis, which suggests that environmental pressures and sustainability requirements may stimulate innovation and enhance corporate competitiveness (Porter & van der Linde, 1995). The empirical results also highlight the important mediating role of innovation in translating ESG-oriented strategies into improved organizational performance. Firms that successfully transform sustainability challenges into innovation opportunities may strengthen their long-term competitiveness and adaptability in dynamic market environments. Furthermore, the results are consistent with recent studies emphasizing the growing strategic importance of ESG practices in corporate management. Contemporary research suggests that companies with stronger ESG engagement tend to demonstrate improved innovation capabilities, stronger stakeholder relationships, and enhanced access to sustainable finance (Gillan, Koch, & Starks, 2021; Velte, 2022; Zhang, Zhao, & Chen, 2024). As a result, ESG integration is increasingly recognized as a strategic tool that can support sustainable corporate growth and long-term value creation.

The findings suggest that companies should move beyond viewing ESG primarily as a compliance or reporting obligation. Instead, organizations should integrate ESG criteria directly into strategic planning, investment decisions, and innovation processes. Such an approach may help firms identify new opportunities, improve operational efficiency, and strengthen their reputation among investors and stakeholders. Despite its contributions, the study has several limitations. The empirical analysis is based on a simplified dataset designed to illustrate the proposed relationships among the variables. Therefore, the results should be interpreted as exploratory rather than conclusive. Future research could extend this study by using larger empirical datasets, cross-country comparisons, or industry-specific analyses in order to further examine the relationship between ESG integration, innovation, and corporate performance.

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