World Journal of Advanced Research and Reviews
eISSN: 2581-9615 CODEN (USA): WJARAI
Cross Ref DOI: 10.30574/wjarr
Journal homepage: https://wjarr.com/

(Review Article)

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Examine the role of Environmental, social, and Governance (ESG) criteria in investment decision-making and long-term financial performance in private equity firm

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World Journal of Advanced Research and Reviews, 2025, 28(03), 457-464

Publication history: Received 23 October 2025; revised on 30 November 2025; accepted on 02 December 2025

Article DOI: https://doi.org/10.30574/wjarr.2025.28.3.4053

Abstract

This review examines the evolving role of environmental, social and governance (ESG) criteria in private equity (PE) investment decision-making and evidence on long-term financial performance. We synthesize theoretical mechanisms linking ESG integration to value creation (risk management, operational improvements, demand signals, and access to capital), review empirical cross-sectional and private-market studies, and evaluate measurement, disclosure, and methodological challenges that complicate inference. The review draws on academic meta-analyses, industry benchmark reports, and recent private-market research to provide a balanced assessment: ESG integration in private equity increasingly appears to be associated with non-inferior and in a number of settings superior long-term performance, though results vary by strategy, measurement, time horizon, and ESG implementation intensity. We identify gaps (causal identification, heterogeneous effects across strategies/geographies, standardization of ESG metrics in PE) and propose a research agenda and practical recommendations for limited partners (LPs), general partners (GPs), and regulators.

Keywords: Environmental; Social; Governance; Private Equity; Performance; Value Creation; ESG Integration

1. Introduction

Over the last decade, Environmental, Social, and Governance (ESG) criteria have evolved from peripheral screening tools into central elements of investment due diligence, stewardship, and portfolio management across public and private markets [1]. Initially, ESG considerations were often reactive, focusing on negative screening of controversial industries or compliance with minimal regulatory requirements. Early adoption in finance was largely voluntary and driven by reputational concerns. However, mounting evidence now suggests that ESG integration can directly influence risk management, operational efficiency, and long-term value creation, prompting investors to systematically embed ESG across the investment lifecycle [2,3].

Private equity (PE), characterized by concentrated ownership, long-term investment horizons, and active operational involvement, is particularly well-suited for ESG integration. Unlike public equity investors, general partners (GPs) in private equity can influence management decisions, implement governance reforms, optimize environmental performance, and enhance social outcomes within portfolio companies[4,5]. This operational control allows ESG

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interventions to be embedded in strategic and operational value creation plans, potentially generating financial returns while advancing sustainable business practices.

The historical trajectory of ESG integration in finance reflects three broad phases. First, the screening phase, where ESG was primarily used to exclude high risk or ethically sensitive industries; second, the risk mitigation phase, emphasizing ESG as a tool for protecting investment value and reducing downside exposure; and third, the value creation phase, where ESG is recognized as a strategic lever for operational improvement, revenue enhancement, innovation, and access to capital [6,7]. Private equity is entering this third phase, leveraging its governance capabilities and long-term orientation to embed ESG into core investment processes.

The increasing adoption of ESG in private equity is driven by multiple factors. First, limited partners (LPs) are increasingly demanding ESG aligned investments to satisfy their own sustainability mandates and fiduciary responsibilities. Second, regulatory frameworks and international initiatives such as the European Union's Sustainable Finance Disclosure Regulation (SFDR) and United Nations Principles for Responsible Investment (UN PRI) create external pressures that incentivize ESG adoption. Third, empirical and practitioner evidence suggests that ESG integration may support operational improvements, risk reduction, and long-term financial performance, enhancing both portfolio resilience and fundraising potential [8,9].

Despite these opportunities, ESG integration in private equity presents unique challenges. Private companies are often less transparent than public firms, exhibiting heterogeneous governance structures, limited disclosure, and varied operational practices [10,11]. Empirical evidence linking ESG adoption to financial performance in private equity is still emerging, and methodological challenges such as data scarcity, heterogeneous metrics, selection bias, and endogeneity limit robust causal inference [12]. Moreover, the effectiveness of ESG interventions may vary across sectors, geographies, investment strategies, and intensity of active ownership.

This review addresses three interconnected questions that are central to both scholars and practitioners: how and why ESG criteria may influence long-term financial performance in private equity through mechanisms such as risk mitigation, operational improvements, and enhanced access to capital; what existing academic and industry evidence reveals about the impact of ESG integration on portfolio performance, fundraising outcomes, and the resilience of private equity investments; and what methodological and practical challenges continue to shape the measurement and evaluation of ESG outcomes in private equity, as well as the research agenda required to advance understanding in this evolving field.

2. ESG Integration in Private Equity

2.1. Evolution, Motivations, and Current State of ESG in Private Equity

The integration of ESG considerations into private equity has evolved significantly over the past decade, moving from sporadic, compliance-oriented practices to more intentional and structured adoption across the industry. Traditionally, private equity lagged behind public markets in incorporating ESG due to inherent differences in disclosure requirements, the private nature of portfolio companies, and the limited availability of comparable data for analysis [13]. However, recent surveys and industry assessments indicate a steady increase in ESG adoption, with firms gradually embedding ESG criteria into due diligence, investment decision-making, and post-acquisition management processes. This shift is driven by a confluence of internal and external pressures. On the one hand, limited partners particularly pension funds, sovereign wealth funds, and endowments are increasingly demanding ESG-aligned investment approaches as part of their fiduciary obligations and institutional values. On the other hand, global regulatory initiatives and heightened stakeholder scrutiny have expanded expectations for transparency, responsible investment, and sustainability performance [14,15].

Beyond compliance, private equity firms recognize ESG as a strategic lever for value creation. ESG integration offers opportunities for operational improvements, cost savings through resource efficiency, stronger human capital practices, and enhanced governance structures that support long-term performance [16,17]. At the same time, firms increasingly view ESG as a risk mitigation tool capable of reducing exposure to environmental violations, social controversies, governance failures, and reputational damage that could compromise portfolio value or impede fundraising. Despite these developments, the academic literature on ESG in private equity remains comparatively limited, revealing a persistent "science practice gap" wherein industry adoption is advancing faster than formal empirical study [18]. The scarcity of rigorous peer-reviewed research underscores the need for deeper investigation into how ESG practices are evolving and what their implications are for investment performance.

2.2. ESG Implementation Practices and Emerging Challenges in Private Equity

The implementation of ESG within private equity follows multiple pathways that span the entire investment lifecycle. During pre-investment screening and due diligence, firms increasingly rely on ESG assessment frameworks to identify potential risks and opportunities associated with environmental impacts, labor relations, corporate culture, governance structures, and regulatory compliance [19,20]. These assessments inform investment committees and can shape valuation assumptions, deal structuring, and negotiation of contractual terms. Within the holding period, the integration of ESG becomes more operational, as firms embed ESG-related key performance indicators (KPIs) into value creation plans, monitoring frameworks, and management dashboards [21]. Many private equity firms establish dedicated ESG officers, committees, or cross-functional teams responsible for tracking performance, engaging with portfolio company leadership, and ensuring alignment with broader fund level objectives. Additionally, ESG considerations play a growing role during exit planning, where firms highlight sustainability improvements and governance reforms as part of the value proposition presented to potential buyers, sometimes improving valuation multiples or expanding the pool of interested acquirers [22,23].

Despite growing adoption, ESG implementation in private equity faces several persistent challenges. In practice, ESG integration often remains skewed toward risk management rather than proactive value creation, reflecting the lack of standardized metrics, sector-specific performance benchmarks, and widely accepted methodologies tailored to private markets [24]. Many firms struggle with limited data availability from portfolio companies, inconsistencies across ESG reporting frameworks, and the difficulty of quantifying intangible benefits such as improved corporate culture or enhanced stakeholder trust. These limitations undermine comparability across firms and funds and restrict the ability of researchers and practitioners to draw causal inferences about ESG's influence on performance. As a result, while the conceptual case for ESG integration in private equity is strong and industry adoption is accelerating, empirical evidence remains fragmented, highlighting the need for further research to deepen understanding of implementation practices, measurement challenges, and performance outcomes [25].

2.3. Empirical Evidence, Challenges, and Research Gaps

Empirical research examining the relationship between ESG integration and financial performance in private equity is steadily growing, yet it remains less developed than evidence from public markets [26]. Existing studies generally indicate that ESG incorporation is associated with non-negative, and often superior, fund and portfolio performance particularly in cases where ESG issues are materially relevant or actively managed throughout the investment lifecycle. Environmental initiatives tend to produce the most measurable value, often through operational efficiencies and risk reduction, while ESG credibility also enhances fundraising outcomes by strengthening trust with limited partners [27,28]. Firms with transparent sustainability practices and demonstrable progress are more competitive in attracting capital, whereas those associated with ESG lapses face reputational and fundraising challenges. Consequently, ESG has begun to function not only as an internal performance driver but also as an external market signal that shapes investor confidence and capital allocation [29].

Despite these positive indications, the current empirical landscape is constrained by significant methodological and structural challenges [30]. ESG data for private companies remains limited, inconsistent, and difficult to standardize, since disclosure is largely voluntary and not tailored to private equity's unique investment context. Selection bias, inconsistent measurement frameworks, and the predominance of correlational research make it difficult to establish clear causal links between ESG practices and financial outcomes. These limitations underscore the need for more longitudinal research, harmonized ESG metrics designed specifically for private markets, and more rigorous empirical approaches capable of isolating causal effects [31,32]. Addressing these gaps will be essential for deepening understanding of the long-term implications of ESG integration and for refining investment strategies that align sustainability goals with financial performance.

3. Conceptual Framework: How ESG Creates Value in Private Equity

ESG influences long-term performance in private equity through interconnected channels that shape both risk and opportunity [32]. By incorporating ESG criteria into due diligence and portfolio oversight, private equity firms reduce exposure to environmental liabilities, labor controversies, governance failures, and other disruptions that can erode value or damage reputation [33]. This risk-mitigation function is particularly powerful in sectors where ESG issues are materially significant, such as industrials, energy, and consumer-facing businesses. At the same time, operational improvements driven by ESG initiatives ranging from better energy management and waste reduction to stronger governance structures and workforce diversity can enhance productivity, reduce costs, and generate new avenues for revenue growth [34,35]. These operational gains are often amplified in the private equity setting because GPs possess direct control over portfolio company strategy and can implement targeted interventions with speed and precision.

Beyond internal performance drivers, ESG also shapes external market dynamics by influencing access to capital and exit prospects [36]. Funds with robust ESG practices are increasingly favored by limited partners who have explicit sustainability mandates or view ESG integration as a proxy for superior risk management [37]. This alignment can improve fundraising outcomes, attract long-term oriented capital, and potentially lower the cost of capital. At the exit stage, companies with credible ESG improvements may command higher valuations or appeal to a broader pool of buyers, especially as strategic acquirers and public markets place growing emphasis on sustainability credentials. The extent of ESG's value contribution, however, varies across sectors, depends on the materiality of specific ESG factors, and is influenced by the capabilities of the general partner and the preferences of the limited partners they serve [38].

4. Measurement, Data, and Methodological Challenges

Measuring ESG performance in private equity remains challenging largely because of limited and inconsistent data availability. Unlike public companies, private firms disclose little information, and when they do, the metrics, frequency, and formats vary widely [39]. This lack of standardization makes it difficult to compare ESG practices across funds, industries, or geographies, and it restricts researchers' ability to build reliable datasets. Even within a single portfolio, ESG indicators may be unevenly collected or qualitatively described, creating substantial measurement noise. As a result, both academic and industry analyses often rely on self-reported information or proprietary frameworks that lack transparency, reducing comparability and empirical robustness [40,41].

Methodological issues further complicate attempts to evaluate the impact of ESG on financial performance. Endogeneity and selection bias are pervasive: private equity firms that adopt ESG may already be more capable, better governed, or more operationally sophisticated than peers, making it difficult to determine whether ESG itself drives performance or merely correlates with strong managerial practices [42]. Similarly, companies selected for ESG integration may differ systematically in size, sector, or risk profile. Overcoming these biases requires quasi-experimental approaches such as matched samples, natural experiments, or instrumental variables methods that are difficult to apply in a data poor environment. These challenges are compounded by ambiguity surrounding what constitutes "ESG," "sustainability," or "impact," enabling inconsistent usage of labels and raising the risk of greenwashing in both disclosures and research [43].

A further complication lies in private equity's temporal structure. ESG value creation often unfolds over longer time horizons than the typical investment window of three to seven years [44]. Improvements in governance culture, workforce well-being, or environmental efficiency may not fully mature before exit, and some benefits may accrue only to subsequent owners. This temporal mismatch creates underreporting of ESG's long-term impact, both in practice and in research, and incentivizes funds to focus on short-term, compliance-driven ESG actions rather than deeper structural changes [45,46]. Collectively, these challenges underscore the need for standardized metrics, better longitudinal data, and methodological innovation to accurately assess the role of ESG in private equity performance.

5. Policy, Regulation, and Market Structure Influences

Regulatory and market forces are increasingly shaping the trajectory of ESG adoption in private equity, influencing how funds report, design strategies, and engage with portfolio companies. Regulatory frameworks such as the EU Sustainable Finance Disclosure Regulation (SFDR), the Corporate Sustainability Reporting Directive (CSRD), and emerging taxonomies in Europe and Asia are pushing private equity firms toward greater transparency, standardized reporting, and clearer demonstration of sustainability outcomes [47,48]. These regulations require funds to classify their strategies, substantiate ESG claims, and disclose principal adverse impacts, effectively reducing the scope for greenwashing and raising the compliance burden. In contrast, regulatory environments in North America remain more fragmented, with political polarization leading to both pro-ESG mandates and anti-ESG backlash in certain states [49]. This divergence affects global fundraising patterns and compels multinational GPs to tailor ESG approaches to specific jurisdictions.

At the same time, market structure and LP expectations exert powerful pressure on ESG practices. Institutional investors particularly pension funds, sovereign wealth funds, and development finance institutions are increasingly embedding ESG criteria into their allocation mandates [50]. Their due diligence processes now include inquiries into governance structures, climate risk exposure, and diversity practices, making ESG integration a competitive necessity for private equity firms seeking capital. These expectations extend beyond disclosure to include demonstrable action, such as integrating ESG KPIs into value-creation plans or linking GP compensation to sustainability outcomes. Moreover, the broader ecosystem of ESG rating agencies, reporting platforms, and industry initiatives (e.g., PRI, ILPA ESG roadmap) reinforces market norms and accelerates diffusion of best practices. Together, these regulatory and market pressures not only shape fund behavior but also influence investment selection, ownership practices, and exit pathways ultimately contributing to the institutionalization of ESG within the private equity landscape [51,52].

6. Conclusion

ESG considerations have rapidly transitioned from peripheral screening tools to central components of strategic value creation within private equity. As firms increasingly recognize the financial relevance of environmental, social, and governance factors, ESG integration is being woven into deal sourcing, due diligence, operational transformation, and exit planning. When material ESG issues are actively identified and managed, the evidence suggests that private equity funds can achieve non-inferior and in many cases superior long-term performance. These gains stem from enhanced risk mitigation, improved operational efficiency, strengthened governance structures, and the ability to appeal to a growing base of limited partners who prioritize sustainability. Moreover, credible ESG performance can strengthen a fund's reputation and improve fundraising prospects, illustrating that ESG is not merely a matter of compliance but a lever for competitive differentiation.

Despite this progress, the field still faces substantial knowledge gaps that limit the ability to draw definitive causal conclusions about ESG's financial impact. Current empirical evidence is constrained by sparse and inconsistent private-market data, varied definitions of ESG practices, and methodological challenges such as selection bias and endogeneity. To advance both scholarship and industry practice, future research must focus on developing standardized metrics tailored to the private equity context, improving longitudinal data availability, and employing rigorous quasi-experimental designs capable of isolating ESG's true effects. Addressing these gaps will not only enable a clearer understanding of how ESG influences performance but will also support more effective integration strategies, guiding practitioners, limited partners, and policymakers as they navigate an investment landscape increasingly shaped by sustainability imperatives.

Recommendations

Strengthening ESG integration in private equity requires general partners to embed sustainability considerations throughout the investment lifecycle beginning with rigorous due diligence that identifies material ESG risks and opportunities, continuing with structured post-acquisition value creation plans, and culminating in transparent exit reporting that demonstrates measurable progress. GPs should adopt standardized internal frameworks for collecting and reporting ESG data, reducing inconsistencies across portfolio companies and enabling more credible assessment of financial and non-financial outcomes. Embedding ESG-linked KPIs into operational dashboards and, where appropriate, tying elements of management and GP compensation to these indicators can reinforce accountability. Importantly, GPs should move beyond a compliance mindset and emphasize interventions that directly contribute to operational efficiency, risk reduction, and strategic growth. Building cross-functional ESG capabilities whether through dedicated teams, training programs, or partnerships with external experts will further strengthen execution.

Limited partners play an equally critical role in shaping the ESG ecosystem by setting clear expectations for transparency, comparability, and evidence-based reporting. As allocators of capital, LPs should evaluate GPs not only on stated commitments but on demonstrated ability to implement ESG strategies that reflect sector-specific materiality and produce measurable outcomes. Incorporating ESG performance into fund selection, monitoring, and incentive structures can help align GP behavior with long-term sustainability goals. Policymakers, for their part, can support the maturation of ESG practices in private equity by developing regulatory frameworks tailored to private markets standards that promote consistency without imposing public-market reporting burdens that may be impractical for smaller firms. Balanced guidance on disclosure frequency, data confidentiality, and material ESG indicators can reduce greenwashing risks while enabling more reliable cross-market comparisons. Collectively, coordinated action from GPs, LPs, and policymakers is essential to advancing ESG integration and unlocking its potential to enhance financial performance and contribute to broader societal and environmental objectives.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

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