

DOI: 10.5281/zenodo.121126298

DOES ESG REFRAME CORPORATE LIQUIDITY? EVIDENCE ON CASH, VALUATION, AND INVESTOR INTERPRETATION IN AN EMERGING MARKET

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Received: 01/12/2025

Accepted: 02/01/2026

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ABSTRACT

The growing integration of Environmental, Social, and Governance (ESG) considerations into capital markets has reshaped how investors evaluate corporate financial decisions. While prior research extensively links ESG performance to firm value and risk, its role in shaping corporate liquidity behavior and, more importantly, investor interpretation of liquidity remains underexplored – particularly in emerging economies. This study investigates whether ESG performance reframes corporate liquidity from a balance-sheet buffer into a value-relevant signal. Using multi-year panel data from Indian listed firms and employing a two-step Difference Generalized Method of Moments (GMM) estimator, the study examines the impact of ESG performance on traditional liquidity measures (current ratio and quick ratio) and tests whether ESG moderates the relationship between corporate cash holdings and market value. The results reveal a nuanced pattern. ESG performance exhibits a weak but positive association with the current ratio, driven primarily by governance quality, while no significant relationship is observed with the quick ratio – suggesting that ESG does not immediately influence strict short-term liquidity. In contrast, ESG plays a strong moderating role in valuation: firms with higher ESG credibility experience a significantly stronger positive relationship between cash holdings and market value. This indicates that investors interpret liquidity more favourably when firms demonstrate credible ESG commitments, viewing cash reserves as strategic flexibility rather than managerial inefficiency. These findings contribute to corporate finance and sustainable finance literature by reconceptualising liquidity as a contextual signal whose valuation depends on ESG credibility. The study highlights governance as the critical ESG channel linking sustainability to financial strategy and underscores ESG's growing role in shaping investor perception rather than immediate operational liquidity. From a practical perspective, the results suggest that firms can enhance the market value of liquidity buffers through credible ESG engagement, while policymakers should focus on strengthening governance-oriented ESG disclosure frameworks in emerging markets.

KEYWORDS: ESG performance; corporate liquidity; cash holdings; market valuation; governance; investor interpretation; dynamic panel GMM; emerging markets; sustainable finance.

1. INTRODUCTION

The increasing prominence of Environmental, Social, and Governance (ESG) considerations in global capital markets has fundamentally altered how investors evaluate corporate financial decisions (Yadav et al., 2023). ESG is no longer viewed merely as a non-financial disclosure requirement but has become an integral signal shaping investor expectations regarding risk, governance quality, and long-term strategic orientation. While a growing body of research documents the association between ESG performance and firm value, cost of capital, and risk exposure, far less is known about how ESG influences corporate liquidity decisions and more critically how it shapes investor interpretation of liquidity itself (Hatak & Hyslop, 2015; Sonfield et al., 2015). This gap is particularly salient in emerging markets, where ESG adoption is uneven and institutional frameworks are still evolving. Corporate liquidity occupies a central position in financial theory. Liquidity provides firms with operational flexibility, insurance against uncertainty, and the capacity to exploit future investment opportunities. Traditional finance theory, however, offers competing interpretations of liquidity (Bassetti et al., 2015; Le Breton-Miller & Miller, 2015). On the one hand, higher liquidity reduces financial distress risk and enhances strategic flexibility. On the other hand, excessive cash holdings may signal agency problems, inefficient capital allocation, or a lack of profitable investment opportunities. As a result, the valuation impact of liquidity is inherently ambiguous and depends on the informational and governance context in which it is observed (Jang & Park, 2019; Wang et al., 2017). This ambiguity raises a fundamental question that remains largely unanswered: when do investors perceive corporate liquidity as value-enhancing rather than value-destroying? This study argues that ESG performance provides a critical contextual lens through which liquidity is interpreted by capital markets. ESG particularly governance quality can mitigate agency concerns, reduce information asymmetry, and signal responsible managerial intent. When firms demonstrate credible ESG engagement, investors are more likely to trust that liquidity buffers will be deployed efficiently and in alignment with long-term stakeholder interests. In contrast, in the absence of ESG credibility, similar levels of liquidity may be discounted or even penalized. Thus, ESG does not merely influence liquidity levels; it reframes the economic meaning of liquidity in valuation processes (Debata et al., 2020; Gasparro & Monk, 2019). Despite

this conceptual relevance, existing empirical evidence on the ESG liquidity nexus remains limited and inconclusive. Prior studies primarily focus on ESG's relationship with firm value, profitability, or risk, often treating liquidity as a control variable rather than a core outcome. The few studies that examine liquidity typically rely on broad measures such as cash holdings, without distinguishing between different dimensions of liquidity or investigating how ESG alters investor responses to liquidity. Moreover, research has largely concentrated on developed economies, where ESG disclosure standards are relatively mature and institutional enforcement is strong. Whether similar dynamics hold in emerging markets where ESG adoption is more heterogeneous and investor interpretation may differ remains an open empirical question. India provides a compelling setting to address this gap. In recent years, India has witnessed a rapid expansion of ESG-related regulation and disclosure, most notably through the Securities and Exchange Board of India's Business Responsibility and Sustainability Reporting (BRSR) framework (Kranias et al., 2024; Yao, 2025). At the same time, Indian firms display substantial variation in ESG engagement, governance quality, and financial transparency across sectors. This institutional heterogeneity creates a natural laboratory to examine how ESG performance interacts with liquidity management and market valuation in an emerging-market context. Importantly, Indian capital markets are increasingly influenced by ESG-sensitive domestic and foreign institutional investors, making investor interpretation of ESG signals particularly relevant. This study makes three key contributions to the literature. First, it advances understanding of the ESG-liquidity relationship by distinguishing between broad liquidity (current ratio) and strict liquidity (quick ratio), demonstrating that ESG's influence on liquidity is component-specific and governance-driven rather than uniform. Second, it introduces ESG as a moderating variable in valuation models, showing that ESG credibility fundamentally alters how investors value corporate cash holdings. In doing so, the study reconceptualises liquidity not merely as a financial buffer but as a context-dependent signal whose valuation depends on non-financial credibility. Third, methodologically, the study employs a two-step Difference Generalized Method of Moments (GMM) estimator to address endogeneity, dynamic persistence, and unobserved firm heterogeneity – issues that are particularly acute in corporate finance and ESG research. The findings

reveal a striking asymmetry. While ESG performance exhibits only a weak association with broad liquidity and no significant effect on strict liquidity, it plays a powerful role in shaping the valuation of liquidity. Firms with stronger ESG performance derive significantly greater market value from cash holdings, suggesting that investors reward liquidity when it is embedded within a credible ESG framework. This evidence underscores a critical insight: ESG's most immediate financial impact lies not in altering balance-sheet structure but in reshaping investor perception and valuation logic. By positioning ESG as a valuation lens rather than a purely operational determinant, this study contributes to corporate finance, sustainable finance, and emerging-market literature. It highlights the growing importance of governance-driven ESG credibility in resolving classic liquidity–agency trade-offs and offers new insights into how sustainability considerations intersect with core financial decisions in capital markets.

1.1. Research Objectives

1. To examine the effect of ESG performance on corporate liquidity, distinguishing between broad liquidity (current ratio) and strict short-term liquidity (quick ratio) among Indian listed firms.
2. To investigate whether ESG performance moderates the relationship between corporate cash holdings and market valuation, thereby influencing investor interpretation of liquidity.
3. To assess the differential role of ESG dimensions particularly governance in shaping liquidity outcomes and valuation effects in an emerging-market context.

1.2. Research Questions

1. Does ESG performance influence corporate liquidity, and does this influence differ between broad and strict liquidity measures?
2. Does ESG performance alter how investors value corporate cash holdings in capital markets?
3. Which ESG dimension plays the most significant role in shaping liquidity management and valuation outcomes in emerging-market firms?

2. LITERATURE REVIEW

2.1. ESG as an Informational and Governance Mechanism in Corporate Finance

Environmental, Social, and Governance (ESG) performance has increasingly been conceptualized as an informational and governance mechanism rather than a purely ethical or compliance-oriented

construct. In corporate finance, ESG signals firm-level attributes related to managerial quality, risk management, transparency, and long-term strategic orientation. Prior research demonstrates that ESG engagement reduces information asymmetry, mitigates agency conflicts, and improves stakeholder trust, thereby influencing capital market outcomes such as firm value, cost of capital, and downside risk (Guyader et al., 2017; Oyedokun, 2017; Oyedokun et al., 2018). Among the three ESG pillars, governance has been consistently identified as the most directly linked to financial decision-making. Strong governance enhances internal controls, aligns managerial incentives with shareholder interests, and constrains opportunistic behavior (Shleifer & Vishny, 1997; Gompers et al., 2003). Environmental and social dimensions, while increasingly important, typically involve long-term investments with delayed payoffs and are less immediately reflected in financial ratios (Atan et al., 2016; Farooq, 2015). This distinction is particularly relevant in emerging markets, where ESG adoption is uneven and governance quality varies substantially across firms. In emerging economies, ESG disclosure regimes are still evolving, leading to heterogeneity in ESG credibility and implementation depth (Al-Jalahma et al., 2020; Albitar et al., 2020; Shaikh, 2021). As a result, ESG may function less as a uniform performance metric and more as a credibility signal, allowing investors to differentiate between firms with substantive governance practices and those engaging in symbolic or compliance-driven disclosure. This signaling role suggests that ESG's financial impact may operate indirectly by shaping investor interpretation of firm characteristics rather than directly through operational metrics.

2.2. ESG and Corporate Liquidity: Competing Theoretical Predictions

Corporate liquidity reflects a firm's ability to meet short-term obligations, absorb shocks, and maintain operational flexibility. Traditional liquidity theory emphasizes precautionary motives, transaction needs, and financing constraints as key drivers of liquidity holdings (Myers & Majluf, 1984; Campello, 2006). From this perspective, liquidity serves as a financial buffer that reduces distress risk and supports investment under uncertainty. The integration of ESG considerations introduces competing theoretical predictions regarding liquidity management. On one hand, ESG engagement particularly environmental and social initiatives often requires significant upfront capital expenditures and compliance costs (Fuadah et al., 2022; Huang, 2021;

Liang et al., 2021). Firms pursuing sustainability strategies may therefore retain higher liquidity as a precautionary measure to finance ESG investments and absorb regulatory or operational risks. This precautionary motive implies a positive relationship between ESG performance and liquidity. On the other hand, strong ESG performance especially governance quality may reduce the need for excessive liquidity buffers. Firms with credible governance structures typically face lower agency costs, improved access to external finance, and more efficient working capital management (Cho, 2022; Gu et al., 2022; Khan, 2022). Reduced information asymmetry and enhanced stakeholder trust can lower financing frictions, diminishing reliance on internal liquidity reserves. From this efficiency perspective, ESG could be associated with lower or unchanged liquidity levels. Empirical evidence on the ESG liquidity relationship remains mixed (Díaz-Peña et al., 2022; Nguyen et al., 2022; Tanjung, 2023). While some studies report positive associations between ESG and cash holdings, others find weak or insignificant effects, particularly when liquidity is measured using strict short-term indicators. These inconsistencies suggest that ESG's influence on liquidity is likely dimension-specific and gradual, with governance exerting a more immediate effect than environmental or social initiatives.

2.3. ESG Performance and Broad Liquidity: The Current Ratio

The current ratio captures a firm's ability to meet short-term liabilities using total current assets and reflects broad liquidity conditions. Unlike narrower liquidity measures, the current ratio is sensitive to changes in receivables, inventories, and working capital policies areas where governance quality and stakeholder relationships may exert influence (M. T. Lee et al., 2023; Wasiuzzaman et al., 2023). From a positive perspective, firms with strong ESG performance may exhibit higher current ratios due to improved operational discipline, favourable supplier and creditor terms, and enhanced access to short-term financing. Governance-driven transparency and accountability can stabilize working capital cycles and reduce liquidity risk. In contrast, environmental and social investments are less likely to affect the current ratio immediately, as they primarily involve long-term asset commitments rather than short-term asset reallocation (Bissoondoyal-Bheenick et al., 2023; Khandelwal et al., 2023; Maji & Lohia, 2023). Given these considerations, ESG performance particularly governance may be associated with broad liquidity, albeit weakly and selectively. The expected effect is not uniform across ESG dimensions and is likely

modest in emerging markets where ESG integration is still maturing.

Hypothesis H1a

H1a: ESG performance has a significant effect on the current ratio.

2.4. ESG Performance and Strict Liquidity: The Quick Ratio

The quick ratio provides a more stringent measure of liquidity by excluding inventories and focusing on the most liquid assets, such as cash, marketable securities, and receivables. This metric captures immediate financial flexibility and is less sensitive to operational or strategic initiatives that affect longer-term asset composition (Alduais, 2023; Babaghaderi, 2023; Firmansyah et al., 2023). From a theoretical standpoint, ESG initiatives are unlikely to exert a direct short-term influence on the quick ratio. Environmental and social investments typically reduce liquid resources in the short run due to capital reallocation, while governance improvement although beneficial for financial discipline do not necessarily translate into higher levels of cash or receivables (Chen et al., 2024; Dong et al., 2023; Pu, 2023). As a result, ESG's impact on strict liquidity is expected to be limited. Prior empirical studies support this view, showing that short-term liquidity measures are driven primarily by working capital cycles, credit policies, and short-term market conditions rather than long-term strategic commitments such as ESG. Consequently, any ESG-quick ratio relationship is likely to be weak or statistically insignificant, particularly in emerging-market contexts.

Hypothesis H1b

H1b: ESG performance has a significant effect on the quick ratio.

2.5. Cash Holdings, Market Valuation, and the Moderating Role of ESG

The relationship between cash holdings and firm value has long been debated in corporate finance. Cash can enhance firm value by providing strategic flexibility, reducing distress risk, and enabling timely investment. Conversely, excess cash may exacerbate agency problems, encourage inefficient investment, and signal weak governance (Dayal et al., 2024; Wu & Nguyen, 2024; Yip & LAU, 2024). As a result, the valuation effect of cash holdings is inherently ambiguous and context-dependent. This study argues that ESG performance particularly governance credibility serves as a critical moderating

factor in this relationship. ESG signals responsible management, transparency, and long-term orientation, reducing concerns that managers will misuse liquidity reserves (Llach et al., 2025; Narula et al., 2024; Veeravel et al., 2024). When ESG credibility is high, investors are more likely to interpret cash holdings as a strategic resource rather than a source of inefficiency. Conversely, in low-ESG firms, similar cash levels may be discounted or penalized due to heightened agency concerns. By reframing investor interpretation, ESG alters the economic meaning of liquidity in valuation models (Ajina et al., 2025; S. Lee et al., 2025; Tahtamoni et al., 2025). Rather than directly influencing cash levels, ESG strengthens the positive valuation impact of cash by enhancing trust and reducing information asymmetry. This moderating role is particularly salient in emerging markets, where governance quality varies widely and ESG signals help investors differentiate between firms.

Hypothesis H1c

H1c: ESG performance positively moderates the relationship between cash holdings and market value, such that the valuation impact of cash holdings is stronger for firms with higher ESG performance.

2.6. Conceptual Synthesis

Together, the hypotheses reflect a coherent theoretical structure. ESG's direct influence on liquidity (H1a and H1b) is expected to be limited and dimension-specific, reflecting gradual operational effects. In contrast, ESG's moderating influence on valuation (H1c) is expected to be stronger and more immediate, operating through investor perception and signaling channels. This asymmetry highlights ESG's primary role as a valuation lens rather than a direct driver of short-term liquidity outcomes.

3. METHODOLOGY

This study employs a quantitative, dynamic panel data methodology to examine the relationship between ESG performance, corporate liquidity, cash holdings, and market valuation among Indian listed firms. Given the endogenous and persistent nature of liquidity and valuation decisions—where ESG engagement, cash holdings, and firm value may be jointly determined—the study adopts a two-step Difference Generalized Method of Moments (GMM) estimator to ensure consistent and unbiased parameter estimates. This approach effectively addresses key econometric challenges, including unobserved firm-specific heterogeneity, simultaneity bias, and reverse causality, by first-differencing the regression equations and using lagged values of

endogenous variables as internal instruments. The analysis is conducted on an unbalanced panel of non-financial firms for which consistent ESG scores and financial data are available. ESG performance is measured using Bloomberg's composite ESG score and its individual Environmental, Social, and Governance components, while liquidity is captured through both the current ratio and quick ratio to distinguish between broad and strict liquidity conditions. Market valuation is measured using the natural logarithm of market capitalization, and cash holdings are defined as cash and cash equivalents scaled by total assets. Firm size and leverage are included as control variables, and lagged dependent variables are incorporated to capture dynamic adjustment effects. Model validity is assessed using standard diagnostic tests, including Arellano-Bond tests for serial correlation and Hansen/Sargan tests for instrument validity, ensuring the robustness of the estimated relationships.

Model Specifications

Liquidity Models (H1a and H1b)

where $Liquidity_{it}$ represents the current ratio (H1a) and quick ratio (H1b), respectively.

Valuation Model with ESG Moderation (H1c)

where MV_{it} denotes market value, $Cash_{it}$ represents cash holdings, and the interaction term captures the moderating role of ESG performance.

4. DATA ANALYSIS AND RESULTS

The Data Analysis and Results section presents a comprehensive empirical examination of the relationships between ESG performance, corporate liquidity, cash holdings, and market valuation. It begins with detailed descriptive statistics and correlation analysis to assess data distribution, variability, and preliminary associations among variables, ensuring the absence of multicollinearity and validating the suitability of the dataset for dynamic panel estimation. The section then reports the results of two-step Difference GMM models analyzing the impact of ESG performance on broad and strict liquidity measures, capturing the dynamic nature of liquidity management while addressing endogeneity and firm-specific heterogeneity. Finally, the section presents moderation analysis examining whether ESG performance alters the valuation effect of corporate cash holdings, thereby revealing how sustainability credibility reshapes investor interpretation of liquidity. Together, these analyses provide robust, theory-consistent evidence on the asymmetric operational and valuation roles of ESG in corporate financial decision-making, supported by appropriate diagnostic and robustness tests.

Table 1: Descriptive Statistics and Distributional Properties

Variable	Mean	Median	Std. Dev.	Min	Max	Skewness	Kurtosis	VIF
Current Ratio	1.84	1.63	0.91	0.42	4.96	0.87	3.21	1.42
Quick Ratio	1.12	0.98	0.64	0.18	3.87	0.74	2.89	1.36
Cash Holdings	0.094	0.071	0.072	0.004	0.386	1.68	5.12	1.51
Market Value (log)	9.62	9.47	1.31	6.88	13.54	0.56	3.04	—
ESG Combined	46.37	44.80	14.92	12.10	82.60	0.41	2.67	1.63
Environmental Score	43.21	41.90	16.04	9.80	85.10	0.48	2.81	1.71
Social Score	45.68	44.30	15.11	11.40	84.70	0.45	2.73	1.69
Governance Score	49.19	48.60	13.27	15.60	88.30	0.32	2.55	1.58
Firm Size (log assets)	10.74	10.61	1.42	7.21	14.88	0.22	2.61	1.74
Leverage	0.41	0.39	0.19	0.05	0.82	0.63	2.94	1.46

Table 1 presents the descriptive statistics and distributional properties of the study variables, revealing substantial heterogeneity in ESG performance, liquidity positions, and firm characteristics across Indian listed firms. The mean current ratio and quick ratio indicate moderate overall liquidity, while the wide dispersion around these averages reflects diverse working capital strategies across firms. Cash holdings exhibit right skewness and elevated kurtosis, suggesting that a subset of firms maintains significantly higher liquidity buffers, consistent with precautionary motives in uncertain institutional environments. ESG scores also display considerable variation, highlighting uneven adoption of sustainability practices across firms and reinforcing the relevance of

examining ESG as a differentiating signal rather than a homogeneous attribute. Among ESG dimensions, governance shows comparatively lower dispersion and skewness, indicating more consistent implementation relative to environmental and social practices. Market value and firm size distributions exhibit moderate skewness, which is typical in emerging-market samples and justifies logarithmic transformation. Importantly, variance inflation factors remain well below conventional thresholds, confirming the absence of multicollinearity concerns. Overall, the distributional characteristics support the use of dynamic panel estimation techniques and suggest that ESG, liquidity, and valuation dynamics are sufficiently heterogeneous to warrant firm-level analysis.

Table 1: Correlation Matrix

Variable	CR	QR	Cash	ESG	MV	Size	Lev
Current Ratio (CR)	1.00						
Quick Ratio (QR)	0.63	1.00					
Cash Holdings	0.29	0.41	1.00				
ESG Combined	0.18	0.07	0.21	1.00			
Market Value (MV)	0.24	0.19	0.31	0.38	1.00		
Firm Size	-0.27	-0.18	-0.14	0.33	0.52	1.00	
Leverage	-0.36	-0.29	-0.22	-0.17	-0.26	0.41	1.00

Table 2 reports the pairwise correlations among key study variables and provides preliminary insights into their relationships. ESG performance is positively correlated with market value and cash holdings, suggesting that firms with stronger ESG profiles tend to be larger, more valuable, and maintain higher liquidity buffers. However, the correlations between ESG and short-term liquidity measures—particularly the quick ratio—are weak, indicating that ESG engagement is not strongly associated with immediate liquidity positions.

Cash holdings show a stronger association with market value than traditional liquidity ratios, reinforcing the importance of cash as a valuation-relevant financial resource. Importantly, none of the correlation coefficients exceed conventional thresholds for multicollinearity, suggesting that the independent variables capture distinct dimensions of firm behavior. Overall, the correlation patterns provide early support for the valuation-based role of ESG rather than a direct operational liquidity effect.

Table 3: Difference GMM Results: ESG → Current Ratio (H1a)

Variable	Coefficient	Std. Error	z-value	p-value
ESG Combined	0.0031	0.0018	1.72	0.085*
Environmental Score	-0.0012	0.0024	-0.50	0.617
Social Score	-0.0009	0.0020	-0.45	0.652
Governance Score	0.0048	0.0026	1.84	0.066*
Lagged Current Ratio	0.231	0.041	5.63	0.000***
Firm Size	-0.019	0.004	-4.64	0.000***
Leverage	-0.312	0.058	-5.37	0.000***

Table 3 presents the two-step Difference GMM results examining the effect of ESG performance on the current ratio. The findings indicate a weak but positive association between ESG performance and broad liquidity, with governance emerging as the only ESG dimension exhibiting statistical significance. This suggests that governance-driven ESG practices—such as stronger oversight, transparency, and internal controls—enhance working capital management and short-term

financial stability. In contrast, environmental and social dimensions do not exhibit a significant effect, consistent with the long-term and capital-intensive nature of these initiatives. The strong persistence of the lagged current ratio confirms the dynamic nature of liquidity management. Overall, the results suggest that ESG influences broad liquidity selectively and primarily through governance rather than through environmental or social channels.

Model Diagnostics

Test	Result
AR(1)	Significant
AR(2)	Not significant
Hansen Test	Not significant
Instruments	Valid

Table 4: Difference GMM Results: ESG → Quick Ratio (H1b)

Variable	Coefficient	Std. Error	z-value	p-value
ESG Combined	-0.0014	0.0020	-0.70	0.484
Environmental Score	-0.0021	0.0030	-0.69	0.491
Social Score	-0.0007	0.0027	-0.26	0.796
Governance Score	0.0019	0.0029	0.65	0.516
Lagged Quick Ratio	0.273	0.051	5.35	0.000***
Firm Size	-0.013	0.005	-2.65	0.008***
Leverage	-0.291	0.071	-4.07	0.000***

Model Diagnostics: AR (1): Significant | AR (2): Not Significant | Hansen Test: Valid

Table 4 reports the Difference GMM results for the relationship between ESG performance and the quick ratio. Unlike the current ratio, none of the ESG components – including the composite score – exhibit a statistically significant effect on strict liquidity. This indicates that ESG engagement does not materially alter firms’ most liquid asset positions in the short run. The quick ratio appears to be driven primarily by firm-specific financial

policies and structural characteristics rather than sustainability-related initiatives. The strong significance of the lagged dependent variable further highlights the persistence of strict liquidity over time. These findings suggest that ESG’s influence on liquidity does not extend to immediate financial flexibility, supporting the argument that ESG impacts liquidity gradually rather than instantaneously.

Table 5: Moderation Analysis: ESG × Cash Holdings → Market Value (H1c)

Variable	Coefficient	Std. Error	t-value	p-value
Cash Holdings	0.214	0.041	5.22	0.000***
ESG Combined	0.187	0.039	4.79	0.000***
Cash × ESG	0.122	0.033	3.69	0.000***
Firm Size	0.041	0.018	2.28	0.023**
Leverage	-0.217	0.062	-3.50	0.001***

Table 5 provides strong evidence of ESG’s moderating role in the relationship between cash holdings and market value. Cash holdings are positively valued by investors, and this effect is significantly amplified in firms with higher ESG performance. The positive and statistically significant interaction term indicates that ESG credibility reshapes investor interpretation of liquidity, reducing agency concerns and enhancing

trust in managerial deployment of cash reserves. In high-ESG firms, cash is perceived as strategic flexibility rather than inefficient capital hoarding. The direct positive effect of ESG on market value further reinforces its role as a valuation signal. These results demonstrate that ESG’s most powerful financial impact operates through investor perception and valuation channels rather than direct balance-sheet effects.

Model Fit and Diagnostics

Metric	Value
R ² (Base Model)	0.31
R ² (Interaction Model)	0.38
Multicollinearity	No
Endogeneity	Controlled

Table 6: Summary of Hypothesis Testing

Hypothesis	Relationship	Result
H1a	ESG → Current Ratio	Partially Supported
H1b	ESG → Quick Ratio	Not Supported
H1c	ESG × Cash → Market Value	Fully Supported

Table 6 summarizes the hypothesis testing results and highlights a clear asymmetry in ESG's financial impact. While ESG exhibits a limited and selective influence on operational liquidity—partially supporting H1a and rejecting H1b—it plays a decisive role in shaping valuation outcomes, fully supporting H1c. This pattern underscores the distinction between ESG's gradual operational effects and its immediate perceptual effects in capital markets. The findings collectively suggest that ESG functions more effectively as a valuation lens than as a short-term liquidity driver, particularly in emerging-market contexts.

5. DISCUSSION AND CONCLUSION

5.1. Discussion

This study advances understanding of how Environmental, Social, and Governance (ESG) performance intersects with corporate liquidity management and market valuation by revealing a clear asymmetry between operational and perceptual effects. While ESG engagement has become increasingly prominent in corporate strategy and investor discourse, its financial implications remain contested. The findings of this study suggest that ESG's primary financial relevance lies not in directly reshaping short-term liquidity structures but in reframing how liquidity is interpreted and valued by capital markets. The weak but positive association between ESG performance and the current ratio highlights governance as the critical transmission channel linking sustainability to broad liquidity. Strong governance practices enhance oversight, reduce agency frictions, and improve working capital discipline, which can marginally strengthen firms' ability to meet short-term obligations. However, the absence of any significant ESG effect on the quick ratio suggests that sustainability initiatives do not immediately influence firms' most liquid asset positions. This distinction underscores the gradual and structural nature of ESG's operational effects, particularly for environmental and social dimensions that require long-term capital commitments and

exhibit delayed financial payoffs. In emerging markets, where ESG integration is still evolving, these effects are likely to manifest slowly and unevenly across firms. In contrast, the moderation results reveal a much stronger and more immediate role for ESG in valuation. ESG credibility significantly amplifies the positive market valuation of cash holdings, indicating that investors interpret liquidity differently depending on a firm's sustainability profile. In firms with strong ESG performance, cash reserves are perceived as strategic flexibility and preparedness for long-term investment rather than as idle resources susceptible to managerial misuse. This finding aligns with signalling theory and agency theory, suggesting that ESG reduces information asymmetry and mitigates concerns over opportunistic behavior. By enhancing investor trust, ESG alters the economic meaning of liquidity from a potential agency problem to a value-enhancing strategic resource. The results further suggest that ESG operates as a contextual lens through which traditional financial indicators are evaluated. Rather than uniformly affecting balance-sheet metrics, ESG reshapes investor expectations and valuation logic. This perspective helps reconcile mixed findings in prior literature regarding the financial impact of ESG, as it emphasizes interpretation and credibility over immediate operational outcomes. In emerging markets such as India—characterized by heterogeneous governance quality and evolving disclosure regimes—this reframing role is particularly salient. Investors rely on ESG signals to distinguish between firms with genuine long-term orientation and those with weaker governance structures, making ESG a powerful moderator of valuation relationships.

5.2. Conclusion

This study investigates whether ESG performance reframes corporate liquidity and alters its valuation implications using dynamic panel evidence from Indian listed firms. The findings demonstrate that ESG exhibits only a limited and selective influence on operational liquidity, with governance modestly

affecting the current ratio and no significant effect on strict liquidity measured by the quick ratio. In contrast, ESG plays a decisive role in shaping how liquidity is valued by capital markets, significantly strengthening the positive relationship between cash holdings and market value. The evidence suggests that ESG’s most immediate financial impact lies not in altering liquidity levels but in influencing investor interpretation of liquidity. By enhancing transparency, governance quality, and stakeholder trust, ESG transforms cash holdings from an ambiguous financial buffer into a credible signal of strategic flexibility. This insight contributes to corporate finance and sustainable finance literature by reconceptualizing liquidity as a context-dependent signal whose valuation depends on non-financial credibility.

From a broader perspective, the findings underscore the growing importance of ESG as a valuation mechanism in emerging markets. As

sustainability disclosure frameworks mature and investor attention to ESG intensifies, firms that integrate credible ESG practices—particularly governance—are better positioned to derive valuation benefits from financial flexibility. For managers, the results highlight the importance of aligning liquidity strategies with ESG commitments to enhance market confidence. For policymakers, the findings emphasize the need to strengthen governance-focused ESG disclosure standards to improve transparency and comparability. Overall, this study demonstrates that ESG does not merely complement traditional financial analysis but actively reshapes how core financial decisions are interpreted and valued in capital markets. By positioning ESG as a valuation lens rather than a short-term liquidity driver, the research offers a refined understanding of the ESG-liquidity-valuation nexus and provides a foundation for future research in sustainable corporate finance.

Table 5.1: Limitations and Future Research Directions

Aspect	Limitations of the Current Study	Future Research Directions
ESG Measurement	ESG scores are sourced from a single provider, which may involve methodological biases, weighting subjectivity, and incomplete disclosure coverage.	Future studies can employ multiple ESG rating providers or construct composite ESG indices to enhance measurement robustness and comparability.
Temporal Scope	The study captures ESG effects over a limited time horizon, which may not fully reflect the long-term financial impacts of environmental and social initiatives.	Longitudinal analyses over extended periods can examine whether ESG’s operational effects on liquidity intensify as sustainability maturity increases.
Industry Heterogeneity	Industry-specific dynamics are controlled but not explicitly modeled, potentially masking sector-level ESG-liquidity differences.	Sector-wise or industry-specific models can explore heterogeneous ESG effects across asset-intensive, service-oriented, and ESG-sensitive industries.
Market Context	The empirical setting is restricted to an emerging market, which may limit the generalizability of the findings to developed economies.	Cross-country comparative studies can assess how institutional quality and regulatory regimes moderate ESG-liquidity-valuation relationships.
Liquidity Measures	Liquidity is captured using accounting-based ratios, which may not fully reflect market-based liquidity conditions or intraday cash management.	Future research can incorporate market-based liquidity measures such as bid-ask spreads, turnover ratios, or cash flow volatility.
Methodological Scope	While Difference GMM addresses endogeneity, it relies on internal instruments that may weaken with shorter panels.	Alternative identification strategies, including system GMM, quasi-experimental designs, or instrumental-variable approaches, can be explored for robustness.
ESG Role Specification	ESG is examined primarily as a moderator rather than as a mediator or dynamic capability.	Future studies can test ESG as a mediating mechanism between governance quality, risk management, and financial outcomes.
Investor Perspective	The analysis infers investor interpretation indirectly through market valuation measures.	Micro-level investor data or event-study approaches can provide direct evidence on how investors react to ESG-linked liquidity signals.

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