DOES ESG DİSCLOSURE FACİLİTATE CORPORATE FİNANCİNG? EVİDENCE FROM EQUİTY ISSUANCE AND DEBT MARKETS

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Abstract: This study investigates whether firms obtain financing benefits primarily through substantive improvements in ESG reporting quality or through increases in ESG disclosure quantity that may be associated with impression management. Using a panel of Polish non-financial companies listed on the Warsaw Stock Exchange during 2017–2022, we estimate panel regression models to examine (i) the relationship between ESG reporting dimensions and the implicit cost of debt and (ii) changes in ESG reporting preceding debt and equity financing events. ESG reporting measures are constructed through manual content analysis of annual and stand-alone non-financial reports, distinguishing reporting quality, disclosure quantity, and disclosure abundance. The results indicate that ESG reporting is generally unrelated to the implicit cost of debt, although disclosure quantity is weakly associated with lower borrowing costs for newly obtained debt. Firms issuing new equity increase the volume of ESG disclosure but do not improve its quality, suggesting that financing-related reporting behaviour is more consistent with increased disclosure visibility than with substantive improvements in reporting quality.

***Keywords*:** corporate financing, cost of capital, ESG reporting quality, ESG reporting quantity, impression management

INTRODUCTION

The rapid development of environmental, social, and governance (ESG) reporting has altered the information environment in which firms raise external capital (Amir & Serafeim, 2018; Yadav et al., 2025). The literature suggests that the perceived ESG performance may influence corporate financing through two related but conceptually distinct channels. First, it can affect the availability and composition of financing, including the choice between debt and equity and the capacity to attract particular groups of investors (Adeneye et al., 2023; Kotsantonis et al., 2016). Second, it can affect the price of financing (Bolton et al., 2022; Chava, 2014; Eichholtz et al., 2019; Seltzer et al., 2022).

Therefore, corporations may have strong incentives to manage their ESG reporting. In this context, “management” of ESG reporting does not necessarily imply falsification. It encompasses a continuum ranging from legitimate efforts to improve the relevance, comparability, and visibility of sustainability information (substantive reporting) to selective disclosure, impression management, and greenwashing. The common underlying premise is that managers do not treat ESG reporting as a purely administrative or accountability exercise. They may also use it strategically to influence investors’ and creditors’ perceptions of risk, attract preferred capital providers, reduce financing costs and preserve access to external funds.

The determinants underlying firms' choice between substantive ESG reporting and impression management are complex and multifaceted. The case for a financing benefit from substantive ESG reporting rests primarily on information-asymmetry, signaling, stakeholder, agency, and risk-management arguments (Ellili, 2022). Evidence supports that by providing information that is not fully captured in financial statements, ESG disclosure can reduce uncertainty regarding future cash flows, regulatory liabilities, reputational exposure, and the quality of corporate governance (Boulton, 2024; Derrien et al., 2025). In debt markets, disclosure may allow lenders to distinguish firms with manageable sustainability exposures from borrowers whose environmental or social liabilities increase default risk (Apergis et al., 2022). In equity markets, it can reduce uncertainty about long-term growth, operating resilience, and terminal value (Giese

et al., 2019). ESG reporting may also signal managerial competence and a willingness to accept external scrutiny (Kao et al., 2024).
On the other hand - because substantive improvements in ESG performance and reporting quality are costly, slow, and expose firms to greater scrutiny, managers may prefer impression-management strategies that deliver more immediate reputational and financing benefits (Iazzi et al., 2025; Zhang & Chen, 2020). They may therefore increase disclosure volume, emphasize favorable indicators, adopt vague long-term commitments, or selectively omit adverse information to create the appearance of transparency and sustainability without materially improving disclosure relevance or credibility (Cho et al., 2012; Clarkson et al., 2008; Marquis et al., 2016). Such window-dressing may temporarily broaden investor demand or reduce perceived risk.

The literature provides only limited evidence on how variations in ESG disclosure influence corporate financing decisions and firms' use of external capital markets. For example Taddeo et al. (2026) as well as Attig et al. (2025) find that greenwashing is positively and significantly associated with the cost of debt. While Wang et al. (2025) find that financial markets fail to recognize ESG greenwashing. Also Eliwa et al. (2021) supports that lending institutions fail to distinguish between ESG performance and disclosure in their credit decisions and consequently ESG disclosure has an equal impact on the cost of debt as ESG performance.

An important question therefore remains unresolved: do firms obtain financing benefits primarily through substantive improvements in the quality and credibility of ESG reporting, or can similar benefits arise from increasing the quantity and visibility of ESG disclosure without corresponding improvements in its informational value? Accordingly, this study pursues two complementary objectives. First, it examines whether the quantity and quality of ESG reporting are differentially associated with firms' cost of debt financing. Second, it investigates whether firms anticipating future debt or equity issuance strategically adjust these dimensions of ESG reporting to accessing external capital markets, thereby shedding light on whether financing-related disclosure behaviour is more consistent with substantive reporting or impression management.

Investigating these questions in the Polish setting is particularly relevant for several reasons. First, in Poland ESG is characterised by considerable variation in both the quantity and quality of disclosed information. Such conditions provide a particularly suitable setting for disentangling whether capital providers reward the mere availability of ESG information or whether they require reporting that is substantively more credible and informative.

Second, the Polish corporate sector is characterised by concentrated ownership, a significant presence of family- and state-controlled firms, and a financial system in which bank financing continues to play a prominent role. In such a context firms planning to raise external capital may face stronger incentives to use ESG reporting to reduce information asymmetries and broaden their investor base.

Finally examining corporate reporting behaviour during the ESG reporting frameworks transition provides an opportunity to understand how firms adjust ESG disclosure in response to evolving capital-market expectations.

METHODOLOGY

The empirical analysis adopts two complementary perspectives. First, it examines whether different dimensions of ESG reporting are associated with firms' implicit cost of debt. Particular attention is paid to distinguishing between the quantity and the quality of ESG reporting, allowing us to assess whether creditors reward merely greater disclosure or rather more credible and decision-useful reporting (substantive ESG reporting).

Second, the study investigates whether firms adjust their ESG reporting to external financing events. Specifically, it examines whether firms that increase debt financing or issue new equity exhibit systematic changes in the quantity or quality of ESG reporting.

The primary dependent variable is the firm's implicit debt financing spread, which approximates the effective cost of debt financing. The implicit cost of debt is calculated as:

$$CostOfDebt_{it} = \frac{InterestExpense_{it}}{\frac{Debt_{it} + Debt_{it-1}}{2}}$$

where average interest-bearing debt is measured as the arithmetic mean of total financial debt at the beginning and end of the fiscal year. To isolate firm-specific borrowing conditions from fluctuations in market interest rates, the annual average three-month WIBOR rate is subtracted from the estimated cost of debt, producing an implicit financing spread that reflects firms' borrowing conditions relative to the prevailing market benchmark.

Another set of key variables is related to ESG reporting data which were obtained through manual content analysis of annual reports and stand-alone non-financial reports published by companies. ESG reporting quality is measured using a composite index capturing four complementary dimensions of reporting quality: relevance, approximated by the disclosure of a stakeholder materiality matrix; verifiability, measured by the presence of external assurance; clarity and comparability, proxied by the level of compliance with the GRI Standards; and comprehensiveness, measured by the proportion of the 25 predefined ESG disclosure items reported by a firm. Each dimension receives an equal weight, resulting in a quality index ranging from 0 to 1. ESG reporting quantity is measured in two complementary ways. The first measure captures the absolute disclosure volume, defined as the total number of pages devoted to ESG-related topics in corporate reports, while the second measure captures ESG disclosure abundance, calculated as the proportion of ESG-related pages relative to the total length of the report, thereby controlling for differences in overall report size.

Panel regressions are estimated using ordinary least squares with year fixed effects. Year effects account for common macroeconomic shocks, changes in monetary conditions, and the evolving ESG regulatory environment.

Firm fixed effects are intentionally not employed in the baseline debt-pricing models. The objective of the analysis is to explain economically meaningful cross-sectional differences in borrowing costs arising from firms' financial condition, creditworthiness and information environment. Firm fixed effects would remove much of this cross-sectional variation, which constitutes the primary source of identification. Moreover, because detailed information on individual debt contracts is unavailable, borrowing costs are approximated using effective interest rates derived from accounting data rather than contractual loan spreads.

The empirical analysis consists of two sets of panel regressions.

The first examines whether ESG reporting influences firms' borrowing costs:

$$Spread_{it} = \alpha + \beta_1 ESG_{it} + \beta_2 Altman_{it-1} + \lambda_t + \varepsilon_{it}$$

where $Spread_{it}$ denotes the implicit debt financing spread, ESG_{it} alternatively represents on of ESG reporting dimensions: ESG reporting quality, quantity or reporting abundance, and λ_t denotes year fixed effects.

The second set of models investigates whether changes in ESG reporting systematically precede external financing events:

$$\Delta ESG_{it} = \alpha + \beta_1 DebtGrowthPositive_{it+1} + \beta_2 ShareGrowthPositive_{it+1} + \beta_3 Size_{it} + \lambda_t + \varepsilon_{it}$$

where future positive debt growth and future positive equity growth serve as observable proxies for firms subsequently obtaining additional debt or equity financing.

FINDINGS

The first set of models examines whether different dimensions of ESG reporting explain cross-sectional variation in firms' borrowing costs after controlling for conventional financial determinants (N = 317). The results provide no statistically significant evidence that ESG reporting quality, quantity, or disclosure abundance is associated with the implicit cost of debt.

To examine whether ESG reporting is associated with the pricing of newly obtained debt, we restrict the sample to firm-year observations characterised by a positive increase in financial debt (N = 159). This restriction reflects the assumption that only newly contracted debt is subject to contemporaneous pricing and lending conditions, whereas the cost of existing debt largely reflects contractual terms negotiated in previous periods.

Table 1. ESG reporting and the cost of newly obtained debt.

	CostOfDebt_w		**CostOfDebt_w**		**CostOfDebt_w**	
Predictors	*Estimates*	*p*	*Estimates*	*p*	*Estimates*	*p*
ESG QUALITY	-0.015	0.158				
Altman lag	-0.002	**0.045**	-0.003	**0.030**	-0.003	**0.032**
ESG QUANTITY			-0.000	0.078		
ESG ABUNDANCE					-0.045	0.113
Observations	159		159		159	
R^2 / R^2 adjusted	0.035 / -0.003		0.043 / 0.005		0.039 / 0.001	

The results indicate a negative association between all three ESG reporting measures and the implicit cost of debt. However, the estimated coefficients are not statistically significant at conventional levels, although the coefficient on ESG reporting quantity is marginally significant (p = 0.078), providing weak evidence that greater ESG disclosure volume may be associated with lower borrowing costs for newly obtained debt.

In contrast to the baseline debt-pricing models, which seek to identify within-firm changes in borrowing costs while controlling for persistent firm heterogeneity through firm fixed effects, the ESG dynamics models focus on contemporaneous changes in reporting behaviour associated with financing events. Accordingly, year fixed effects provide the most appropriate control for common shocks influencing disclosure decisions across all firms. We investigate whether firms adjust ESG reporting while obtaining additional debt or issuing new equity. Neither the contemporaneous models (N = 332).

Table 3. ESG reporting adjustments to increase of debt and equity financing

	ESG_QUALITY_Delta		**ESG_QUANTITY_Delta**		**ESG_ABUNDANCE_Delta**	
Predictors	*Estimates*	*p*	*Estimates*	*p*	*Estimates*	*p*
Log Assets	0.010	**0.005**	1.744	**<0.001**	0.002	0.224
DebtGrowthPositive	0.000	0.814	0.037	0.274	0.000	0.217
ShareGrowthPositive	-0.057	0.300	13.615	**0.002**	-0.022	0.474
Observations	332		332		332	
R^2 / R^2 adjusted	0.025 / 0.004		0.134 / 0.116		0.010 / -0.012	

We can observe that for the years with new shares emissions the number of pages of non-financial reports increases, with proportional increase of ESG part. This may suggest that the companies when issuing new shares increase the amount non-financial activities, including ESG ones.
We further examine whether firms adjust ESG reporting in the year preceding increases in debt or equity financing (N = 243). The results reveal no statistically significant changes in either the quality or the quantity of ESG reporting prior to external financing events.

CONCLUSIONS

This study examined whether different dimensions of ESG reporting influence firms' cost of debt financing and whether companies adjust ESG reporting before obtaining external capital. The findings indicate that neither ESG reporting quality nor disclosure quantity is significantly associated with the implicit cost of debt in the full sample. However, among firms obtaining new debt, ESG disclosure quantity is negatively related to borrowing costs. In addition, firms issuing new equity increase the volume of ESG disclosure, while no evidence is found that they improve ESG reporting quality either contemporaneously or in advance of financing events.

These results suggest that, in the Polish market during the study period, capital providers may place greater value on the visibility of ESG disclosure than on improvements in its substantive quality. The study contributes to the literature by distinguishing between the quantity and quality of ESG reporting and by demonstrating that these dimensions may play different roles in corporate financing decisions.

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