DO POLITICAL CONNECTIONS MITIGATE THE DETRIMENTAL EFFECT OF EARNINGS MANAGEMENT? EVIDENCE FROM COST OF DEBT

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ABSTRACT

This study investigates the conditional impact of political connections on the relationship between earnings management and the cost of debt. The theoretical framework is grounded in resource dependence and agency perspectives. The sample comprises non-financial firms listed on the Indonesia Stock Exchange from 2010 to 2020. We observe a positive correlation between earnings management and the cost of debt. Political connections alleviate the adverse effects of earnings management, with an estimated reduction of US\$1.375 million in interest paid, aligning with the resource dependence theory. Additional tests indicate that the mitigating effect of political connections is more pronounced in firms experiencing inferior financial performance, establishing connections to higher-ranking politicians, and securing debt solely from bank loans. Furthermore, we observe that debtholders may be less adept at detecting real operations-based earnings management in their lending decisions. Our results remain robust to various measures of earnings management and political connections, as well as different estimation methods to address endogeneity issues.

Keywords: political connections, earnings management, information risk, cost of debt

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1. INTRODUCTION

In this study, we investigate the conditional effect of political connections on the relationship between earnings management (EM) and cost of debt (COD) in an emerging country. Corporate financing in emerging economies demonstrates greater reliance on debt financing (Chiu et al., 2023). Accordingly, the cost of debt financing might serve as a crucial determinant of organizational performance in emerging economies. Complementarily, EM has been asserted to undermine the reliability of accounting information and bring unintended consequences (Bansal, 2024). However, firms in both developed and emerging countries continue to engage in EM (Gil, 2024). Therefore, understanding the dynamics of the relationship between EM and COD is crucial for corporate financing decisions.

The presence of EM creates non-diversifiable information risk, which prevents lenders from accurately estimating the borrower's ability to repay the debt. Consequently, lenders are more inclined to demand a higher COD to offset this risk. However, empirical evidence on this matter remains inconclusive. One stream of research reveals that firms with higher EM exhibit unfavorable loan interest rates (González-Sánchez et al., 2023; Muttakin et al., 2020). On the other hand, EM has been documented to exhibit either a negative or insignificant relationship with COD (Aboud et al., 2023; Gandía & Huguet, 2021; Orazalin & Akhmetzhanov, 2019).

Prior studies suggest that the inclusive findings may stem from the presence of specific contingency variables, which can either enhance or weaken the detrimental impact of EM. For instance, Saleh et al. (2022) reveal that the adverse effect of EM becomes stronger in firms with a higher proportion of female directors. On the other hand, other studies suggest that the detrimental impact of EM is attenuated in the presence of stable institutional investors, state ownership, specific regulations, and political connections (Chaney et al., 2011; Gao et al., 2020; Huang et al., 2022; Jung & Kim, 2020; Kim et al., 2020; Majeed & Yan, 2021). In this paper, we follow the contingency approach and investigate the effect of political connections on the link between EM and COD.

Political connections are more likely to provide a greater beneficial impact for firms in countries characterized by higher levels of corruption and ineffective legal systems (Khaw et al., 2019). Consequently, the influence of political connections on the relationship between corporate strategies and organizational outcomes is more pronounced in less-developed economies. Evidence confirms that political connections in emerging countries accentuate the favorable effect of internal governance devices (Almarayeh et al., 2023) and weaken the adverse impact of economic uncertainty (Tran et al., 2024) and investment risk (Zhang et al., 2020). However, there is a lack of archival studies that investigate how political connections condition the relationship between EM and COD in emerging economies.

In examining how political connections influence the relationship between earnings management (EM) and cost of debt (COD), two contrasting theoretical perspectives offer valuable but opposing insights. Considering both is important because political connections can function as either a strategic resource or a source of agency problems, and the balance between these roles may vary across contexts. From the resource dependence perspective, the presence of political connections provides firms with privileged access to critical resources and broader financing channels (Alonso et al., 2022; Faccio et al., 2006). This access can help firms hedge against poor performance and reduce insolvency risk, potentially offsetting the detrimental impact of EM on COD. In contrast,

the agency perspective argues that political connections can increase expropriation risk and shield firms from external disciplinary mechanisms (Habib et al., 2017; O'Connor Keefe, 2019; Pang & Wang, 2021; Wang et al., 2022). Under this view, political connections may encourage opportunistic behavior and diversion of resources, thereby amplifying the harmful effect of EM on loan quality and, in turn, COD.

This study presents several contributions. First, we extend existing research that explores the relationship between EM and COD by introducing the conditional effect of political connections. Our findings suggest that political connections lead to the estimated reduction of the detrimental effect of EM on COD by 0.276% of interest paid, or US\$0.766 million. Second, we show that the positive effect of political connections is more pronounced in firms with poor financial performance. This finding verifies that political connections act as a protective mechanism against adverse organizational outcomes, consistent with the resource dependence perspective. Given the prevalence of political connections and EM practice in both developed and emerging countries, our study holds significant importance for industries and regulators.

The paper proceeds as follows. The next section presents the theoretical background and develops hypotheses. Subsequently, we discuss the sample and model. Next, we report and discuss our empirical test. The last section presents conclusions, limitations, and recommendations for future studies.

2. THEORETICAL BACKGROUND AND HYPOTHESIS

2.1. Earnings management, information risk, and cost of debt

EM has been claimed to create non-diversifiable information risk for the debtholders. Eventually, the information risk arising from EM prevents creditors from estimating borrowers' ability to generate future cash flow accurately (Gao et al., 2020). Complementarily, the information risk might obstruct creditors from scrutinizing management behavior in respecting debt contracts and, thereby, give rise to incremental monitoring costs (Lassoued, 2022). Consequently, lenders would demand higher interest rates to compensate for such risk. Accordingly, EM is more likely to lead to a higher COD. Empirical studies commonly share this line of reasoning.

Empirical studies mostly confirm that EM leads to unfavorable debt contracting in both developing and developed countries. Cross-country evidence reveals that higher EM is associated with higher debt interest in Europe (González-Sánchez et al., 2023). Kim et al. (2020) show that firms with higher real operations-based earnings manipulations exhibit lower initial bond credit ratings. Single-country studies from both developed and emerging economies reveal similar results. Evidence from the US, a developed economy, shows that accruals quality exhibits an adverse relationship with the yield spread of corporate bonds (Kim et al., 2021). Evidence from China, an emerging country, shows that firms with better accruals quality enjoy better access to external financing, lower loan interest rates, and lower corporate bond spreads (Chen et al., 2021; Huang et al., 2022).

However, some dispute the results. For instance, Orazalin and Akhmetzhanov (2019) observe a negative relationship between EM and COD in Kazakhstan. They posit that the institutional setting

of Kazakhstan exhibits inferior credit analysis and risk management, weak accountability and transparency, and poor banking regulation and supervision. They argue that such a setting enables firms to use EM as an opportunistic business strategy to mislead the lending banks. In a more recent study, Gandía and Huguet (2021) conclude that the magnitude of EM negatively influences COD in Spain. In addition, EM has been documented to have an insignificant effect on COD (Aboud et al., 2023).

2.2. EM, COD, and the role of political connections

Prior studies believe that the inconclusive findings are attributable to the presence of a specific contingency variable, which might either exacerbate or compensate for the damaging consequences of EM (Huang et al., 2022; Jung & Kim, 2020; Kim et al., 2020). Therefore, these studies propose to adopt a contingency approach to arrive at a more comprehensive investigation of the link between EM and COD. One stream of studies refers to country-level governance as the contingency variable. Kim et al. (2020) assert that a developed financial market provides debt investors with greater transparency and access to necessary information. Accordingly, a developed market reduces information asymmetry that enables lenders to detect and price EM more efficiently. Their finding supports the assertion that the damaging effect of EM is more severe in countries with developed debt markets. Complementarily, Huang et al. (2022) explore the contingency effect of a new regulation on the link between EM and COD.

Other studies rely on specific aspects of firm-level governance as the contingency variable. Jung and Kim (2020) suggest that the relationship between earnings management (EM) and loan interest rates depends on the presence of higher-quality auditors. They argue that higher-quality auditors are perceived to inherently limit EM. Consequently, lenders may relax their scrutiny for borrowers with high-quality auditors, which leads to a mispricing of information risk. In a broader sense, evidence suggests that the effect of financial reporting quality on the cost of financing is conditional on the presence of institutional investors (Gao et al., 2020) and state ownership (Majeed & Yan, 2021). On the other hand, Saleh et al. (2022) reveal that the presence of a highly gender-diversified board accentuates the detrimental effect of EM on the cost of equity.

Following the contingency approach, we propose that political connections potentially influence the relationship between EM and COD. We contemplate two competing perspectives. The resource dependence perspective implies that the presence of political connections might compensate for the detrimental effect of EM on COD. Alternatively, the agency perspective denotes that political connections exacerbate the damaging effect of EM.

Resource dependence posits that firms rely on external supplies to obtain the essential resources needed for competition and survival (Khaw et al., 2019; Wang et al., 2021). This dependence engenders significant risks due to the potential supply disruptions (Pang & Wang, 2021). The theory suggests that the government plays a crucial role as the primary actor in the distribution of both tangible and intangible resources (Boubakri et al., 2012; Lin et al., 2021). In this context, political connections allow firms to influence government policies related to resource allocation, thereby assisting them in securing both necessary informational and financial resources. Liu et al. (2021) argue that informational advantage helps firms navigate institutional uncertainty and maintain optimal business operations. Complementarily, financial resources facilitate firms securing revenue streams and achieving better organizational outcomes Ferris et al. (2019).

Arguably, the prevalence of both informational and financial advantages simultaneously provides firms with a hedging mechanism against poor performance (Alonso et al., 2022; Arifin et al., 2020; Khaw et al., 2019). Consequently, politically connected firms are less likely to face future cash flow shortages and insolvency risk. This line of reasoning implies that information risk associated with EM becomes less relevant for lending decisions in politically connected firms. Following this line of reasoning, we propose that lenders are more likely to adjust the adverse effect of EM in favor of politically connected firms. Accordingly, we propose that political connections negate the detrimental consequences of EM on COD.

Agency theory hinges upon the assumption that corporate insiders prefer to maximize their wealth and, thereby, opportunistically obtain the private benefit of corporate control (Jensen & Meckling, 1976). Accordingly, corporate insiders are more likely to divert firm resources, which harms the interests of corporate stakeholders. This is particularly relevant because politicians can act as influential stakeholders, enabling them to direct business decisions (O'Connor Keefe, 2019). As a result, politically connected firms may prioritize certain business operations that align with the interests of their connected politicians. Therefore, political connections are more likely to erode financial performance (Pang & Wang, 2021). Similarly, Faccio (2010) show that connected firms experience lower ROA and market valuation than their nonconnected peers. The financial performance of politically connected firms tends to decline as the corruption levels increase. This evidence aligns with recent studies on corporate tax aggressiveness among politically connected firms in emerging economies with high levels of corruption. For instance, Arifin and Kabir (2025) find that connected firms face higher effective tax rates than their non-connected counterparts, particularly during election years. In addition, political connections may protect firms against disciplinary mechanisms (Habib et al., 2017). As a result, politically connected firms are more likely to become entrenched, which weakens performance-turnover sensitivity (Cao et al., 2017). Accordingly, the connections create substantial obstacles for improving financial performance.

The increased potential for diversion activities and entrenchment effects arising from political connections may diminish the advantages or exacerbate the negative impacts of certain corporate strategies. Prior studies confirm that political connections distort the positive effect of additional capital resources (Tang & Liu, 2022) and the value of cash holdings (Lou et al., 2021). On the other hand, Tessema and Abou-El-Sood (2023) suggest that political connections exacerbate the perceived information asymmetry problem following auditor rotation.

2.3. Hypothesis

The previous discussions reveal that that political connections might bring two competing effects on the relationship between EM and COD. The resource dependence perspective implies that the presence of political connections might mitigate the detrimental effect of EM on COD. On the other hand, the agency perspective suggests that political connections potentiallt exacerbates the information risk of EM that results in higher COD. Given both potential benefit and cost of political connections coexist, accordingly our formal hypothesis is as follow:

H1: Political connections moderate the relationship between EM and COD.

3. RESEARCH METHOD AND SAMPLE

3.1. Research models

To investigate the effect of political connections on the relationship between EM and COD, we estimate the following econometric models.

$$\begin{aligned} &COD_{it^{+}l} = \beta_{0} + \beta_{1} \ EM_{it} + \beta_{2} POLCON_{it} + \ \beta_{3} \ EM*POLCON_{it} + \ \beta_{4} BIDP_{it} + \ \beta_{5} \ BLEAD_{it} + \beta_{6} \ BIG4_{it} + \\ &\beta_{7} \ SIZE_{it} + \beta_{8} \ DEBT_{it} + \ \beta_{9} \ TANG_{it} + \beta_{10} \ ROA_{it} + \ \beta_{11} \ INCOV_{it} + \ Year \ and \ Industry \ -FE + \ \epsilon_{it} \ \dots \ (1) \end{aligned}$$

We employ a fixed-effect model, which has been quoted to mitigate the possible confounding bias arising from potential omitted variable and time-invariant endogeneity problems (Kuzey et al., 2024). The dependent variable is the cost of debt (COD). We are aware that the measure of COD varies across studies. However, the vast majority of firms in our sample do not issue corporate bonds listed on the Indonesian Stock Exchange. Accordingly, our measure of COD refers to interest expense divided by the average total interest-bearing debt (González-Sánchez et al., 2023; Le et al., 2021).

The independent variable is earnings management (EM). Nguyen et al. (2023) suggest that the accruals-based model exhibits higher explanatory power than the real operations-based model. Accordingly, we use the accruals-based model to measure EM. We refer to the cross-sectional modified Jones (1991), proposed by Dechow et al. (1995), which has been claimed to outperform other models in identifying abnormal accruals (El-Dyasty & Elamer, 2021). We derive the EM from the residual modified Jones, using the following regression formula:

$$\begin{split} TACC_{it} &= NI_{it} - CFO_{it} \\ TACC_{it} &= \beta_1 \ 1/TA_{it\text{-}1} + \beta_2 \ (\Delta REV_{it} - \Delta REC_{it})/TA_{it\text{-}1} + \beta_3 PPE_{it}/TA_{it\text{-}1} \ + \ \epsilon_{it} \end{split}$$

where NI is net income before extraordinary items, CFO is cash flow from operations, ΔREV is changes in revenue from year t-1 to t, ΔREC is changes in net receivable from year t-1 to t, PPE is property, plant, and equipment, and TA is total assets. However, we also employ the performance-adjusted discretionary accruals model (Kothari et al., 2005) in our sensitivity check. The Kothari model incorporates adjustment for firm performance (ROA: return on assets) and has been claimed to robustly capture discretionary accruals (Naz & Sheikh, 2023). Complementarily, we use real operations-based (REM) earnings management (Roychowdhury, 2006).² REM is structured by diverting real activities from their optimal level of business operations. Thus, REM potentially jeopardizes future firm performance and cash flows and creates both information risk and business risk (Zhang et al., 2023).

² While originally developed for US data, the REM model has been applied in emerging markets, including Indonesia, in prior studies (e.g., Khalil et al., 2022). Nevertheless, we acknowledge that differences in financial reporting quality, regulatory enforcement, and operational structures may affect the model's measurement precision in the Indonesian context. This contextual limitation should be considered when interpreting the REM-based results.

The contingency variable is political connections (POLCON), defined as the proportion of politically connected directors on the supervisory board to the total number of board members. Politically connected directors include current or former cabinet ministers, members of parliament, or military generals serving on the supervisory board (Faccio et al., 2006; Phan et al., 2020). In our sensitivity analysis, we use an alternative measure of POLCON that encompasses politicians from all official ranks (Arifin et al., 2020; Joni et al., 2020). To test the hypotheses, we focus on the interaction term (EM*POLCON), which portrays the conditional effect of political connections on the link between EM and COD. We conjecture that the resource dependence (agency) perspective prevails if the coefficient of the interaction term is negative (positive).

Following prior studies (Chen et al., 2021; Eliwa et al., 2019; González-Sánchez et al., 2023; Kim et al., 2020; Kim et al., 2021; Le et al., 2021; Muttakin et al., 2020), we incorporate board independence (BIPD), independent board leadership (BLEAD), Big 4 auditor (BIG4), firm size (SIZE), debt (DEBT), asset tangibility (TANG), and profitability (ROA) as control variables. Our model also incorporates the year and industry effects. Appendix 1 presents the definition of variables.

3.2. Sample and data

Information on directors and governance characteristics is manually obtained from the annual report, which we download from the firm's official website. We collect financial data from the Datastream database. To identify political connections, we review the directors' profiles presented in the annual report. We then match the directors with the list of the Members of Parliament (collected from the website of the Indonesia House of Representatives, www.dpr.go.id/id/anggota/), of members of cabinet (gathered from the website of the cabinet secretariat of the Republic of Indonesia, http://setkab.go.id/en/profil-kabinet.html), and the heads of local governments (collected from www.kemendagri.go.id/staff-directory/gubernur-dan-wakil-gubernur).

The initial sample consists of firms listed on the Indonesian Stock Exchange from 2010 to 2020 (5,921 observations). We exclude firms that engage in financial industries (banks, insurance, investment, and brokerage firms) because they follow distinct business operations, specific regulations, and unique financial reporting (1,053 observations). We note that the annual report for 393 firm-years is unavailable. Further, we exclude observations with missing financial data from Datastream (1,362 observations). The final sample comprises 3,113 firm-year observations.

4. RESULTS AND DISCUSSION

4.1. Descriptive statistics and correlations

Table 1 presents the descriptive statistics. We winsorize all continuous variables at the top and bottom 5% to mitigate the possible effect of outliers.

The mean of COD is 0.064, which is lower than Kurniawati et al. (2019) and higher than Arifin et al. (2020). The minimum and maximum values range from 0.000 to 0.186, indicating a high variation of COD across the sample. The average value of EM is 0.078, with 0.004 as the minimum and 0.374 as the maximum value. The mean of POLCON is 0.058, consistent with Joni et al. (2020).

The maximum score is 1.000, which indicates that the board completely consists of politically connected directors in some firms.

Table	1:	Descri	ntive	statistics
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Variable	N	Mean	SD	Min	Max
COD	3,113	0.064	0.049	0.000	0.186
EM	3,113	0.078	0.086	0.004	0.374
POLCON	3,113	0.058	0.121	0.000	1.000
BIDP	3,113	0.408	0.122	0.200	0.667
<i>BDCH</i>	3,113	0.130	0.336	0.000	1.000
BDSZ	3,113	4.187	2.013	1.000	22.000
BIG4	3,113	0.358	0.479	0.000	1.000
SIZE	3,113	19.024	1.558	16.079	21.664
PPE	3,113	0.367	0.238	0.014	0.823
DEBT	3,113	0.260	0.188	0.000	0.647
ROA	3,113	0.059	0.075	-0.076	0.248

Table 2 shows the correlation among the variables. We observe that the highest correlation coefficient is 0.498 (between SIZE: firm size and BDSZ: board size). The lower correlation coefficient among independent variables indicates that the multicollinearity issue is less likely to plague our analysis.

Table 2: Pearson correlation matrix

	VIF	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) COD		1.000									
(2) EM	1.20	0.128 ***	1.000								
(3) POLCO	V 1.04 -	0.102 ***	-0.077 ***	1.000							
(4)BIDP	1.09 -	0.032	-0.013	0.001	1.000						
(5)BDCH	1.05	0.003	-0.028	0.038 **	0.191 ***	1.000					
(6)BDSZ	1.44 -	0.128 ***	-0.142 ***	0.130 ***	-0.154 ***	0.023	1.000				
(7)BIG4	1.28 -	0.213 ***	-0.139 ***	0.104 ***	-0.036 **	-0.003	0.291 ***	1.000			
(8)SIZE	1.76 -	0.144 ***	-0.316 ***	0.177 ***	0.026	0.024	0.498 ***	0.413 ***	* 1.000		
(9)PPE	1.10 -	0.034 **	-0.117 ***	-0.001	0.019	-0.040 **	0.034 *	0.097 ***	* 0.053 ***	1.000	
(10) DEBT	1.17 -0	0.058 ***	0.020	0.032 *	0.076 ***	0.011	-0.029	-0.057 ***	* 0.146 ***	0.233 ***	1.000
(11) ROA	1.17	0.029 **	0.162 ***	0.012	0.007	0.056 ***	0.149 ***	0.151 ***	0.112 ***	-0.101 *** -	0.182 ***

Notes: *** p < .01, ** p < .05, * p < .1. Variables are defined in Appendix A.

4.2. Baseline results

Table 3 presents the baseline results of multivariate analyses. In Column 1, the coefficient of EM is significantly related to COD. The positive sign indicates that firms with greater EM experience higher COD. Column 2 shows that the individual effect of POLCON is negatively significant, suggesting that political connections help firms secure a lower cost of debt. Column 3 reveals that the coefficients of both EM and POLCON are significant. Column 4 shows that the coefficient of EM (POLCON) remains significantly positive (negative). More importantly, the effect of EM*POLCON is significant at the 1% level. ³ The negative sign indicates that the presence of

³ We acknowledge the relatively low adjusted R² values (max 9.7%) shown in Table 3. This pattern aligns with prior empirical work in corporate finance. For instance, Bliss and Gul (2012) demonstrate meaningful relationships between political connection and the cost of debt, despite modest predictive power. Likewise,

political connections attenuates the effect of EM on COD. The finding provides empirical support to the resource dependence perspective, consistent with Li et al. (2021), Alonso et al. (2022), and Arifin et al. (2020).

Table 3: Baseline results

	1	2	3	4
EM	0.024**		0.023**	0.038***
	(2.087)		(2.034)	(3.238)
POLCON		-0.066***	-0.066***	-0.047***
		(-4.082)	(-4.072)	(-2.755)
EM*POLCON		, ,	, ,	-0.282***
				(-2.647)
BIDP	-0.006	-0.005	-0.005	-0.005
	(-0.514)	(-0.418)	(-0.421)	(-0.452)
BDCH	0.000	-0.001	-0.001	-0.001
	(081)	(-0.278)	(-0.269)	(-0.288)
BDSZ	-0.001	-0.001	-0.001	-0.001
	(-1.227)	(-0.842)	(-0.85)	(-0.889)
BIG4	0.001	0.001	0.001	0.001
	(0.156)	(0.086)	(0.093)	(0.218)
SIZE	-0.003	-0.004	-0.003	-0.003
	(-1.068)	(-1.162)	(-0.97)	(-0.964)
PPE	0.001	0.001	0.001	0.001
	(0.157)	(0.055)	(0.116)	(0.082)
DEBT	-0.06***	-0.059***	-0.06***	-0.061***
	(-5.564)	(-5.533)	(-5.616)	(-5.753)
ROA	0.006	0.006	0.005	0.005
	(0.333)	(0.337)	(0.264)	(0.292)
constant	0.164***	0.173***	0.16***	0.159***
	(2.936)	(3.133)	(2.889)	(2.882)
N	3113	3113	3113	3113
R^2	0.082	0.091	0.092	0.096
R^2 - Adj	0.076	0.085	0.087	0.09

Notes: *** p < .01, ** p < .05, * p < .1. t-values are in parentheses and are based on robust standard errors. Variables are defined in Appendix A.

As for control variable, an unexpected finding of this study is the consistent statistical insignificance of the BIG4 variable across all model specifications (Table 3). Prior research often reports that engagement with Big 4 auditors is associated with higher audit quality, greater credibility of financial statements, and consequently, lower cost of debt (e.g., Pittman & Fortin, 2004). Our results diverge from these findings, which may be attributable to the institutional characteristics of the emerging economy in our sample. In such settings, the audit market is

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Pittman and Fortin (2004) find significant auditor effects on borrowing costs in newly public firms. These examples affirm that low R² is common in firm-level panel models, especially when testing theoretical relationships rather than predicting outcomes.

frequently concentrated, and the gap in perceived quality between Big 4 and non-Big 4 auditors may be narrower than in developed economies. Furthermore, the presence of political connections—a key variable in our analysis—may exert a stronger influence on lenders' perceptions of credit risk than audit quality considerations, effectively overshadowing the potential impact of engaging a Big 4 auditor. This suggests that in environments where political affiliations play a dominant role in shaping financial contracting, the traditional audit quality premium documented in prior literature may be attenuated or absent.

4.3. Endogeneity tests

Table 4 presents the results of endogeneity tests. First, we address the potential selection bias. To mitigate these issues, we rely on Heckman's two-stage procedure. In the first stage, we run a probit estimate (Panel A). The dependent variable is EM, a dummy that takes 1 if the value of EM is above the median and 0 otherwise. The independent variables are all control variables. We generate the inverse Mills ratio (MILLS) from the probit estimation. In the second stage, we incorporate MILLS into equation (1) as an additional control variable. We display the result in Panel B column 1. The interaction term (EM*POLCON) remains significantly negative. The results validate that our baseline findings are less likely to suffer from self-selection bias.

Table 4: Endogeneity tests
Panel A: First-stage probit estimation

T uner i i i	Tunerin The stage products and the		
	First-stage		
BIDP	-0.027		
	(-0.132)		
BDCH	-0.123*		
	(-1.645)		
BDSZ	0.019		
	(1.338)		
BIG4	-0.004		
	(-0.062)		
SIZE	-0.257***		
	(-12.943)		
PPE	-0.644***		
	(-5.964)		
DEBT	0.767***		
	(5.574)		
ROA	3.215***		
	(9.556)		
constant	4.379***		
	(12.468)		
N	3113		
$Pseudo R^2$	0.094		
AUC	0.7098		

Panel B: Heckman model and propensity score matching

Tanci B. Treekman model and propensity score matering			
	1	2	
EM	0.036***	0.069***	
	(3.05)	(5.423)	
POLCON	-0.048***	-0.021*	
	(-2.791)	(-1.663)	
EM*POLCON	-0.28***	-0.199*	
	(-2.631)	(-1.841)	
MILLS	0.058		
	(1.276)		
Control variables	Yes	Yes	
constant	Yes	Yes	
N	3113	2048	
R^2	0.097	0.106	
R^2 - Adj	0.09	0.097	

Notes: *** p < .01, ** p < .05, * p < .1. t-values are in parentheses and are based on robust standard errors. Variables are defined in Appendix A.

Alternatively, the differences in inherent characteristics between firms with lower and higher EM may influence our previous findings. To address this issue, we employ the propensity score matching (PSM) approach. We assign firms with EM above the mean as the treatment group and those below the mean as the control group. To generate the propensity score, we rerun the previous probit estimation and apply a caliper distance of 5%. This procedure allowed us to create treatment and control groups with similar characteristics, except for the EM (variable of interest), POLCON (moderating variable), and COD (dependent variable). However, this approach resulted in a reduced sample size. We present the results in Panel B Column 2. The coefficient of EM*POLCON remains negative and significant, confirming that our baseline results are robust after addressing endogeneity concerns arising from the inherent characteristics of the sample.

4.4. Effect of political rank

In Table 5, we examine whether the political rank of connected directors influences the baseline results. Previous studies suggest that varying rankings of political offices correspond to different organizational outcomes. Li et al. (2021) assert that higher political ranks provide greater advantages. Conversely, Lou et al. (2021) discovered that connections to higher political ranks can lead to significant negative consequences. Nevertheless, these studies indicate that political ranks may affect organizational outcomes in different ways. In this context, we are aware that our definition of political connections exclusively covers higher-ranking politicians, which potentially confounds our baseline results. To address this issue, we conduct two tests. In column 1, the POLCON measure encompasses politicians from all official ranks (Arifin et al., 2020; Joni et al., 2020). The coefficient of EM is significantly positive, while the effects of POLCON and the interaction term EM*POLCON are significantly negative. In column 2, the POLCON measure focuses on politicians from lower ranks (retired government officials from echelon one or lower bureaucratic positions, as well as retired army officials holding the rank of colonel or lower). The effect of EM*POLCON is insignificant, suggesting that connections to lower-ranking politicians

are less likely to lessen the negative impact of EM.⁴ Collectively, the results indicate that firms might reap the beneficial effect of political connections if, and only if, they are connected to higher-ranking politicians.

Table 5:	Effect of a	nolitical	ranks
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	1	2	
EM	0.042***	0.032**	
	(3.174)	(2.521)	
POLCON	-0.015*	0.001	
	(-1.758)	(0.074)	
EM*POLCON	-0.127***	-0.09	
	(-2.606)	(-1.545)	
Control variables	Yes	Yes	
Constant	Yes	Yes	
N	3113	3113	
R^2	0.089	0.082	
R^2 - Adj	0.083	0.076	

Notes: *** p < .01, ** p < .05, * p < .1. t-values are in parentheses and are based on robust standard errors. Variables are defined in Appendix A.

4.5. Additional analysis

In Table 6, we report the results of additional analyses. The resource dependence perspective implies that political connections provide firms with hedging mechanisms against poor financial performance (Faccio et al., 2006; Li et al., 2021). This view suggests firms with inferior performance are more likely to gain a greater benefit from political connections. To validate this assertion, we split the sample into two subgroups: firms with high and low financial performance within their respective industry-year. The measure of financial performance is based on the average return on assets (ROA) calculated over a four-year period, from t-4 to t-1. The higher (lower) financial performance subgroup consists of firms with an average ROA below (above) the mean. The results are presented in the first two columns. Column 1 (low performance) reveals that the effect coefficient of EM*POLCON is significant. By contrast, column 2 (high performance) shows that the effect of EM*POLCON is insignificant. The results suggest that political connections tend to provide greater benefits to firms with lower performance. The findings support the notion that the hedging channel plays a significant role in explaining the positive effects of these connections.

Subsequently, we examine whether our baseline findings are driven by the sources of debt financing: bank loans and corporate bonds. We display the results in the last two columns. Li et al. (2015) argue that bondholders are less likely to constrain opportunistic behavior, which potentially

⁴ While the insignificant interaction term for lower-ranked political connections may indicate the absence of a substantive effect, it may also reflect weaker measurement precision at these levels, as lower-tier positions are more heterogeneous in influence and less consistently documented, potentially introducing measurement error that attenuates the estimated coefficients toward zero.

⁵ We have re-estimated the baseline models using median splits of ROA. The results remain qualitatively similar to those reported for the 4-year average ROA, which supports the robustness of our conclusions.

reduces loan quality. On the other hand, the bond market has been proposed to mitigate information asymmetry problems and induce strong disciplinary actions (Chy & Kyung, 2023). The studies suggest that the sources of corporate debt could potentially distort our findings. To tackle this concern, we divided the sample into two groups: firms that rely solely on bank loans for their debt and firms that utilize both bank loans and corporate bonds. In the DEBT-BANK subgroup (column 3), the effect of EM, POLCON, and the interaction term remains significant. In the DEBT-BANK-BOND subgroup (column 4), the coefficient of EM, POLCON, and EM*POLCON is insignificant. ⁶ The results suggest that lending banks are more likely to engage in monitoring actions, whereas bondholders are less likely to do so.

Table 6: Additional tests

	1	2	3	4
EM	0.046*	0.021	0.04***	0.035
	(1.912)	(1.284)	(3.268)	(0.799)
POLCON	-0.057**	-0.011	-0.054***	0.024
	(-2.181)	(-0.488)	(-3.153)	(0.949)
EM*POLCON	-0.334**	-0.308**	-0.256**	-0.309
	(-2.203)	(-2.153)	(-2.38)	(-1.195)
Control variables	Yes	Yes	Yes	Yes
constant	Yes	Yes	Yes	Yes
N	1208	1905	2982	131
R^2	0.082	0.151	0.097	0.504
R^2 - Adj	0.065	0.141	0.091	0.409

Notes: *** p < .01, ** p < .05, * p < .1. t-values are in parentheses and are based on robust standard errors. Variables are defined in Appendix A.

4.6. Sensitivity tests and economic impact

In Table 7, we check whether our baseline findings are sensitive to measurement issues. In column 1, we employ performance-adjusted discretionary accruals to measure EM. The result shows that EM, POLCON, and EM*POLCON are significantly related to COD. In column 2, we use REM as the measure of earnings management. We observe that EM and EM*POLCON become insignificantly related to COD. The results support the notion that lenders are less likely to detect REM. Accordingly, the potential benefits of political connections become irrelevant in firms that engage in REM. In column 3, the measure of POLCON refers to a dummy variable that takes 1 if the firm is politically connected and 0 otherwise. We observe that the results remain unchanged. The margin test confirms that EM is significantly related to COD positively in firms without political connections (dy/dx polcon=0, coefficient=0.037). By contrast, in politically connected firms, the effect of EM on COD is insignificant (dy/dx polcon=1, coefficient=-0.023). Based on

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⁶ It is important to note that certain subgroups in the heterogeneity analysis, such as firms issuing both loans and bonds (131 observations), have relatively small sample sizes. This may limit the statistical power to detect effects within these categories, and therefore, results for these subgroups should be interpreted with caution. ⁷ In the REM specification (Column 2), the interaction term becomes statistically insignificant. While this may reflect the greater difficulty debtholders face in detecting real activities manipulation, it could also be due to potential model misspecification or measurement error in the REM proxy, given the inherent challenges in accurately capturing such earnings management practices.

these findings, we calculate the economic impact of political connections. To facilitate the interpretation of the results, we split the sample into two subgroups: firms with and without political connections. Column 4 (firms without political connections) shows that the coefficient of EM is 0.037 and significant at the 1% level. On the other hand, column 5 (firms with political connections) shows that the coefficient of EM is insignificant. Therefore, the economic impact of political connections can be summarized as follows. The estimated coefficient of EM is 0.040 in non-politically connected firms (column 3), while the standard deviation of EM is 0.086 (Table 2). A one standard deviation increase in EM results in an increase in interest rate by 0.705% (0.082 x 0.086). In our case, the average proportion of debt is \$195 million. Thus, political connections help firms that engage in EM reduce the interest paid by \$195 million x 0.705% = US\$1.375 million. The point estimate implies an average reduction of approximately US\$1.375 million, but with the 95% confidence, the interval reduction is from 0.973 million to 5.39 million. Accordingly, we conjecture that the mitigating effect of the connections on the link between EM and COD is economically and statistically significant.

Table 7: Sensitivity tests and economic impact analysis

	1	2	3	4	5
EM	-0.002	-0.007	0.040***	0.037***	-0.023
	(-0.142)	(-1.53)	(3.363)	(2.989)	(-0.832)
POLCON	-0.037*	-0.061***	-0.009*		
	(-1.959)	(-3.539)	(-1.763)		
EM*POLCON	-0.228**	-0.008	-0.082**		
	(-2.458)	(-0.597)	(-2.365)		
Control variables	Yes	Yes	Yes	Yes	Yes
constant	Yes	Yes	Yes	Yes	Yes
N	3113	2689	3113	2429	684
R^2	0.095	0.099	0.092	0.091	0.078
R²-Adj	0.089	0.092	0.086	0.084	0.051

Notes: *** p < .01, ** p < .05, * p < .1. t-values are in parentheses and are based on robust standard errors. Variables are defined in Appendix A.

5. DISCUSSIONS AND CONCLUSION

We explore how political connections influence the relationship between earnings management (EM) and the cost of debt (COD). Our findings reveal a positive correlation between EM and COD. Additionally, political connections appear to reduce the negative impacts of EM. Additional tests indicate that the mitigating effect of political connections is stronger in firms experiencing inferior financial performance, establishing connections to higher-ranking politicians, and securing debt solely from bank loans. Debtholders are less likely to recognize earnings management based on real operations. Our results remain consistent across alternative variable measures and different estimation methods used to tackle endogeneity concerns.

Our findings indicate that political connections can influence market mechanisms in both facilitating and distortive ways, rather than uniformly improving them. The overall effect depends on firm-specific characteristics and the nature of the political ties. For instance, higher-ranked

political connections may enhance access to resources and reduce borrowing costs, while lowerranked connections or politically connected firms with weaker operational performance may exacerbate agency problems and increase the cost of debt. These conditional effects highlight the importance of context in evaluating the role of political connections and suggest that policy interventions should consider the heterogeneity in their impacts.

This study suffers from several limitations that require some careful consideration in interpreting the results. First, our measure of COD relies solely on interest expense. Future research could enhance this investigation by utilizing a more comprehensive measure, such as interest spreads. Second, we do not account for the sources of accruals, which include both innate and discretionary components. As a result, our measure of EM faces a significant shortcoming. Future studies may benefit from exploring the individual effects of both innate and discretionary components on COD.

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APPENDIX 1: Definition and measure of variables

Variables	Measurement					
COD	Cost of debt: the interest expense scaled by the total value of interest-bearing					
F1.6	debt					
EM	Earnings management: the absolute value of performance-adjusted					
POLCON	discretionary accruals Political connection: the proportion of politically connected directors (a current or former cabinet minister or a member of parliament, or a retired army general) to total members of the supervisory board.					
BDIDP	Board independence: the number of independent directors scaled by the total members of the supervisory board,					
BDCH	Board chairperson independence: a dummy variable that takes the value of 1 if the independent member of the board serves as the chairperson and 0 otherwise.					
BIG4	Auditor size: dummy variable that takes the value of 1 if the auditor is Big N and 0 otherwise					
SIZE	Firm size: the natural log of total assets.					
DEBT	Total debt: the ratio of total debt (long-term debt + short-term debt) to total assets					
TANG	Asset tangibility: net property, plant, and equipment scaled by total assets					
INCOV	Interest coverage: earnings before interest, taxes, depreciation, and amortization divided by interest expense					
ROA	Return on assets: the ratio of earnings before taxes to total assets					

APPENDIX 3: Mean differences of variable in the matched sample

	Treated	Control	Diff	t-value
BIDP	0.4047	0.4067	-0.0020	-0.29
BDCH	0.1172	0.1123	0.0049	0.27
BDSZ	3.9268	3.9336	-0.0068	-0.06
BIG4	0.2939	0.2969	-0.0029	-0.11
SIZE	18.505	18.461	0.0443	0.52
PPE	0.3288	0.3309	-0.0021	-0.16
DEBT	0.2578	0.2624	-0.0046	-0.42
ROA	0.0720	0.0664	0.0056	.131