

Signals in the Noise: The Asymmetric Validation of Dividends and Share Repurchases

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Abstract

While corporate payout policy is well-studied in North America, its valuation effects across diverse global markets remain a persistent enigma. This study resolves this puzzle by proposing and testing a Theory of Context-Dependent Signal Dominance and Asymmetric Validation. The theory posits that payout valuation is determined by the dominance of two competing signals, a negative capital allocation signal and a positive shareholder commitment signal, and that the validation mechanisms for dividends and repurchases are fundamentally asymmetric. Testing this theory on a comprehensive global panel from 1992 to 2024, I find a duality in the dividend signal. From an enterprise value perspective, institutional quality acts as an information substitute, leading to a dividend discount in transparent markets. Conversely, from a shareholder perspective, it acts as a commitment validator, unlocking a premium only when investor protection is strong. In contrast, share repurchases are validated intrinsically by their financial scale while the premium for their scale is highest in less transparent markets, consistent with an information substitution effect, though their valuation is fundamentally anchored in the trust established by a country's deep-rooted legal origin. Channel tests confirm this asymmetry. An institutionally-validated dividend credibly predicts future earnings, while a large-scale repurchase primarily mitigates present agency costs without signaling future performance. These findings reveal that dividend signals are context-dependent, their ability to cut through noise is dependent on the interplay of institutional forces, while repurchase signals rely on the "brute force" of their own scale, with their reception shaped by the deep grammar of legal traditions.

Keywords: Payout Policy, Firm Valuation, Dividends, Share Repurchases, Dividend Premium, Rule of Law, Capital Structure, International Finance, Corporate Signals, Institutional Quality

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1. Introduction

Corporate payout policy remains a persistent enigma in financial economics. While foundational theories suggest payout choice should be irrelevant in perfect markets (Miller and Modigliani, 1961), this view stands in contrast to decades of real-world observation (Allen and Michaely, 1995) and the consensus that payout policy is one of the "top ten unsolved problems in finance" (Brealey et al., 2014). In a world of frictions, payout decisions are widely seen as potential signals of firm quality (John and Williams, 1985; Miller and Rock, 1985). The central question, however, is not whether these signals exist, but how effectively they cut through the "informational noise" of complex global markets.

The theoretical richness has produced powerful rationales for why payouts matter, from overcoming information asymmetries (Bhattacharya 1979) and mitigating agency costs (Jensen 1986) to catering to investor preferences (Baker and Wurgler 2004b). Yet, while these theories explain that payouts can create value, they fall short in explaining the vast global heterogeneity of their valuation effects. They lack a mechanism to explain why a dividend payment is rewarded with a premium in one country but seemingly ignored or even penalized in another. The literature's heavy focus on the North American market (Brav et al., 2005; Karpavičius and Yu, 2018) has provided a narrow lens, whose findings may not be universally applicable.

To resolve this puzzle, this study first introduces the concept of context-dependent signal dominance. I argue that payout signals are inherently multi-faceted, often conveying conflicting messages simultaneously. The institutional and economic context acts as a crucial filter, determining which of these messages is perceived by the market as the dominant signal and which is dismissed as noise. This dominance mechanism is what ultimately shapes the net valuation effect of a payout.

Building on this concept, I develop and test a novel theory of Asymmetric Validation. This theory posits a fundamental asymmetry in how the dominant signals of dividends and repurchases are validated.

First, I argue that the dividend signal is dualistic, simultaneously conveying two competing messages whose dominance shapes its net valuation effect. The first is a negative "capital allocation" signal. Rooted in the principle of a residual payout policy (Myers and Majluf, 1984), this signal suggests that cash distributed to shareholders is cash not invested in potentially value-creating projects (Jensen, 1986; Gordon, 1959). From an

enterprise value perspective, a dividend can thus signal a lack of profitable growth opportunities. Competing with this is a positive "shareholder commitment" signal. This signal addresses the core agency problem of free cash flow (Jensen, 1986), serving as a credible promise by management to return cash to its owners rather than misspend it on inefficient projects or managerial perks. The credibility of this commitment is behaviorally reinforced. As prospect theory suggests, the market response to a dividend cut (a loss from a reference point) is far more severe than the response to an equivalent increase (Kahneman and Tversky, 1979). However, I posit that this positive signal is only credible if it is externally validated by strong institutions. By making the commitment enforceable (Rule of Law) and its underlying financial health verifiable (transparency), institutions allow it to transmit positive information through the earnings, risk, and agency channels. Second, the repurchase signal is more unidimensional, primarily conveying financial strength. Lacking a clear commitment structure that institutions could externally validate, its credibility is generated intrinsically through costly action (scale). This fundamental asymmetry in validation logics explains the complex and often contradictory patterns of payout premia observed across the globe.

From this framework, I derive two core propositions regarding the dual nature of the dividend signal. From an enterprise value perspective, where capital allocation concerns are crucial, institutions can act as an information substitute. As the level of transparency increases, the dividend's marginal informational value may diminish, allowing its negative interpretation to predominate (Holmström, 1979; Diamond, 1984). This leads to my first proposition: the valuation effect of a dividend on total firm value (MA/A)¹ is expected to be systematically weaker in countries with higher institutional quality. From an equity value perspective, however, where agency risks are the primary concern, institutions act as a commitment validator. This leads to my second proposition: the valuation effect of a dividend on equity value (ME/E) is expected to be systematically stronger in countries with higher institutional quality. For share repurchases, my theory predicts a different, though related, role for institutions. I propose that their primary validation mechanism is intrinsic (financial scale), as they lack a formal commitment structure. However, the value of this signal is not institutionally invariant. Consistent with the logic of information substitution, I hypothesize that the valuation premium for a large-scale repurchase is greatest in institutionally weak markets, where it serves as a powerful, non-redundant signal of financial strength. In transparent markets, its marginal informational value di-

¹See appendix A for variable definitions.

minishes. This leads to my third proposition: the valuation effect of repurchase scale is expected to be systematically weaker in countries with higher institutional quality. Furthermore, I posit a two-tiered institutional effect where deep-rooted legal origins provide a foundational trust anchor for managerial motives, while contemporary governance acts as a motivational filter for interpreting the persistence of buybacks.

To test this multi-layered theory, I construct a comprehensive firm-level panel from 1992 to 2024. My empirical strategy is designed to test both the overarching validation mechanisms and the specific transmission channels. I use interaction models that moderate payout signals with both contemporary governance indicators (Worldbank Worldwide Governance Indicators) and deep-rooted legal origins. Furthermore, I conduct direct tests on the economic channels through which these signals appear to operate.

The results provide strong confirmation for this framework. For dividends, the evidence supports the predicted duality: institutional quality appears to have a negative moderating effect on the enterprise-level valuation (MA/A) but a positive effect on the equity-level valuation (ME/E). For repurchases, the findings confirm the primacy of intrinsic validation through scale, while also revealing the subtle, moderating influence of the institutional context.

This study makes several key contributions. First and foremost, it advances corporate signaling theory by proposing a novel framework of signal duality and asymmetric validation. My theory adds a foundational layer to traditional signaling: while a signal may need to be backed by a strong commitment to be effective, this commitment's interpretation appears to be determined by the institutional environment. Second, my comprehensive global analysis demonstrates the limitations of the U.S.-centric view and extends the empirical scope of the Payout literature as well as the Law and Finance literature. Finally, by dissecting the distinct validation mechanisms, this paper provides a refined understanding of how firms can effectively communicate value in a complex global economy.

2. Data and Sample Construction

2.1. Data Source and Sample Construction

This study draws on the Compustat Global and North America databases from 1992 to 2024, incorporating firm fundamentals and stock price data. For North American companies, monthly stock prices are used, while for firms outside North America, daily stock prices are employed to maximize historical coverage. All data are converted to US dollars using Compustat-provided exchange rates, with balance sheet items converted at year-end rates and income statement, as well as, cash flow items at annual average rates to ensure comparability and accuracy.

My analysis proceeds using a comprehensive "Full" sample, which includes all available firm-year observations from both the Compustat North America and Global databases. From this overarching dataset, I define a "North America" subsample, which serves as a crucial benchmark to ensure comparability with the extensive literature focused on this region. The Full (Global) sample is further disaggregated into six geographic regions for detailed analysis: *North America*, *Europe*, *Asia-Pacific*, *South America*, *Middle East*, and a residual category, *Other*. As shown in Table 5, the Full sample is dominated by firms from Asia-Pacific (nearly 50%), North America (nearly 25%), and Europe (17%), highlighting both the breadth of the dataset and the regional asymmetries in market coverage.

The initial dataset comprises 84,867 companies with more than 1.45 million firm year observations. The dataset includes 25,714 North American companies with roughly 250,000 observations and 59,153 companies with more than 1.2 million firm year observations outside North America. Several data cleaning steps are performed to ensure a reliable sample. First, firms with missing values in key variables such as equity or total assets are excluded. Second, companies classified as belonging to the financial sector (GICS codes 4010-4040) and the utilities sector (GICS code 5510) are removed, given their unique regulatory frameworks, leverage structures, and accounting environments which can distort valuation comparisons. Next, only firms with equity greater than \$250,000 and total assets above \$500,000 are retained, ensuring the focus is on sufficiently large and economically relevant companies, following [Baker and Wurgler \(2004a\)](#); [Hoberg and Prabhala \(2009\)](#); [Karpavičius and Yu \(2018\)](#). Lastly, countries with highly volatile currencies, such as Argentina and Turkey, were removed from the dataset. After this final screen, the Full

Sample consists of 57,372 firms and 572,434 observations over 60 countries. The North American subsample comprises 15,345 of these firms with 137,894 observations.

2.2. Descriptive Statistics

A preliminary analysis of the data reveals significant and systematic differences between dividend-paying and non-paying firms. Tables 1 through 4² present descriptive statistics for both the North American and Global samples (excluding North America).

A first glance at the raw data reveals a seeming paradox. On average, valuations (MA/A and ME/E) are substantially lower for dividend payers across all samples. This initially suggests a valuation discount. However, this pattern is likely driven by confounding characteristics: as Figures 1 to 3 show, dividend payers are larger and, as other metrics indicate, more mature and less volatile firms. This observation aligns with catering theory (Baker and Wurgler, 2004b) but critically underscores the necessity of a multivariate regression framework to isolate the dividend effect from these other characteristics.

Table 1: Panel A: Ratios by Dividend Payer-status based on Book Value of Assets (North America)

	Mean (Nonpayer)	Mean (Payer)	Difference	t-stat	Average
MA/A	2.587	2.041	-0.546	28.92***	2.437
DIV/A	0.000	0.042	0.042	-187.89***	0.011
NI/A	-0.142	0.066	0.208	-99.67***	-0.085
REP/A	0.012	0.021	0.009	-35.43***	0.015
DEBT/A	0.193	0.248	0.055	-45.26***	0.209
CASH/A	0.271	0.119	-0.152	100.09***	0.229
PPE/A	0.219	0.325	0.106	-74.29***	0.248
CAPEX/A	0.052	0.056	0.004	-9.29***	0.053
RD/A	0.137	0.030	-0.106	77.75***	0.112
RE/A	-1.230	0.265	1.496	-83.66***	-0.840
VOL	0.654	0.362	-0.292	138.98***	0.574
AGE	15.364	21.912	6.548	-112.56***	17.054
RDD	0.455	0.602	0.147	-49.24***	0.497
Observations	100,557	37,337			137,894

*** $p < 0.01$

²The "Payer" and "Nonpayer" columns report summary statistics for firm-year observations with positive and zero dividend payouts, respectively. The total number of observations may differ from the full sample size reported in Table 5, as it is restricted to firms for which dividend status is explicitly reported. The full sample includes all firm-years with either dividend or repurchase data.

Table 2: Panel B: Ratios by Dividend Payer-status based on Book Value of Equity (North America)

	Mean (Nonpayer)	Mean (Payer)	Difference	t-stat	Average
ME/E	4.728	3.919	-0.808	14.34***	4.507
DIV/E	0.000	0.117	0.117	-161.97***	0.032
NI/E	-0.406	0.158	0.563	-76.16***	-0.251
REP/E	0.030	0.059	0.030	-37.59***	0.038
DEBT/E	1.029	1.141	0.112	-6.80***	1.069
CASH/E	0.568	0.297	-0.272	58.57***	0.495
PPE/E	0.768	1.057	0.289	-28.53***	0.851
CAPEX/E	0.159	0.173	0.015	-7.37***	0.164
RD/E	0.314	0.083	-0.232	48.25***	0.262
RE/E	-3.420	0.462	3.882	-67.59***	-2.410
VOL	0.654	0.362	-0.292	138.98***	0.574
AGE	15.364	21.912	6.548	-112.56***	17.054
RDD	0.455	0.602	0.147	-49.24***	0.497
Observations	100,557	37,337			137,894

*** $p < 0.01$

In line with their mature profile, dividend payers exhibit distinct financial traits. They are markedly more profitable (higher NI/A and NI/E) and have higher retained earnings, consistent with signaling theories where stable earnings support credible dividend signals (Bhattacharya, 1979; Miller and Rock, 1985). They are also older and less volatile, reinforcing the "bird-in-hand" perception (Gordon, 1959; Lintner, 1956; Karpavičius and Yu, 2018). Conversely, their R&D intensity is significantly lower, supporting the view that high-growth firms prioritize reinvestment over payouts (Fama and French, 2001; Baker and Wurgler, 2004a).

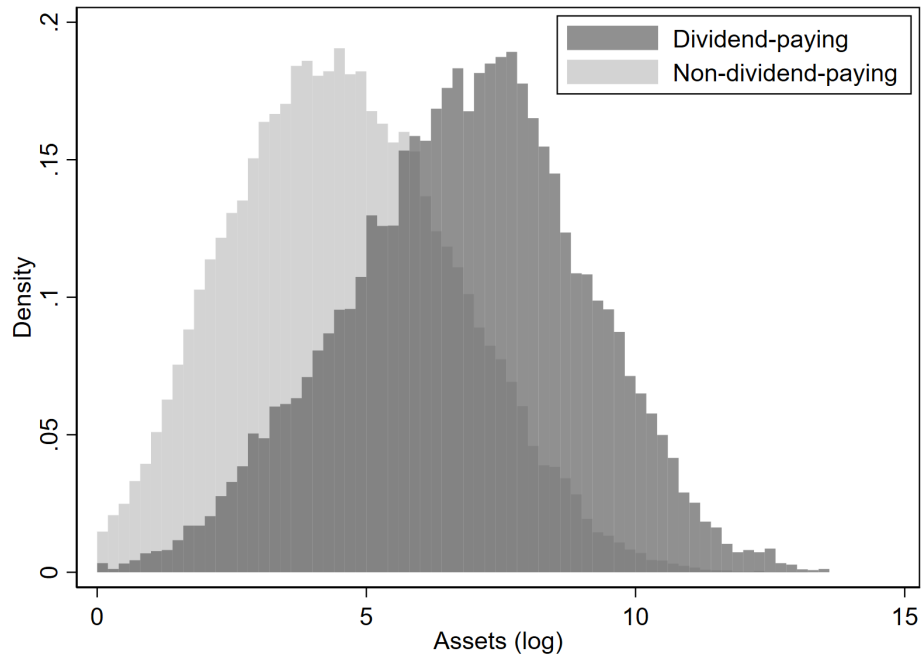


Fig. 1. Distribution of Assets by Dividend Status (North America)

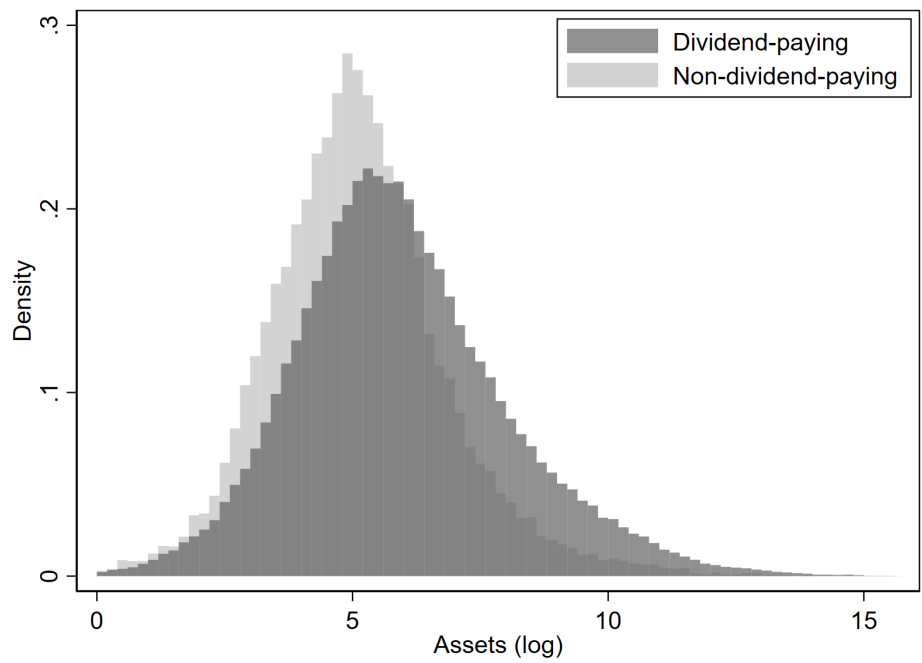


Fig. 2. Distribution of Assets by Dividend Status (Global without North America)

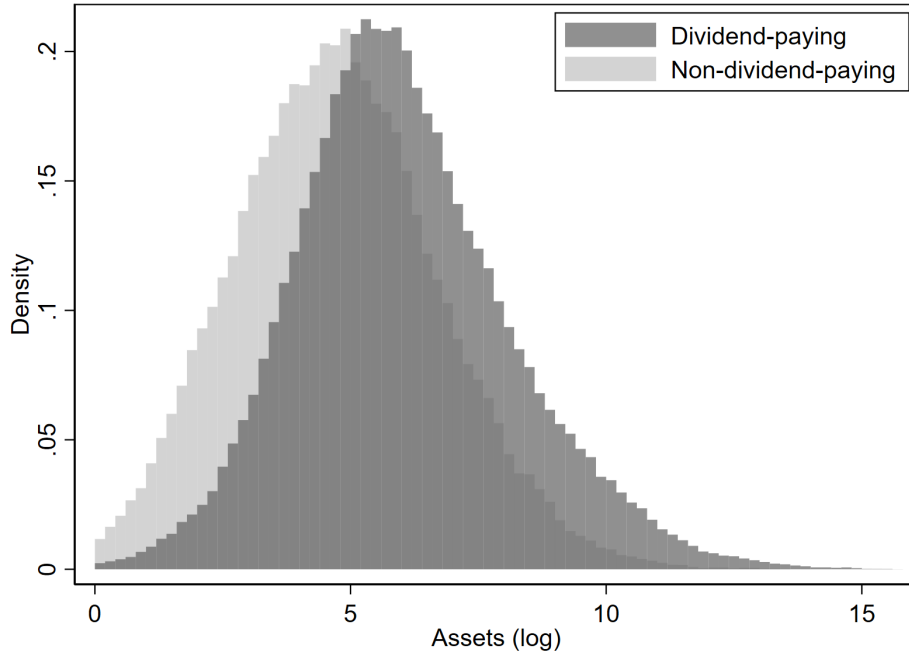


Fig. 3. Distribution of Assets by Dividend Status (Full Sample)

Figures 4 and 5 illustrate the diverging evolution of payout methods. In North America, aggregate dividend payments show a notable uptick after 2003, a trend linked to the U.S. Jobs and Growth Tax Relief Reconciliation Act which reduced dividend tax rates (Chetty and Saez, 2005). More pronounced, however, is the surge in share repurchases beginning in the early 2000s, which has led them to become the dominant form of cash distribution in North America. This shift is often attributed to their flexibility and tax efficiency (Jagannathan et al., 2000; Grullon and Michaely, 2002).

Table 3: Panel A: Ratios by Dividend Payer-status based on Book Value of Assets (Global without North America)

	Mean (Nonpayer)	Mean (Payer)	Difference	t-stat	Average
MA/A	2.521	1.497	-1.024	35.66***	2.613
DIV/A	0.000	0.024	0.024	-146.37***	0.010
NI/A	-0.006	0.046	0.051	-98.66***	-0.017
REP/A	0.000	0.000	0.000	-2.36***	0.000
DEBT/A	0.241	0.200	-0.041	39.43***	0.232
CASH/A	0.157	0.141	-0.016	18.61***	0.143
PPE/A	0.287	0.254	-0.033	26.97***	0.249
CAPEX/A	0.047	0.038	-0.009	30.20***	0.038
RD/A	0.006	0.009	0.003	-24.05***	0.011
RE/A	-0.238	0.214	0.452	-123.92***	-0.330
VOL	0.790	0.651	-0.138	17.69***	0.741
AGE	21.544	21.194	-0.350	7.80***	19.538
RDD	0.924	0.632	-0.292	112.42***	0.712
Observations	35,466	344,979			380,445

*** $p < 0.01$

Table 4: Panel B: Ratios by Dividend Payer-status based on Book Value of Equity (Global without North America)

	Mean (Nonpayer)	Mean (Payer)	Difference	t-stat	Average
ME/E	3.319	1.916	-1.403	30.06***	3.032
DIV/E	0.000	0.051	0.051	-148.16***	0.020
NI/E	-0.002	0.093	0.095	-60.34***	-0.002
REP/E	0.000	0.000	0.000	-1.01	0.000
DEBT/E	0.966	0.762	-0.204	21.57***	0.830
CASH/E	0.346	0.297	-0.050	23.80***	0.297
PPE/E	0.833	0.648	-0.185	35.75***	0.663
CAPEX/E	0.119	0.092	-0.027	29.72***	0.095
RD/E	0.011	0.018	0.006	-22.48***	0.021
VOL	0.790	0.651	-0.138	17.69***	0.741
AGE	21.544	21.194	-0.350	7.80***	19.538
RDD	0.924	0.632	-0.292	112.42***	0.712
Observations	35,466	344,979			380,445

*** $p < 0.01$

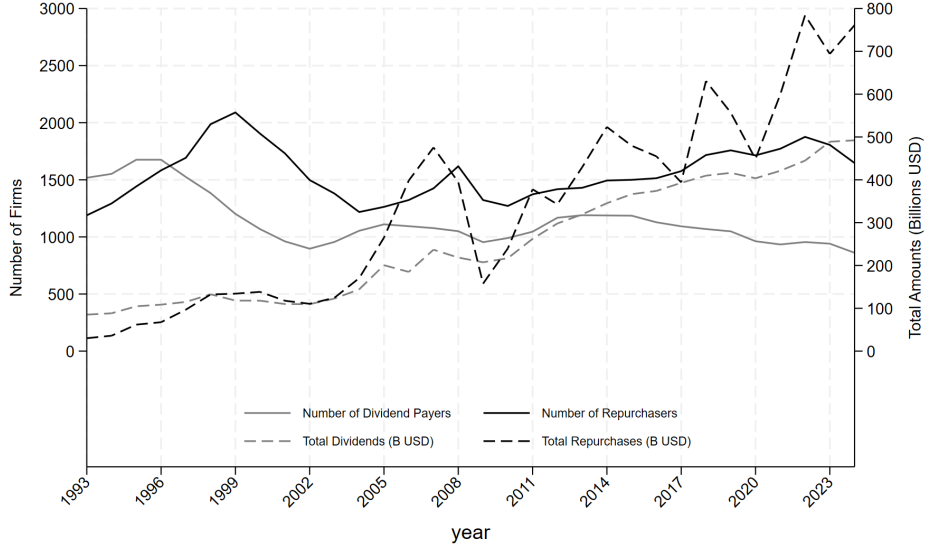


Fig. 4. Dividend and Repurchase Volume over time (North America)

Globally, however, dividends remain the primary payout tool, highlighting fundamental differences in market maturity and institutional norms. A methodological issue concerns the measurement of share repurchases. The standard Compustat measure (PRSTKC) is a known noisy proxy for actual buyback activity. As demonstrated by (Banyi et al., 2008), this measure can overstate repurchases by failing to account for decreases in other equity classes, such as preferred stock. To create a more accurate benchmark, they propose an adjusted measure. Following their recommendation, I construct an alternative metric by subtracting the change in preferred/preference stock (Compustat item PSTK) from PRSTKC and excluding negative results. To ensure the validity of my findings, I test the standard proxy against this more refined measure. As detailed in Table B.1 in Appendix B, the comparison reveals a near-perfect correlation ($\rho > 0.9978$) and substantively identical descriptive statistics for the Full sample. This confirms that my results are not sensitive to this specific measurement choice. Confident in the robustness of the standard proxy, I proceed with PRSTKC to maintain consistency with the majority of the prior literature.

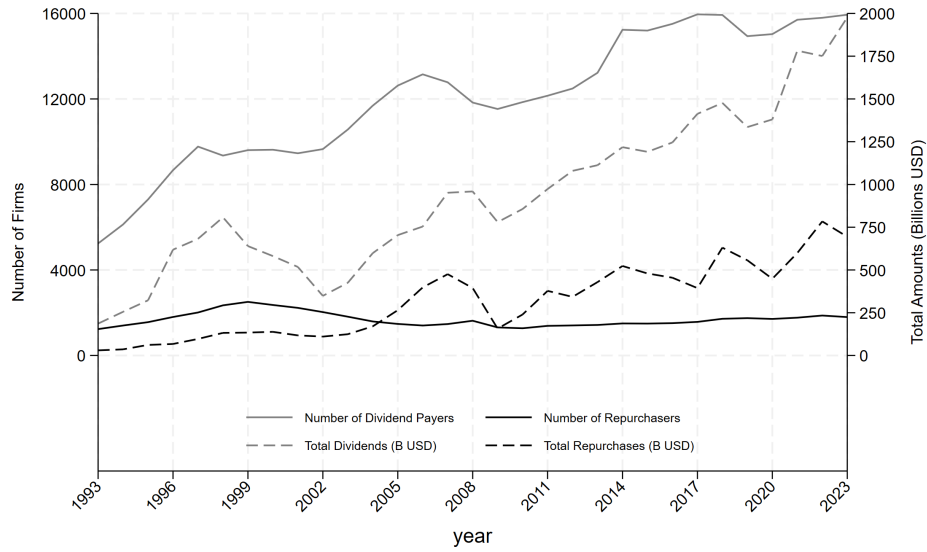


Fig. 5. Dividend and Repurchase Volume over time (Full Sample)

Table 5: Observations and Firms by Region (with Dividend or Repurchase Data, Full Sample)

Region	Observations	% of Total	Firms	% of Region (Firms)
Africa	5,537	0.97%	732	—
Asia Pacific	285,293	49.84%	24,982	—
China	61,884	10.81%	—	22.0%
Japan	84,795	14.81%	—	19.9%
Europe	97,803	17.09%	11,280	—
Middle East	9,545	1.67%	1,380	—
North America	137,894	24.09%	15,345	—
South America	8,369	1.46%	955	—
Other	27,993	4.89%	3,653	—
Total	572,434	100.00%	57,372	

3. Results

3.1. Empirical Model

3.1.1. Baseline Specification for Dividends

To isolate the valuation effect of dividend policy, I estimate a series of panel regression models with firm and year fixed effects. This two-way fixed effects approach is crucial as it controls for unobserved time-invariant firm characteristics (e.g., corporate culture) and common macroeconomic shocks affecting all firms in a given year (Wooldridge, 2010).

The dependent variable is firm valuation, proxied by two standard market-to-book ratios: the market-to-book value of assets (MA/A) and the market-to-book value of equity (ME/E). Using both allows for a comprehensive view: MA/A provides a perspective on the total enterprise value, less sensitive to leverage, while ME/E captures the valuation specifically from the equity holders' standpoint.

The baseline model is specified as follows:

$$Y_{it} = \beta_1 \text{DIVD}_{it} + X'_{it}\beta + \mu_i + \lambda_t + \varepsilon_{it}$$

where Y_{it} is the valuation proxy. The key explanatory variable, DIVD_{it} , is an indicator dummy that equals one if a firm pays dividends in a given year, and zero otherwise. Its coefficient, β_1 , captures the average valuation premium associated with being a dividend payer.

The vector X_{it} contains a comprehensive set of control variables. Unlike seminal work by Baker and Wurgler (2004b), which defines the dividend premium based on the raw difference in valuations, this study employs a regression-based approach to provide a “cleaner” estimate. By controlling for key firm characteristics such as size, profitability, leverage, liquidity, investment, and risk, I can isolate the dividend effect from these confounding influences. The selection of these controls is guided by established literature (Coles et al., 2008; Kalcheva and Lins, 2007; Karpavičius and Yu, 2018). A detailed list of all variable definitions is provided in Appendix A. To ensure the robustness of the findings, I conduct several additional tests on the baseline specification. First, to distinguish between the mere act of paying a dividend and its financial intensity, I replace the binary DIVD indicator with continuous payout ratios (DIV/A , PAYOUT/A). Second,

to separate persistent dividend policies from sporadic ones, I use a dividend history variable (*DIV6D*) that identifies firms with a consistent payout record over the past six years. To address potential issues of heteroskedasticity and serial correlation in the panel data, all standard errors throughout this study are clustered two-way at the firm and year level, a robust practice for this type of analysis (Cameron et al., 2011; Petersen, 2009).

3.1.2. Analysis of Share Repurchases

To provide a comparative analysis for repurchases, I apply a parallel empirical framework to examine the valuation effects of share repurchases. The models are analogous to the dividend specifications, replacing the dividend variables with their repurchase counterparts.

The key explanatory variable is $REPD_{it}$, an indicator dummy for firms that engage in share repurchases. The model is specified as:

$$Y_{it} = \gamma_1 REPD_{it} + X'_{it}\gamma + \mu_i + \lambda_t + \varepsilon_{it}$$

This parallel structure allows for a direct comparison of the signaling power of dividends versus repurchases. As with dividends, I also test for the effects of repurchase intensity (e.g., REP/A) and persistence ($REP6D$) to ensure the robustness of the findings.

3.1.3. Moderating Role of Institutional Quality

A central hypothesis of this study is that the signaling power of payouts is contingent on the institutional environment. To test this, I extend the models by incorporating a moderation analysis. Specifically, I interact the payout indicators ($DIVD_{it}$, $REPD_{it}$ and $PAYOUTD_{it}$), as well as the payout size (DIV/A_{it} , REP/A_{it} and $PAYOUT/A_{it}$) with a measure of country-level institutional quality.

I draw institutional quality data from the World Bank's Worldwide Governance Indicators (WGI). Following the Law and Finance literature (La Porta et al., 2000), I focus on two dimensions particularly relevant for investor protection: Control of Corruption (CC) and Rule of Law (RL), using a composite index (AVG_CC_RL)³. The interaction model for

³As the arithmetic mean of Control of Corruption and Rule of Law.

dividends is specified as:

$$Y_{it} = \beta_1 \text{DIVD}_{it} + \beta_2 \text{WGI}_{ct} + \beta_3 (\text{DIVD}_{it} \times \text{WGI}_{ct}) + X'_{it} \beta + \mu_i + \lambda_t + \varepsilon_{it}$$

where the coefficient of interest is β_3 , which captures how the payout premium changes as institutional quality improves. An analogous model is estimated for share repurchases. In addition to these contemporary governance metrics, I incorporate a country's legal origin as a second, time-invariant measure of its institutional framework. This concept, foundational to the Law and Finance literature, posits that common law countries historically provide stronger protection for outside investors than countries with civil law traditions (French, German, or Scandinavian) (La Porta et al., 1998). To test how these institutional layers jointly moderate the payout signal, I estimate a fully interactive model. The specification for dividends is as follows:

$$Y_{it} = \beta_1 \text{DIVD}_{it} + \beta_2 \text{WGI}_{ct} + LO'_c \delta + (\text{DIVD}_{it} \times \text{WGI}_{ct} \times LO_c)' \gamma + \mu_i + \lambda_t + \varepsilon_{it}$$

where LO_c is a vector of dummy variables for the legal origin of country c . Crucially, the model also includes a three-way interaction term

$$\text{DIVD}_{it} \times \text{WGI}_{ct} \times LO_c$$

to test whether the moderating effect of contemporary governance (WGI) is itself conditional on a country's deep-rooted legal traditions. The triple interaction term includes all lower-order interactions. This framework allows for detailed test of my theory.

An analogous, fully interactive model is estimated for share repurchases to assess the asymmetric role of institutions. This design makes it possible to determine not only if institutions matter, but also which institutional layers are the primary drivers of signal credibility.

3.1.4. Identification and Endogeneity

I acknowledge that my empirical analysis, like any study of corporate payout policy, faces a central identification challenge. A firm's decision to pay a dividend or repurchase shares is endogenous and may be correlated with unobserved, time-varying firm characteristics,

most notably its growth opportunities. For instance, firms with fewer profitable investment projects may be more likely to distribute cash, while simultaneously commanding lower market valuations. This would create a downward bias on the payout coefficient. Conversely, reverse causality could be at play, where more profitable and highly valued firms are better positioned to commit to stable payouts, potentially inducing an upward bias. My two-way fixed effects panel specification is designed to mitigate these concerns as rigorously as possible within a broad global context. Firm fixed effects control for all time-invariant unobserved heterogeneity (e.g., corporate culture or industry effects), while year fixed effects absorb common macroeconomic shocks. While this framework cannot fully rule out biases from time-varying firm-specific factors, it provides a robust baseline for testing my theoretical framework across a diverse international sample. A definitive causal identification would ideally require a quasi-experimental design leveraging an exogenous shock to payout policy. Such a shock could arise from country-specific tax reforms that create differential incentives for dividends versus repurchases or from regulatory changes affecting payout discretion. Constructing a globally consistent dataset of such shocks is beyond the scope of this paper, which focuses on developing and testing a new theoretical framework for signal validation. Accordingly, my results should be interpreted as strong, theory-consistent evidence of conditional associations that reveal a novel economic mechanism, rather than as strictly causal estimates.

3.2. The Dividend-Valuation Relationship

3.2.1. Evidence from the Benchmark Case North America

My analysis begins in North America, the most studied capital market, which serves as a crucial benchmark for the global investigation. The results, presented in Tables 6 and 7, confirm the well-documented positive association between dividend payments and firm valuation. Across all model specifications, I find that the coefficient on the dividend-paying dummy (DIVD) is positive and statistically significant. This finding is consistent with a broad body of literature documenting the "dividend premium" (Karpavičius and Yu, 2018; Fama and French, 2001) and aligns with theories suggesting that dividends may signal stability, mitigate agency costs, or cater to investor preferences (Baker and Wurgler, 2004b; Brav et al., 2005).

Table 6: Determinants of Market Value of Assets scaled by Book Value of Assets (MA/A): North America

Dependent variable	Full Sample				1992–2002	/	2003–2013	/	2014–2024
	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A		(6) MA/A		(7) MA/A
DIVD	0.242*** (0.048)				0.281*** (0.072)		0.177*** (0.058)		0.193** (0.085)
DIV/A		3.480*** (0.757)							
PAYOUT/A			0.090 (0.106)						
DIV6D				0.073 (0.051)					
ASSETS	-0.365*** (0.032)	-0.351*** (0.032)	-0.355*** (0.032)	-0.358*** (0.032)	-0.599*** (0.058)		-0.571*** (0.070)		-0.410*** (0.069)
NI/A	-0.172* (0.104)	-0.187* (0.104)	-0.173* (0.104)	-0.171 (0.104)	0.545*** (0.147)		-0.258 (0.190)		-0.540*** (0.184)
DEBT/A	-0.610*** (0.119)	-0.612*** (0.118)	-0.622*** (0.118)	-0.620*** (0.118)	-0.485** (0.227)		-0.607** (0.237)		-1.045*** (0.242)
CASH/A	1.908*** (0.145)	1.898*** (0.145)	1.912*** (0.145)	1.911*** (0.145)	2.311*** (0.243)		1.653*** (0.261)		1.054*** (0.261)
PPE/A	-1.392*** (0.217)	-1.389*** (0.217)	-1.386*** (0.217)	-1.394*** (0.217)	-1.554*** (0.350)		-1.801*** (0.487)		-0.887** (0.365)
CAPEX/A	4.994*** (0.360)	4.976*** (0.359)	4.995*** (0.359)	4.993*** (0.359)	3.529*** (0.422)		3.885*** (0.738)		3.861*** (0.908)
RD/A	1.899*** (0.263)	1.907*** (0.263)	1.911*** (0.263)	1.915*** (0.263)	2.336*** (0.416)		1.931*** (0.505)		0.574 (0.368)
RDD	-0.537*** (0.157)	-0.527*** (0.158)	-0.530*** (0.156)	-0.533*** (0.156)	-0.423* (0.252)		-0.689** (0.341)		-0.698** (0.315)
VOL	0.230*** (0.053)	0.227*** (0.053)	0.224*** (0.053)	0.226*** (0.053)	0.219*** (0.077)		0.233*** (0.084)		-0.046 (0.092)
Year fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Observations	75,253	75,253	75,367	75,349	29,831		23,462		21,235
Adjusted R^2	0.474	0.474	0.474	0.473	0.491		0.621		0.592

Standard errors robust to clustering at the firm and year levels in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The magnitude of this association is economically meaningful. In my full-sample model, the coefficient on DIVD is 0.247 for the market-to-book assets ratio (Table 6)⁴. The effect of payout intensity is even more pronounced. The coefficient of 3.443 on DIV/A implies that a one percentage point increase in the dividend-to-assets ratio is associated with an increase of 0.034 in the market-to-book assets ratio. Relative to the North American sample mean MA/A of 2.437, this corresponds to a valuation increase of approximately 1.4%. From an equity perspective (Table 7), this relationship appears even stronger. The coefficient on DIVD is a substantial 0.772. For payout intensity, the coefficient of 12.435 on DIV/E suggests that a one percentage point increase in the dividend-to-equity ratio is linked to an increase of 0.124 in the market-to-book equity ratio. This translates to a valuation increase of approximately 2.8% relative to the sample mean ME/E of 4.507. These findings indicate that in the North American context, not only the decision to pay a dividend but also the financial intensity of that payout is associated with a significant valuation premium, particularly from the viewpoint of equity holders.

⁴The sample size for the North American regressions is reduced from 137,894 to 75,253 firm-year observations due to the requirement of non-missing values for all explanatory variables and the exclusion of single-observation firms (singletons) by the fixed-effects estimator. The most significant reduction is caused by the limited availability of data on R&D expenditures.

Table 7: Determinants of Market Value of Equity scaled by Book Value of Equity (ME/E): North America

Dependent variable	Full Sample				1992–2002	/	2003–2013	/	2014–2024
	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E		(6) ME/E		(7) ME/E
DIVD	0.766*** (0.127)				0.794*** (0.210)		0.518*** (0.147)		0.875*** (0.321)
DIV/E		12.482*** (1.414)							
PAYOUT/A			0.406 (0.379)						
DIV6D				0.231* (0.133)					
ASSETS	-0.817*** (0.085)	-0.695*** (0.081)	-0.786*** (0.084)	-0.798*** (0.084)	-1.116*** (0.138)		-1.009*** (0.191)		-0.914*** (0.191)
NI/E	0.236** (0.114)	0.043 (0.104)	0.237** (0.114)	0.236** (0.114)	0.298* (0.160)		-0.371* (0.201)		0.349* (0.202)
DEBT/E	0.614*** (0.089)	0.549*** (0.086)	0.611*** (0.089)	0.612*** (0.089)	0.308* (0.161)		0.388** (0.162)		0.985*** (0.161)
CASH/E	2.960*** (0.177)	2.898*** (0.174)	2.961*** (0.177)	2.962*** (0.177)	2.741*** (0.300)		3.364*** (0.293)		3.069*** (0.324)
PPE/E	0.306* (0.176)	0.209 (0.163)	0.301* (0.176)	0.301* (0.176)	0.368 (0.295)		0.220 (0.261)		0.135 (0.308)
CAPEX/E	4.580*** (0.516)	4.249*** (0.503)	4.574*** (0.514)	4.580*** (0.514)	3.421*** (0.586)		5.318*** (0.919)		5.231*** (1.202)
RD/E	3.340*** (0.263)	3.197*** (0.254)	3.351*** (0.263)	3.348*** (0.263)	3.344*** (0.395)		2.899*** (0.479)		2.649*** (0.418)
RDD	-0.467 (0.385)	-0.368 (0.394)	-0.453 (0.382)	-0.464 (0.383)	-0.328 (0.641)		-0.898 (0.578)		-0.035 (0.813)
VOL	-0.198 (0.133)	-0.206 (0.131)	-0.220* (0.133)	-0.216 (0.133)	-0.108 (0.191)		-0.218 (0.225)		-0.551** (0.260)
Year fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Observations	75,253	75,253	75,367	75,349	29,831		23,462		21,235
Adjusted R^2	0.573	0.582	0.572	0.572	0.524		0.666		0.696

Standard errors robust to clustering at the firm and year levels in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Beyond confirming this general relationship, my analysis reveals a notable time-varying dynamic. While the association remains consistently positive, the size of the DIVD coefficient fluctuates across subperiods. For instance, the coefficient for ME/E is larger in the 2014–2024 subsample (0.889) compared to the preceding decades. This suggests that even in a mature market like North America, the strength of the relationship between dividends and firm value is not static. It appears to be more pronounced during certain periods. This finding provides an initial hint for my global analysis: if the strength of this association varies even in a relatively stable institutional environment, its magnitude is likely to be even more context-dependent in the diverse settings of global markets.

A noteworthy pattern emerges in the coefficients of several key control variables, which differ systematically between the enterprise value (MA/A) and equity value (ME/E) models. These differences underscore the distinct perspectives captured by each valuation metric. First, the coefficient on leverage (DEBT/A, DEBT/E) is consistently negative in the MA/A models but positive in the ME/E models. This aligns with standard corporate finance theory. From an enterprise value perspective, higher debt increases financial risk and potential distress costs, leading to a lower valuation. From an equity holder’s perspective, however, leverage can be value-enhancing through tax shields and by magnifying returns on equity, thus explaining the positive coefficient. Second, the sign of the profitability coefficient (NI/A, NI/E) also differs. While net income is positively associated with equity value (ME/E), it shows a negative, often insignificant, relationship with enterprise value (MA/A). This seemingly counterintuitive result might reflect that, after controlling for other factors like investment (CAPEX/A) and growth (RD/A), high current accounting profits could be associated with mature, low-growth firms whose overall enterprise value (which includes the market value of future growth options) is lower. This interpretation is further supported by the coefficients on research and development expenditures. The coefficient on the RDD dummy, which equals one for firms with no reported R&D, is significantly negative. This indicates that the market systematically penalizes firms that do not invest in innovation, likely interpreting this as a strong signal of poor future growth prospects. The positive coefficient on R&D intensity (RD/A) complements this finding, showing that higher investment in future growth is rewarded with a higher valuation. Finally, a similar divergence is observed for volatility (VOL). Higher stock return volatility is positively associated with enterprise value in the MA/A models but negatively with equity value in the ME/E models. This pattern could be interpreted through the lens of real options theory. From an enterprise perspective, volatility can

increase the value of a firm's growth options, as higher uncertainty creates greater upside potential. For equity holders, who hold a leveraged claim on the firm's assets, higher volatility primarily translates into increased risk and a higher required rate of return, leading to a lower valuation. These systematic differences in control variable coefficients reinforce the importance of analyzing both valuation metrics to gain a complete picture of payout policy effects.

3.2.2. Global Heterogeneity and the Moderating Role of Institutions

Moving the analysis beyond North America, I examine the relationship between dividend payments and firm valuation in a global context. The results, presented in Tables 8 and 9, suggest that, on average, after controlling for a host of firm characteristics, the act of paying a dividend is associated with a valuation discount, not a premium. This finding is robust across alternative measures, including the persistence of dividends (DIV6D), which also shows a significant negative coefficient (-0.160). This "global dividend discount" is a central empirical puzzle that motivates the core of my analysis.

Table 8: Determinants of Market-to-Assets Ratio (MA/A): Full Sample

Dependent variable	Full Sample				1992–2002	/	2003–2013	/	2014–2024
	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A		(6) MA/A		(7) MA/A
DIVD	-0.335*** (0.042)				-0.229** (0.094)		-0.828*** (0.070)		0.130 (0.086)
DIV/A		6.683*** (0.665)							
PAYOUT/A			0.020 (0.015)						
DIV6D				-0.160*** (0.057)					
ASSETS	-0.535*** (0.063)	-0.532*** (0.063)	-0.548*** (0.063)	-0.936*** (0.071)	-0.823*** (0.112)		-1.119*** (0.206)		-0.552*** (0.056)
NI/A	-0.296* (0.179)	-0.457** (0.178)	-0.325* (0.177)	-1.557*** (0.213)	0.067 (0.293)		-0.040 (0.334)		0.642*** (0.169)
DEBT/A	0.603** (0.300)	0.750** (0.299)	0.634** (0.297)	1.502*** (0.290)	1.106** (0.502)		0.698 (0.729)		-0.786*** (0.137)
CASH/A	1.669*** (0.174)	1.593*** (0.175)	1.686*** (0.173)	1.928*** (0.210)	2.072*** (0.333)		1.903*** (0.411)		1.330*** (0.134)
PPE/A	-0.310* (0.187)	-0.244 (0.187)	-0.274 (0.187)	-1.148*** (0.238)	-0.936*** (0.324)		0.036 (0.396)		0.017 (0.151)
CAPEX/A	1.452*** (0.270)	1.366*** (0.270)	1.437*** (0.269)	2.484*** (0.329)	1.245*** (0.343)		1.119** (0.550)		2.278*** (0.233)
RD/A	1.492*** (0.396)	1.265*** (0.392)	1.424*** (0.393)	-0.698 (0.455)	1.148* (0.633)		0.902 (0.763)		1.787*** (0.346)
RDD	-0.247*** (0.040)	-0.166*** (0.040)	-0.187*** (0.040)	-0.259*** (0.051)	0.008 (0.056)		-0.100 (0.085)		0.002 (0.036)
VOL	0.034*** (0.012)	0.037*** (0.012)	0.035*** (0.012)	0.024* (0.014)	0.030*** (0.010)		-0.015 (0.037)		0.051*** (0.010)
Year fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Observations	405,444	405,444	406,651	518,290	96,185		148,078		155,242
Adjusted R^2	0.557	0.558	0.558	0.521	0.684		0.519		0.826

Standard errors robust to clustering at the firm and year level in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 9: Determinants of Market-to-Book Equity Ratio (ME/E): Full Sample

Dependent variable	Full Sample				1992–2002	/	2003–2013	/	2014–2024
	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E		(6) ME/E		(7) ME/E
DIVID	-0.196*** (0.073)				0.134 (0.155)		-1.056*** (0.117)		0.704** (0.333)
DIV/E		11.775*** (0.783)							
PAYOUT/E			-0.313*** (0.058)						
DIV6D				-0.241** (0.112)					
ASSETS	-0.879*** (0.056)	-0.939*** (0.062)	-0.867*** (0.056)	-1.085*** (0.069)	-1.229*** (0.120)		-1.452*** (0.139)		-1.379*** (0.114)
NI/E	0.376*** (0.124)	0.182 (0.117)	0.382*** (0.124)	-0.234** (0.111)	0.061 (0.183)		0.261 (0.229)		1.046*** (0.220)
DEBT/E	0.565*** (0.071)	0.530*** (0.068)	0.564*** (0.071)	0.457*** (0.057)	0.485*** (0.121)		0.614*** (0.140)		1.068*** (0.147)
CASH/E	2.997*** (0.161)	2.588*** (0.152)	2.996*** (0.160)	3.251*** (0.173)	2.584*** (0.295)		4.191*** (0.334)		2.937*** (0.236)
PPE/E	0.763*** (0.124)	0.647*** (0.117)	0.755*** (0.123)	0.628*** (0.108)	0.436* (0.227)		1.346*** (0.240)		0.341* (0.206)
CAPEX/E	2.881*** (0.296)	2.446*** (0.276)	2.870*** (0.294)	3.613*** (0.279)	2.847*** (0.486)		1.900*** (0.525)		3.404*** (0.452)
RD/E	3.453*** (0.271)	3.493*** (0.262)	3.468*** (0.271)	2.608*** (0.267)	2.695*** (0.456)		2.428*** (0.493)		3.549*** (0.398)
RDD	-0.298*** (0.064)	-0.170*** (0.062)	-0.309*** (0.063)	-0.357*** (0.077)	0.081 (0.104)		-0.176 (0.127)		0.126 (0.078)
VOL	0.031 (0.023)	0.048** (0.023)	0.028 (0.023)	0.010 (0.026)	0.063** (0.025)		0.022 (0.059)		0.048* (0.025)
Year fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Observations	405,444	403,650	406,651	518,290	96,185		148,078		155,242
Adjusted R^2	0.537	0.557	0.537	0.504	0.566		0.500		0.782

Standard errors robust to clustering at the firm and year level in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Interestingly, while the decision to pay a dividend is, on average, penalized, the financial intensity of the payout appears to be positively valued by the market. The economic magnitude of this effect is substantial. In the full-sample model for enterprise value (Table 8), the coefficient of 6.683 on DIV/A suggests that a one percentage point increase in the dividend-to-assets ratio is associated with an increase of 0.067 in the market-to-book assets ratio. Relative to the sample mean MA/A of 2.592, this corresponds to a valuation increase of approximately 2.6%. From an equity perspective (Table 9), the positive effect of payout intensity is even stronger. The coefficient of 11.775 on DIV/E indicates that a one percentage point increase in the dividend-to-equity ratio is linked to an increase of 0.118 in the market-to-book equity ratio, which translates to a valuation increase of about 3.7% relative to the sample mean ME/E of 3.224. These findings highlight a crucial duality in the global perception of dividends: the market appears to penalize the strategic decision to distribute cash (the negative capital allocation signal), while simultaneously rewarding the demonstrated financial capacity required for a large payout.

Beyond the dividend variables, the global models reveal systematic differences in the valuation of core firm characteristics compared to the North American benchmark. These shifts in control variable coefficients may reflect the distinct economic and institutional environments existing in the global sample. First, a notable reversal occurs for profitability (NI/A, NI/E). In the global context, higher net income is associated with a lower enterprise value (MA/A) but a higher equity value (ME/E). This pattern, also observed in North America, appears to be even stronger globally. It might suggest that investors in diverse international markets, after controlling for investment, view high current accounting profits with even greater skepticism, potentially interpreting them as a stronger signal of a firm's maturity and lack of high-growth investment opportunities.

Second, the valuation of tangible assets (PPE/A, PPE/E) reveals a consistent pattern across both the North American and global samples, though the economic interpretation may differ. From an enterprise value perspective (MA/A), a higher proportion of tangible assets is associated with a lower valuation. This might suggest that, globally, markets tend to reward firms with asset-light business models and more valuable intangible growth options over those with heavy investments in physical capital. From an equity perspective (ME/E), however, the coefficient on PPE/E is consistently positive. This dual finding is compelling. While the overall enterprise may be valued less for its physical assets, for equity holders, who bear the residual risk, a strong base of tangible assets could serve as a form of collateral. This may reduce their perceived risk, leading to a higher valuation of their specific claim, especially in the more uncertain and diverse global environment. Finally, the effect of the total payout ratio (PAYOUT/E) on equity value is positive but insignificant in the global sample, in contrast to the strong positive effect in North America. This finding is highly consistent with the paper's central thesis. A combined payout measure, which mixes the externally-validated dividend signal with the intrinsically-validated repurchase signal, creates an ambiguous message. In the diverse and often less transparent global context, the market appears unable to disentangle these conflicting signals, resulting in a noisy and statistically insignificant net valuation effect.

A disaggregated analysis by geographic region (see Appendix Tables C.7 to G.1) highlights the deep heterogeneity underlying this average effect. The dividend discount is most pronounced and statistically significant in large, diverse markets like Asia-Pacific and the residual Other category, where the coefficient on DIVD is strongly negative across most specifications. A similarly negative, though less precisely estimated, pattern emerges in Europe and Africa. This pattern of a dividend discount is contrasted by the findings for

South America. In this region, the coefficient on DIVD is predominantly positive, but often statistically insignificant, suggesting a fundamentally different market interpretation. This regional divergence presents a central puzzle: why would the same corporate action be, on average, penalized with a valuation discount across most of the world, yet potentially rewarded with a premium in a high-risk region like South America? Traditional signaling theories struggle to explain such a profound and counterintuitive heterogeneity. The literature on institutional economics, however, offers a compelling potential explanation. As argued in the foundational work on Law and Finance ([La Porta et al., 2000](#)), the informational content of corporate policies is not universal but is shaped by the institutional context. My theory of Context-Dependent Signal Dominance builds on this idea, positing that the interpretation of a dividend signal is determined by a trade-off between its negative capital allocation message and its positive shareholder commitment message. The institutional environment might dictate which of these signals dominates. This institutional perspective provides an interesting hypothesis: the puzzle of regional divergence may not be random, but a systematic, institution-based phenomenon that my subsequent moderation analysis tries to resolve.

Table 10: Determinants of Market Value (MA/A and ME/E): Dividend paying Firms in the Full Sample with Institutional Quality (WGI Average)

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
DIVD	-0.288*** (0.049)				-0.340*** (0.074)			
WGI (AVG CC RL)	0.072 (0.086)	-0.025 (0.079)	-0.038 (0.077)	0.292** (0.121)	0.386*** (0.150)	0.337** (0.137)	0.422*** (0.135)	0.738*** (0.191)
DIVD $\times$ WGI	-0.080 (0.049)				0.160** (0.081)			
DIV/A or DIV/E		9.059*** (1.329)				12.347*** (1.595)		
DIV/A or DIV/E $\times$ WGI		-1.584* (0.938)				-0.830 (1.118)		
PAYOUT/A			0.013 (0.009)				0.042* (0.025)	
PAYOUT/A $\times$ WGI			0.016 (0.019)				0.029 (0.039)	
DIV6D				-0.266*** (0.061)				-0.593*** (0.121)
DIV6D $\times$ WGI				0.205*** (0.067)				0.593*** (0.119)
ASSETS	-0.591*** (0.075)	-0.583*** (0.075)	-0.601*** (0.074)	-1.059*** (0.082)	-0.937*** (0.063)	-1.005*** (0.071)	-0.949*** (0.062)	-1.170*** (0.077)
NI/A or NI/E	-0.247 (0.210)	-0.454** (0.211)	-0.281 (0.209)	-1.674*** (0.241)	0.483*** (0.143)	0.283** (0.136)	0.488*** (0.143)	-0.198 (0.124)
Debt/A or Debt/E	0.548 (0.342)	0.706** (0.342)	0.566* (0.340)	1.619*** (0.329)	0.643*** (0.083)	0.564*** (0.077)	0.642*** (0.082)	0.512*** (0.063)
Cash/A or Cash/E	1.562*** (0.190)	1.468*** (0.190)	1.583*** (0.188)	1.845*** (0.231)	3.131*** (0.179)	2.745*** (0.166)	3.127*** (0.178)	3.428*** (0.191)
PPE/A or PPE/E	-0.230 (0.222)	-0.160 (0.221)	-0.200 (0.221)	-1.173*** (0.254)	0.873*** (0.141)	0.758*** (0.133)	0.868*** (0.140)	0.713*** (0.121)
CAPEX/A or CAPEX/E	1.342*** (0.298)	1.249*** (0.298)	1.325*** (0.297)	2.574*** (0.368)	2.588*** (0.323)	2.302*** (0.301)	2.578*** (0.321)	3.401*** (0.308)
RD/A or RD/E	1.425*** (0.449)	1.139** (0.446)	1.345*** (0.445)	-1.002** (0.509)	3.441*** (0.306)	3.517*** (0.298)	3.450*** (0.305)	2.554*** (0.296)
RDD	-0.279*** (0.050)	-0.190*** (0.047)	-0.228*** (0.047)	-0.319*** (0.060)	-0.352*** (0.075)	-0.161** (0.069)	-0.255*** (0.068)	-0.419*** (0.087)
VOL	0.036** (0.014)	0.040*** (0.014)	0.037*** (0.014)	0.019 (0.016)	0.035 (0.025)	0.052** (0.025)	0.034 (0.025)	0.007 (0.028)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R^2	0.567	0.568	0.568	0.535	0.552	0.572	0.553	0.521
Observations	343,403	343,403	344,468	449,982	343,403	341,954	344,468	449,982

Standard errors in parentheses. All models include firm and year fixed effects. * $p < 0.10$, ** $p < 0.05$,

*** $p < 0.01$.

To formally test my theory, I investigate how institutional quality moderates this puzzling dividend discount. My theory predicts a dual effect: institutions should act as an information substitute for the enterprise as a whole (MA/A), but as a commitment validator for shareholders specifically (ME/E). First, I reestimate Models (1) to (4) for both dependent variables (MA/A and ME/E) and incorporate country-level governance data from the World Bank’s Worldwide Governance Indicators (WGI).⁵ Specifically, I focus on two dimensions that are particularly relevant for investor protection and capital market functioning: Control of Corruption (CC) and Rule of Law (RL). I compute the average of these two indicators as a continuous measure of institutional quality (AVG CC RL) and interact DIVD, DIV/A (respectively DIV/E) and DIV6D with the WGI average measure of institutional quality. The main results (Table 10) rely on this WGI average, while the tables in Appendix E separately analyze CC and RL to ensure robustness. Second, I add a structural, time-invariant measure Legal Origin (LO), based on (La Porta et al., 1998) as an interaction for DIVD (results in Table 13).

The interaction models offer insights into the dual nature of the dividend signal and lend strong support to the proposed theory. The findings reveal that the moderating effect of institutional quality is asymmetric and depends critically on the valuation perspective. When firm value is measured from an enterprise perspective (MA/A), the results align with an “information substitution” hypothesis. This hypothesis, rooted in the principles of information economics (Holmström, 1979; Diamond, 1984), posits that in markets with high institutional quality and thus high transparency, other sources of information such as audited financial statements and credible analyst reports become readily available (Healy and Palepu, 2001). Consequently, the dividend as a signal of financial health loses its marginal informational value, becoming a substitute for, rather than a complement to, other information channels. In such a context, the negative interpretation of a dividend, namely as a signal of foregone investment opportunities, may come to dominate. The empirical results in Table 10 are consistent with this view. The interaction term $\text{DIVD} \times \text{WGI}$ in the MA/A regression is statistically insignificant and small in magnitude. It therefore fails to mitigate the negative and significant direct effect of paying a dividend (DIVD), suggesting that even in well-governed countries, the market does not reward the decision to pay a dividend from an enterprise value standpoint.

This finding provides strong support for my theory’s prediction of a dual role for institutions. One might argue that the negative moderating effect on enterprise value (MA/A)

⁵<https://www.worldbank.org/en/publication/worldwide-governance-indicators>

is simply driven by a selection effect, where firms in transparent markets that pay dividends are disproportionately those with weaker growth opportunities. However, such a simple endogeneity story would struggle to explain the concurrent positive moderating effect on equity value (ME/E). If dividend payers in well-governed countries were merely "low-growth" firms, it is unclear why equity investors would reward them with a premium that is conditional on the very institutional quality that reveals this information. The documented duality of my findings is thus more coherently explained by our theory of context-dependent signal dominance than by a simple selection mechanism.

A different picture emerges when firm value is measured from an equity perspective, where the results support a "commitment validation" hypothesis. For shareholders, particularly in environments with weak investor protection, the primary concern might not be optimal capital allocation but rather the risk of managerial expropriation of free cash flow, as famously articulated by Jensen (1986). A dividend, as a tangible and sticky commitment to distribute cash (Lintner, 1956), can serve as a powerful tool to mitigate this agency conflict. However, the credibility of this commitment is not guaranteed. It requires external validation through strong institutions that protect shareholder rights and ensure the promise of payment is enforceable. In this view, institutional quality acts as a validator that makes the commitment signal credible, a notion central to the Law and Finance literature (La Porta et al., 2000; Shleifer and Vishny, 1997). The results for the ME/E valuation in Table 10 seem to support this mechanism. The interaction term $DIVD \times WGI$ is positive and highly significant, indicating that the valuation effect for shareholders is fundamentally conditional on institutional strength. The direct coefficient on the $DIVD$ in this interactive model is particularly revealing. It remains negative, which might imply that in a hypothetical country with zero institutional quality ($WGI=0$), the act of paying a dividend could be penalized by equity investors. This finding could underscore the role of institutions: without their validating effect, the dividend commitment might not overcome the baseline skepticism regarding managerial intentions, thus failing to generate a positive valuation effect for shareholders.

A disaggregation of the institutional quality index into its core components, Control of Corruption (CC) and Rule of Law (RL), allows for a more granular test of the "commitment validation" hypothesis. The results, presented in Appendix Tables A and B, reveal that the moderating effect is driven specifically by the legal environment, not by broader governance metrics. For both institutional measures, the interaction terms ($DIVD \times CC$ and $DIVD \times RL$) are statistically insignificant in the MA/A regressions, reinforcing the

finding that stronger contemporary governance does not create a dividend premium from an enterprise value perspective. A crucial distinction emerges in the ME/E regressions. While the interaction with Control of Corruption is not statistically significant, the interaction term $DIVD \times \text{Rule of Law}$ is positive and highly significant. This specific finding strongly supports the commitment validation mechanism: it is not the general absence of corruption, but rather the enforceability of contracts and protection of property rights, as captured by the Rule of Law indicator, that validates the dividend commitment in the eyes of shareholders. This legal backstop appears essential to transform the dividend promise into a credible and valuable signal for equity investors. Consistent with the main findings, the direct coefficient on $DIVD$ remains negative in these models. This robustly highlights that the positive valuation of dividends for shareholders is not automatic but is contingent on a specific and critical dimension of institutional quality: a functioning legal system that ensures commitments are honored.

Table 11: Marginal Effects of $DIVD$ on MA/A at Different Levels of Institutional Quality (WGI AVG)

WGI Level	Marg. Effect (dy/dx)	Std. Err.	z-Stat.	95% CI
-2.5	-0.089	0.149	-0.60	[-0.380, 0.203]
-2.0	-0.128	0.126	-1.02	[-0.375, 0.118]
-1.5	-0.168	0.103	-1.63	[-0.370, 0.034]
-1.0	-0.208**	0.082	-2.55	[-0.368, -0.048]
-0.5	-0.248***	0.063	-3.95	[-0.371, -0.125]
0.0	-0.288***	0.049	-5.83	[-0.385, -0.191]
0.5	-0.328***	0.046	-7.10	[-0.418, -0.237]
1.0	-0.368***	0.055	-6.67	[-0.476, -0.260]
1.5	-0.408***	0.072	-5.68	[-0.548, -0.267]
2.0	-0.448***	0.092	-4.86	[-0.628, -0.267]
2.5	-0.487***	0.114	-4.27	[-0.711, -0.264]

Margins based on Model (1) with interaction. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 12: Marginal Effects of $DIVA$ on MA/A at Different Levels of Institutional Quality (WGI AVG)

WGI Level	Marg. Effect (dy/dx)	Std. Err.	z-Stat.	95% CI
-2.5	13.018***	3.549	3.67	[6.062, 19.974]
-2.0	12.226***	3.090	3.96	[6.169, 18.283]
-1.5	11.434***	2.635	4.34	[6.270, 16.599]
-1.0	10.642***	2.186	4.87	[6.358, 14.927]
-0.5	9.851***	1.747	5.64	[6.426, 13.275]
0.0	9.059***	1.329	6.81	[6.453, 11.664]
0.5	8.267***	0.961	8.61	[6.384, 10.149]
1.0	7.475***	0.720	10.38	[6.064, 8.886]
1.5	6.683***	0.744	8.98	[5.224, 8.142]
2.0	5.891***	1.015	5.80	[3.902, 7.881]
2.5	5.099***	1.395	3.65	[2.365, 7.834]

Margins based on Model (2) with interaction. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A potential concern is that institutional quality might simply act as a proxy for other country-level characteristics, such as dominant firm ownership structures, which could themselves influence valuation signals. To ensure that the WGI variable captures the distinct effect of the institutional environment rather than being confounded by ownership patterns, I conduct a further robustness check. The results, presented in Table F.1 in Appendix B, extend the main specification by including interaction terms for firm ownership independence. The analysis confirms the asymmetric moderating effect of institutional quality even after controlling for ownership. Consistent with the commitment validation hypothesis for the shareholder perspective, the positive and significant interaction between the dividend decision and institutional quality ($DIVD \times WGI$) persists for the ME/E valuation. This provides strong evidence that the institutional validation of the dividend commitment for shareholders is a direct effect, not a confound of ownership patterns. Conversely, and in line with the information substitution hypothesis for the enterprise perspective, the moderating effect of institutional quality on the MA/A valuation remains statistically insignificant. This reinforces the finding that the institutional context does not appear to rescue the negative capital allocation signal associated with the dividend decision. Taken together, these robustness checks indicate that the dual, perspective-dependent role of institutions is a robust phenomenon, providing further confidence that the institutional context has a direct, and asymmetric, moderating effect on dividend signals that is not subsumed by corporate ownership characteristics.

To visualize and quantify these dual, conditional effects, I compute the average marginal effects of the dividend decision and its intensity across different levels of institutional quality. The results, presented in Table 11, Table 12 and Appendix D, provide strong support for the proposed theory. From the enterprise value perspective, the findings clearly support the information substitution hypothesis. As shown in Table 11, the marginal effect of the dividend-paying decision on MA/A is consistently negative and becomes significantly more negative as institutional quality improves. The effect is statistically insignificant in the weakest institutional settings but declines to a highly significant -0.487 in the most institutionally advanced markets ($WGI = 2.5$). This pattern suggests that as transparency increases, the negative interpretation of dividends as a signal of foregone growth opportunities intensifies. The analysis of payout intensity (Table 12) reveals a complementary dynamic: the marginal effect of a higher dividend-to-assets ratio (DIV/A) is consistently positive and significant, but its magnitude diminishes monotonically as institutional quality increases. This indicates that while a substantial payout

is a powerful signal of financial health, its marginal informational value seems highest in markets where other credible information is scarce. From the shareholder perspective, the results align with the commitment validation hypothesis. Appendix D, Table A shows that the marginal effect of the dividend decision on equity value is significantly negative in countries with low institutional quality. The negative effect only attenuates and becomes statistically insignificant as institutions strengthen, robustly highlighting that the positive shareholder commitment signal seems to be unlocked by institutional validation. Similarly, the marginal effect of dividend intensity, shown in Appendix D, Table B, while always positive, is also strongest in the weakest institutional settings and declines as institutional quality improves. Taken together, these marginal effects analyses illustrate the complex, dual nature of the dividend signal. For the enterprise as a whole, institutional quality appears to amplify the negative connotations of the dividend decision. For shareholders, it acts as a validator, transforming a potentially negative signal into a credible, though still context-dependent, commitment.

Table 13: Institutional Quality and Legal Origin Interactions with Dividend Status

	MA/A	ME/E
DIVID	6.648*** (0.737)	9.313*** (1.039)
DIVID $\times$ WGI	-4.738*** (0.500)	-6.438*** (0.705)
French $\times$ DIVD	-5.042*** (0.852)	-7.403*** (1.330)
German $\times$ DIVD	-7.124*** (0.741)	-8.787*** (1.197)
Nordic $\times$ DIVD	6.145 (3.923)	11.937 (10.300)
Socialist $\times$ DIVD	-6.517*** (0.830)	-10.276*** (1.210)
French $\times$ DIVD $\times$ WGI	3.758*** (0.633)	5.812*** (1.034)
German $\times$ DIVD $\times$ WGI	5.039*** (0.506)	6.713*** (0.790)
Nordic $\times$ DIVD $\times$ WGI	-1.035 (1.954)	-3.165 (5.147)
Socialist $\times$ DIVD $\times$ WGI	5.920*** (0.797)	6.579*** (1.307)
Controls	Yes	Yes
Adj. R ²	0.043	0.142
Obs.	303,489	303,489

All models include the full set of control variables, as well as firm and year fixed effects. The English Common Law legal origin serves as the benchmark category for all interaction terms. Standard errors robust to clustering at firm and year levels in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

To test whether this dual validation mechanism is also rooted in deeper, structural features of a country's legal system, I incorporate a country's legal origin as a second moderator. The Law and Finance literature posits that common law systems historically offer

stronger investor protection and create a fundamentally different environment for corporate finance than civil law systems (La Porta et al., 1998). The results from my fully interactive model, presented in Table 13, provide support for this view and add a crucial historical layer to the theory. First, the analysis reveals that the Common Law tradition serves as a foundational anchor for the positive interpretation of dividends. The baseline coefficient for DIVD, which represents the effect in Common Law countries at an average level of contemporary governance ($WGI=0$), is strongly positive and significant for both MA/A (6.648) and ME/E (9.313). However, the large and significant negative coefficient on the interaction term $DIVD \times WGI$ for both valuation measures indicates a strong information substitution effect within these advanced legal systems. As governance and transparency improve, the marginal informational value of a dividend appears to diminish sharply, consistent with the core idea of the proposed theory. Second, the model confirms a significant "Civil Law discount" on the valuation of dividends. Relative to the Common Law benchmark, the dividend signal is valued substantially less in countries with French, German, and Socialist legal origins, as indicated by the large negative coefficients on the respective interaction terms (e.g., -7.124 for German $\times$ DIVD on MA/A). This suggests that long-standing legal traditions create a foundational context of skepticism that significantly dampens the initial credibility of payout commitments. Finally, the model uncovers an interesting "catch-up" dynamic. The significant and positive three-way interaction terms (e.g., German $\times$ DIVD $\times$ WGI) show that the moderating effect of contemporary governance is not uniform across legal traditions. These results imply that while the baseline valuation of dividends is lower in Civil Law countries, improvements in modern governance (WGI) have a significantly more positive impact compared to the Common Law benchmark. This dynamic suggests that while deep-rooted legal origins is important, contemporary institutional quality plays a crucial role in compensating for a weaker historical legacy. In markets with a weaker institutional heritage, modern reforms that enhance transparency and the rule of law appear to be particularly effective at validating dividend commitments and allowing them to become credible signals of value.

3.3. Magnitude and Dynamics of the Dividend Premium

Having established a robust statistical association between dividend payments and firm valuation, I now translate these regression coefficients into economically meaningful dividend premia. To provide a comprehensive view, I employ two complementary approaches. First, using my main panel models, I calculate the average, regression-based premium, which isolates the valuation effect of dividends after controlling for a set of firm characteristics. Second, to analyze the dynamic evolution, I utilize year-by-year cross-sectional regressions, which follows the approach in [Karpavičius and Yu \(2018\)](#), who use annual cross-sectional regressions with industry fixed effects to estimate yearly dividend premia. Following [Baker and Wurgler \(2004b\)](#) I also compute raw premia, defined as the log-difference in average valuations between payers and non-payers⁶, to visualize unconditional trends.

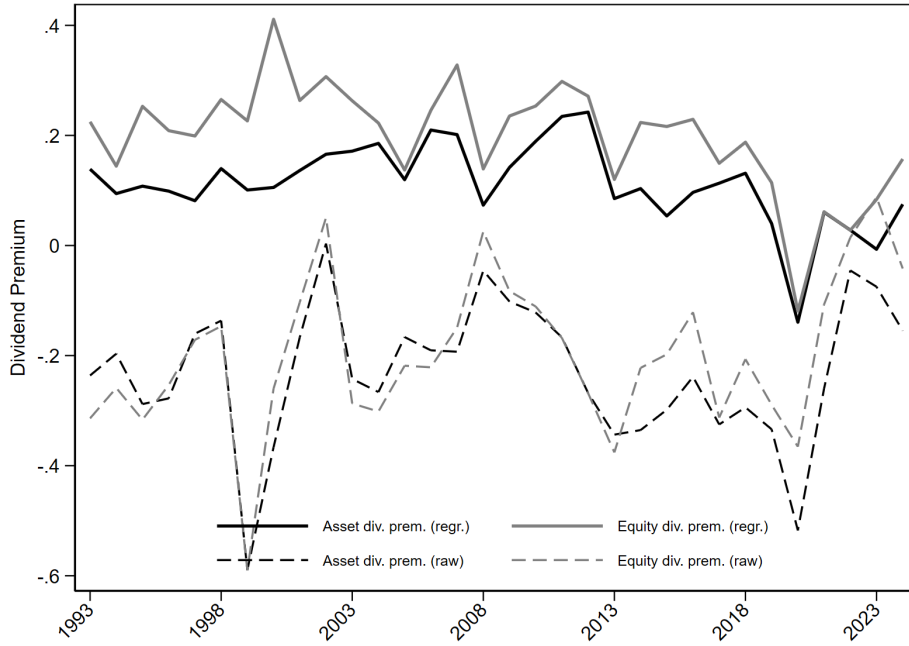


Fig. 6. Dividend Premium Estimates (North America)

⁶i.e., $\log(\text{mean MA}/A_{\text{payers}}) - \log(\text{mean MA}/A_{\text{nonpayers}})$.

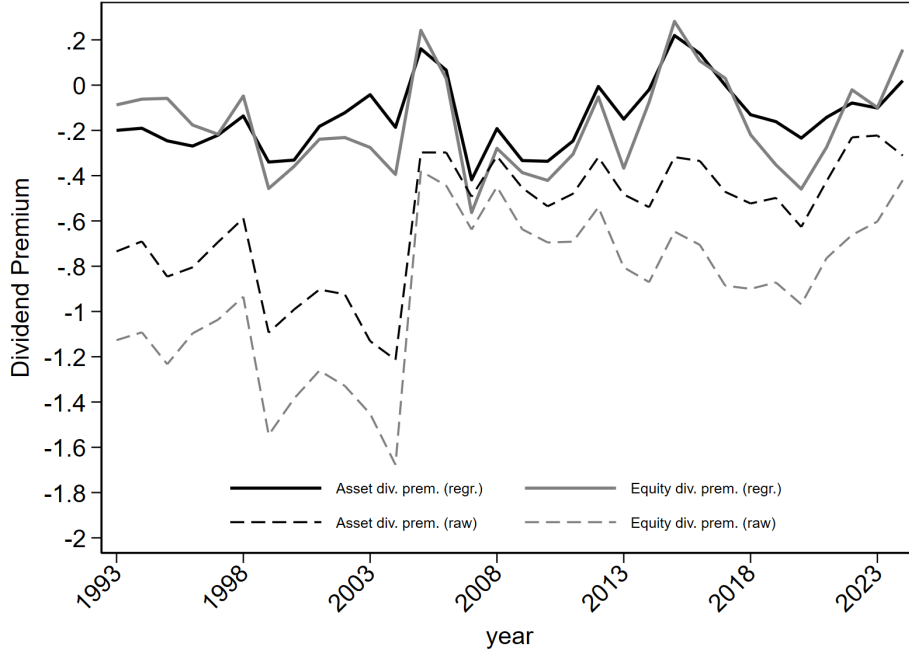


Fig. 7. Dividend Premium Estimates (Full Sample)

The long-term, regression-based estimates reveal a global landscape defined by substantial, yet highly varied, premia. In the benchmark case of *North America*, the well-documented dividend premium persists. I calculate an asset-based (MA/A) premium of approximately 9.9%⁷ and a more substantial equity-based (ME/E) premium of 17.0%⁸, based on coefficients from Tables 6 and 7. Globally, however, this picture reverses entirely. The full-sample regression estimates point towards a significant global dividend discount. The average asset-based (MA/A) discount is approximately -12.9%⁹, while the equity-based (ME/E) discount is -6.1%¹⁰, based on the coefficients from Table 8 and 9. The divergence supports the view that the interpretation of a dividend payment is fundamentally context-dependent (Karpavičius and Yu, 2018; La Porta et al., 1998). These cross-sectional averages, however, conceal a highly dynamic evolution, as illustrated by the year-by-year analysis.

⁷ $0.242/2.437 \approx 0.099$

⁸ $0.766/4.507 \approx 0.17$

⁹ $-0.335/2.592 \approx -0.129$

¹⁰ $-0.196/3.224 \approx -0.061$

Table 14: Dividend Premiums (Regression and Raw, by Year): North America

Year	MA/A Coeff.	MA/A Premium	MA/A Raw	ME/E Coeff.	ME/E Premium	ME/E Raw
1992	0.215*	0.101	-0.217	0.642**	0.194	-0.303
1993	0.313***	0.139	-0.236	0.811***	0.225	-0.314
1994	0.191**	0.094	-0.197	0.469***	0.144	-0.259
1995	0.252*	0.108	-0.288	0.954**	0.253	-0.316
1996	0.242**	0.099	-0.278	0.835***	0.209	-0.253
1997	0.190**	0.081	-0.160	0.804***	0.199	-0.171
1998	0.312***	0.14	-0.137	1.043***	0.265	-0.147
1999	0.325**	0.101	-0.590	1.285***	0.226	-0.590
2000	0.272*	0.105	-0.366	1.725***	0.411	-0.260
2001	0.295**	0.136	-0.167	0.959**	0.263	-0.103
2002	0.302***	0.166	0.004	0.940***	0.307	0.051
2003	0.422***	0.171	-0.242	1.136***	0.263	-0.287
2004	0.505***	0.186	-0.266	1.062***	0.223	-0.302
2005	0.303***	0.12	-0.166	0.614**	0.137	-0.218
2006	0.542***	0.21	-0.190	1.126***	0.246	-0.221
2007	0.513***	0.202	-0.193	1.533***	0.328	-0.149
2008	0.129	0.073	-0.046	0.420	0.139	0.025
2009	0.288***	0.142	-0.102	0.863***	0.235	-0.083
2010	0.434***	0.189	-0.122	1.074***	0.253	-0.111
2011	0.524***	0.235	-0.167	1.231***	0.298	-0.168
2012	0.585***	0.242	-0.268	1.288***	0.271	-0.268
2013	0.235*	0.085	-0.344	0.645*	0.12	-0.376
2014	0.284*	0.103	-0.335	1.276***	0.224	-0.222
2015	0.132	0.054	-0.298	1.120**	0.216	-0.198
2016	0.235*	0.097	-0.239	1.212***	0.229	-0.121
2017	0.317**	0.113	-0.325	0.927**	0.149	-0.312
2018	0.330**	0.131	-0.294	0.985**	0.188	-0.207
2019	0.106	0.04	-0.334	0.632	0.114	-0.289
2020	-0.443**	-0.139	-0.518	-0.800	-0.119	-0.365
2021	0.184	0.06	-0.260	0.396	0.061	-0.107
2022	0.061	0.028	-0.045	0.134	0.028	0.015
2023	-0.015	-0.007	-0.075	0.409	0.084	0.088
2024	0.187	0.075	-0.155	0.856	0.157	-0.042

Notes: Coeff. = DIVD coefficient; Premium = Coeff. / Mean MA/A or ME/E; Raw = Raw Div Premium (see Appendix A. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$)

Table 15: Dividend Premiums (Regression and Raw, by Year): Full Sample

Year	MA/A Coeff.	MA/A Premium	MA/A Raw	ME/E Coeff.	ME/E Premium	ME/E Raw
1992	-0.213***	-0.148	-0.716	0.299	0.172	-1.086
1993	-0.314***	-0.2	-0.735	-0.179	-0.087	-1.127
1994	-0.291***	-0.19	-0.690	-0.118	-0.062	-1.092
1995	-0.407***	-0.246	-0.846	-0.124	-0.058	-1.233
1996	-0.467***	-0.269	-0.805	-0.407**	-0.176	-1.097
1997	-0.399***	-0.221	-0.694	-0.524***	-0.217	-1.036
1998	-0.266***	-0.136	-0.588	-0.122	-0.048	-0.935
1999	-0.792***	-0.34	-1.093	-1.339***	-0.457	-1.546
2000	-0.738***	-0.331	-0.991	-1.010***	-0.359	-1.385
2001	-0.466***	-0.182	-0.903	-0.736***	-0.239	-1.261
2002	-0.340**	-0.122	-0.924	-0.762***	-0.231	-1.329
2003	-0.134	-0.042	-1.131	-1.026***	-0.275	-1.452
2004	-0.589***	-0.186	-1.213	-1.462***	-0.394	-1.677
2005	0.400***	0.161	-0.297	0.787***	0.242	-0.380
2006	0.168*	0.066	-0.297	0.097	0.029	-0.444
2007	-0.982***	-0.418	-0.493	-1.833***	-0.563	-0.638
2008	-0.329***	-0.192	-0.314	-0.545***	-0.279	-0.449
2009	-0.755***	-0.333	-0.454	-1.054***	-0.386	-0.637
2010	-0.825***	-0.336	-0.535	-1.295***	-0.421	-0.695
2011	-0.543***	-0.247	-0.480	-0.772***	-0.305	-0.692
2012	-0.015	-0.006	-0.318	-0.160	-0.052	-0.539
2013	-0.402***	-0.15	-0.483	-1.224***	-0.367	-0.805
2014	-0.056	-0.02	-0.539	-0.260	-0.075	-0.870
2015	0.655***	0.219	-0.318	1.056***	0.282	-0.647
2016	0.404***	0.14	-0.335	0.378	0.107	-0.706
2017	-0.002	-0.001	-0.471	0.114	0.031	-0.886
2018	-0.354***	-0.131	-0.523	-0.699**	-0.219	-0.900
2019	-0.458***	-0.161	-0.498	-1.191***	-0.352	-0.872
2020	-0.742***	-0.234	-0.626	-1.765***	-0.459	-0.968
2021	-0.456***	-0.142	-0.424	-1.171***	-0.274	-0.764
2022	-0.224***	-0.079	-0.231	-0.074	-0.021	-0.662
2023	-0.292***	-0.101	-0.223	-0.369	-0.099	-0.603
2024	0.059	0.02	-0.311	0.707	0.157	-0.420

Notes: Coeff. = DIVD coefficient; Premium = Coeff. / Mean MA/A or ME/E; Raw = Raw Div Premium (see Appendix A. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$)

While the long-term averages establish the baseline, the year-by-year analysis in Tables 14 and 15 reveals the signal’s dynamic nature. The global dividend discount (Figure 7) is not static but fluctuates, often becoming less severe or even temporarily positive during periods of heightened market uncertainty, such as the Global Financial Crisis (GFC) in 2008 and its aftermath. For instance, the global MA/A premium turned positive in 2005, 2006, and again in 2015 and 2016, suggesting that in times of stress, the tangible commitment of a dividend may act as a reassuring signal of a firm’s resilience. The North American market (Figure 6) shows a more cyclical but related pattern. The premium was particularly strong following the dot-com bust and leading up to the GFC. It notably turned negative during the acute phase of the COVID-19 pandemic in 2020 (MA/A premium of -13.9%), possibly reflecting immediate market fears about payout sustainability. Taken together, these findings paint a consistent picture. The positive dividend premium is largely a North American phenomenon and is not a static feature even there. Globally, the dominant pattern is a valuation discount. The magnitude and even the sign of the dividend signal are highly context-sensitive, varying systematically with the macroeconomic climate. This context-dependency points directly to the central thesis of this paper: that the valuation effect of a dividend is not universal but is moderated by deeper, structural factors, namely the quality of a country’s institutions, which determines whether the signal is perceived as positive or negative.

3.4. The Repurchase-Valuation Relationship

3.4.1. Time-Varying Effects of Repurchases in North America

North America provides the primary laboratory for understanding the modern dynamics of share repurchases. Since the early 2000s, buybacks have frequently exceeded dividend payouts in aggregate volume (see Figure 4), marking a fundamental shift in corporate payout strategy. In my analysis of this region, I find evidence of what appears to be a learning process on the part of investors, leading to a sophisticated market interpretation that sharply distinguishes between the mere announcement of a buyback and its financial substance.

Table 16: Determinants of MA/A: Repurchasing Firms in North America

Dependent variable	Full Sample				1992–2002	/	2003–2013	/	2014–2024
	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A		(6) MA/A		(7) MA/A
REPD	-0.143*** (0.026)				-0.250*** (0.038)		-0.054* (0.029)		-0.125** (0.054)
REP/A		1.420*** (0.333)							
PAYOUTD			-0.169*** (0.029)						
REP6D				-0.370*** (0.040)					
ASSETS	-0.331*** (0.033)	-0.343*** (0.032)	-0.342*** (0.032)	-0.343*** (0.032)	-0.482*** (0.059)		-0.586*** (0.078)		-0.429*** (0.072)
NI/A	-0.174 (0.113)	-0.193* (0.113)	-0.171* (0.104)	-0.136 (0.104)	0.397** (0.162)		-0.313 (0.216)		-0.444** (0.198)
DEBT/A	-0.562*** (0.122)	-0.520*** (0.121)	-0.655*** (0.119)	-0.634*** (0.118)	-0.563** (0.240)		-0.547** (0.263)		-0.965*** (0.245)
CASH/A	1.747*** (0.152)	1.732*** (0.152)	1.917*** (0.145)	1.785*** (0.146)	1.989*** (0.257)		1.510*** (0.280)		0.987*** (0.270)
PPE/A	-1.262*** (0.223)	-1.310*** (0.222)	-1.364*** (0.218)	-1.274*** (0.219)	-1.405*** (0.339)		-1.895*** (0.513)		-0.731* (0.379)
CAPEX/A	5.016*** (0.376)	5.049*** (0.376)	4.968*** (0.359)	4.833*** (0.357)	3.691*** (0.437)		3.791*** (0.782)		4.423*** (0.934)
RD/A	2.077*** (0.303)	2.036*** (0.303)	1.923*** (0.263)	2.021*** (0.275)	2.646*** (0.493)		1.976*** (0.592)		0.580 (0.397)
RDD	-0.463*** (0.152)	-0.468*** (0.151)	-0.525*** (0.156)	-0.535*** (0.150)	-0.181 (0.238)		-0.698** (0.354)		-0.588** (0.297)
VOL	0.200*** (0.053)	0.223*** (0.053)	0.208*** (0.053)	0.202*** (0.052)	0.170** (0.075)		0.217** (0.088)		-0.061 (0.094)
Year fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Observations	68,213	68,213	75,367	72,973	26,420		21,185		19,817
Adjusted R^2	0.494	0.495	0.474	0.485	0.516		0.634		0.607

Standard errors robust to clustering at the firm and year levels in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 17: Determinants of ME/E: Repurchasing Firms in North America

Dependent variable	Full Sample				1992–2002	/	2003–2013	/	2014–2024
	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E		(6) ME/E		(7) ME/E
REPD	-0.033 (0.064)				-0.316*** (0.089)		0.154* (0.083)		-0.149 (0.158)
REP/E		7.638*** (0.623)							
PAYOUTD			-0.063 (0.073)						
REP6D				-0.536*** (0.095)					
ASSETS	-0.767*** (0.090)	-0.761*** (0.087)	-0.787*** (0.085)	-0.763*** (0.086)	-0.988*** (0.136)		-1.140*** (0.210)		-0.908*** (0.205)
NI/E	0.343*** (0.122)	0.185 (0.115)	0.236** (0.114)	0.267** (0.115)	0.320* (0.176)		-0.294 (0.220)		0.552*** (0.208)
DEBT/E	0.634*** (0.095)	0.593*** (0.091)	0.611*** (0.089)	0.597*** (0.091)	0.355** (0.176)		0.406** (0.168)		0.926*** (0.173)
CASH/E	2.858*** (0.188)	2.765*** (0.184)	2.961*** (0.177)	2.921*** (0.179)	2.291*** (0.322)		3.321*** (0.306)		3.216*** (0.345)
PPE/E	0.314* (0.184)	0.271 (0.174)	0.301* (0.176)	0.304* (0.177)	0.272 (0.321)		0.289 (0.274)		0.165 (0.321)
CAPEX/E	4.651*** (0.540)	4.336*** (0.522)	4.577*** (0.514)	4.697*** (0.516)	3.736*** (0.588)		4.912*** (0.996)		5.648*** (1.241)
RD/E	3.504*** (0.288)	3.276*** (0.278)	3.349*** (0.263)	3.370*** (0.268)	3.689*** (0.443)		2.769*** (0.497)		2.861*** (0.452)
RDD	-0.275 (0.376)	-0.314 (0.370)	-0.451 (0.383)	-0.435 (0.371)	0.330 (0.584)		-0.957 (0.611)		0.031 (0.839)
VOL	-0.181 (0.135)	-0.059 (0.134)	-0.229* (0.132)	-0.232* (0.131)	-0.101 (0.184)		-0.202 (0.235)		-0.563** (0.256)
Year fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Observations	68,213	68,213	75,367	72,973	26,420		21,185		19,817
Adjusted R^2	0.588	0.598	0.572	0.581	0.550		0.675		0.707

Standard errors robust to clustering at the firm and year levels in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The first key finding is the notable contrast between the valuation effects of the presence versus the intensity of repurchases. The mere presence of a repurchase program, captured by my binary indicator REPD, is associated with a significant valuation discount. As shown in Table 16, the full-sample coefficient is -0.143, an effect that is particularly pronounced in the early period of the sample (1992–2002) but persists across all subperiods. This suggests a deep-seated investor skepticism towards the act of repurchasing alone, which may be perceived as a low-credibility signal or even a sign of managerial opportunism. The market appears to penalize the announcement and mere existence of a program, which lacks a firm commitment. In considerable contrast, measures of repurchase intensity, such as REP/A (Table 16) and REP/E (Table 17), are consistently associated with a large, positive, and highly significant valuation premium. The coefficient on REP/A (1.420) implies a substantial valuation reward for firms that commit significant capital to buybacks. This dichotomy suggests that the North American market does not value the symbolic gesture of announcing a buyback but instead rewards the intrinsic credibility generated by the sheer financial scale of the action. A large-scale repurchase serves as a costly, and therefore credible, signal of financial strength and management’s confidence in the firm’s undervaluation. The consistently strong effects for ME/E suggest that equity investors, whose stake is directly affected, are particularly attuned to the information conveyed by the magnitude of these transactions. This pattern provides a clear benchmark for the theory of intrinsic validation. The North American market has matured to look past the noise of repurchase announcements and focus on the signal of their financial substance, rewarding scale over symbolism. This sophisticated interpretation serves as a crucial reference point for the subsequent analysis of how these signals are processed in diverse global markets with varying institutional frameworks.

3.4.2. Global Ambiguity and the Role of Scale

In contrast to the complex, institutionally dependent nature of dividends, the valuation effects of share repurchases are governed by a simpler, more direct logic. Globally, the market appears to largely disregard the symbolic act of a firm repurchasing shares, focusing instead on the financial magnitude of the transaction. While the full-sample model for REPD (Tables 18 and 19) show a insignificant coefficients, the repurchase intensity (REP/A and REP/E) carries large, positive, and highly significant valuation premiums. This confirms the finding from North America on a global scale: credibility is generated intrinsically through scale.

Table 18: Determinants of MA/A: Repurchasing Firms in the Full Sample

Dependent variable	Full Sample				1992–2002	/	2003–2013	/	2014–2024
	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A		(6) MA/A		(7) MA/A
REPD	0.050 (0.040)				-0.052 (0.045)		-0.112** (0.051)		-0.125** (0.054)
REP/A		2.192*** (0.396)							
PAYOUTD			-0.357*** (0.034)						
REP6D				-0.046 (0.067)					
ASSETS	-1.723*** (0.146)	-1.723*** (0.145)	-0.526*** (0.063)	-2.062*** (0.122)	-2.306*** (0.232)		-2.359*** (0.366)		-0.428*** (0.072)
NI/A	-1.943*** (0.279)	-1.958*** (0.280)	-0.291 (0.178)	-3.083*** (0.269)	-2.133*** (0.422)		-0.987* (0.514)		-0.444** (0.198)
DEBT/A	2.221*** (0.573)	2.221*** (0.572)	0.582* (0.300)	2.870*** (0.506)	2.620*** (0.737)		1.707 (1.102)		-0.967*** (0.245)
CASH/A	2.062*** (0.331)	2.058*** (0.331)	1.669*** (0.174)	1.839*** (0.327)	2.548*** (0.546)		1.930*** (0.649)		0.984*** (0.270)
PPE/A	-2.066*** (0.461)	-2.075*** (0.460)	-0.301 (0.187)	-2.949*** (0.428)	-2.289*** (0.720)		-1.517** (0.740)		-0.740* (0.378)
CAPEX/A	3.229*** (0.677)	3.227*** (0.677)	1.433*** (0.269)	3.692*** (0.594)	2.370*** (0.771)		2.859*** (1.044)		4.413*** (0.928)
RD/A	-2.740*** (0.614)	-2.768*** (0.615)	1.481*** (0.395)	-5.103*** (0.582)	-3.951*** (0.983)		-2.927*** (1.133)		0.581 (0.397)
RDD	-0.630*** (0.178)	-0.632*** (0.178)	-0.245*** (0.040)	-0.800*** (0.099)	-0.478*** (0.179)		-0.705* (0.393)		-0.587** (0.297)
VOL	0.072* (0.040)	0.073* (0.040)	0.033*** (0.012)	0.033 (0.038)	0.056* (0.029)		0.012 (0.179)		-0.062 (0.093)
Year fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Observations	164,483	164,483	406,651	245,320	71,916		69,632		19,854
Adjusted R^2	0.547	0.547	0.558	0.444	0.712		0.565		0.608

Standard errors robust to clustering at the firm and year levels in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 19: Determinants of ME/E: Repurchasing Firms in the Full Sample

Dependent variable	Full Sample				1992–2002	/	2003–2013	/	2014–2024
	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E		(6) ME/E		(7) ME/E
REPD	0.029 (0.069)				-0.152* (0.091)		0.049 (0.100)		-0.150 (0.158)
REP/E		7.336*** (0.652)							
PAYOUTD			-0.313*** (0.058)						
REP6D				-0.344*** (0.115)					
ASSETS	-1.390*** (0.125)	-2.023*** (0.137)	-0.867*** (0.056)	-1.738*** (0.121)	-1.770*** (0.195)		-1.815*** (0.286)		-0.906*** (0.205)
NI/E	-0.613*** (0.142)	-0.356*** (0.131)	0.382*** (0.124)	-1.121*** (0.132)	-1.041*** (0.208)		-0.714** (0.282)		0.552*** (0.208)
DEBT/E	0.404*** (0.113)	0.513*** (0.109)	0.564*** (0.071)	0.450*** (0.101)	0.303* (0.179)		0.325 (0.221)		0.926*** (0.173)
CASH/E	4.113*** (0.247)	3.468*** (0.217)	2.996*** (0.160)	4.639*** (0.245)	4.115*** (0.452)		5.437*** (0.483)		3.216*** (0.345)
PPE/E	0.964*** (0.201)	0.861*** (0.195)	0.755*** (0.123)	0.795*** (0.179)	0.527* (0.293)		1.634*** (0.379)		0.167 (0.321)
CAPEX/E	3.505*** (0.488)	3.074*** (0.456)	2.870*** (0.294)	4.000*** (0.422)	3.493*** (0.570)		3.477*** (0.885)		5.630*** (1.237)
RD/E	1.104*** (0.349)	1.519*** (0.325)	3.468*** (0.271)	-0.127 (0.325)	0.196 (0.595)		-0.370 (0.589)		2.862*** (0.452)
RDD	-0.764*** (0.271)	-0.845*** (0.266)	-0.309*** (0.063)	-0.989*** (0.143)	-0.545 (0.344)		-1.247** (0.585)		0.032 (0.839)
VOL	0.095 (0.066)	0.157** (0.072)	0.028 (0.023)	0.025 (0.064)	0.061 (0.038)		0.330 (0.241)		-0.564** (0.254)
Year fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes		Yes		Yes
Observations	164,483	161,684	406,651	245,320	71,916		69,632		19,854
Adjusted R^2	0.520	0.582	0.537	0.427	0.623		0.529		0.707

Standard errors robust to clustering at the firm and year levels in parentheses.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

A regional disaggregation of the data (see Appendix G) reveals a deep heterogeneity that challenges the idea of a universal repurchase premium. In Europe, for instance, share repurchases are associated with a significant valuation discount. In stark contrast, markets in the Middle East appear to interpret the signal most favorably, associating even the mere presence of a repurchase program with a significant positive premium. Other major regions, such as Asia-Pacific, show a more ambiguous picture. This widespread inconsistency raises a critical question for this study’s central thesis: does a strong institutional framework lend credibility to repurchase signals, as it appears to do for dividends? The evidence from my interaction models suggests it does not.

I test this first by interacting repurchase activity with institutional quality (WGI). As shown in Table 20, the interaction term between the repurchase decision $REPD$ and WGI is statistically insignificant for both MA/A and ME/E. This statistically null finding is a key result of this analysis, as it points to a fundamental asymmetry in how markets validate payouts. While a stronger institutional context is crucial for interpreting dividend signals, it does not appear to perform a similar validation function for the more flexible act of a share repurchase. I test this by interacting repurchase activity with institutional quality (WGI). While the interaction term for the mere presence of a buyback ($REPD \times WGI$) is statistically insignificant, an interesting result emerges when considering repurchase scale. As shown in Table 20, the interaction term $REP/E \times WGI$ is large, negative, and highly significant. Contrary to a simple validation hypothesis, stronger contemporary institutions do not enhance the repurchase premium. Instead, they appear to act as an information substitute, a mechanism consistent with my theory. In institutionally weak markets, a large-scale buyback is a strong available signal of a firm’s financial health and management’s confidence. Investors reward this clear signal with a substantial valuation premium. In contrast, in well-governed, transparent markets, investors have access to a wealth of other credible information sources, such as audited financials, independent analyst coverage, and stringent disclosure requirements. Consequently, the marginal informational value of a large buyback diminishes, leading to a smaller premium. This conclusion is reinforced by the marginal effects analysis. Table 21 shows that the marginal effect of the repurchase decision remains statistically indistinguishable from zero across all levels of institutional quality, but lowers and turns even negative with increasing WGI level. Table 22 reveals that the repurchase intensity (REP/A) is associated with a large valuation premium, particularly in institutionally weaker environments. The premium diminishes as institutional quality improves, a pattern consistent with the in-

formation substitution logic. In in-transparent markets, a large-scale buyback is a strong signal of financial strength, while in transparent markets its marginal informational value is lower. A similar pattern emerges when analyzing the valuation from a shareholder perspective (ME/E), as detailed in Appendix H. The marginal effect of the repurchase decision ((Appendix H, Table A) on equity value is positive and statistically significant across a wide range of institutional quality levels, peaking in moderately governed environments before declining. The signal seems to be valuable in most contexts, but its marginal benefit decreases in highly transparent markets. Furthermore, the valuation premium for repurchase intensity (Appendix H, Table B) is also strongest in institutionally weak markets and declines monotonically, eventually turning significantly negative in the most transparent environments. This underscores that the information substitution logic applies to both enterprise and equity valuation. The findings consistently point to one primary factor: scale. The market rewards buybacks only when their size is substantial enough to represent a costly and therefore credible commitment of firm resources. A small, token repurchase is overlooked, whereas a large-scale buyback is interpreted as a credible signal.

Table 20: Determinants of Market Value (MA/A and ME/E): Repurchasing Firms in the Full Sample with Institutional Quality (WGI Average)

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
REPD	0.803 (0.579)				1.454* (0.754)			
AVG CC RL	1.875*** (0.380)	1.856*** (0.379)	0.043 (0.083)	2.491*** (0.367)	3.225*** (0.551)	3.859*** (0.537)	0.418*** (0.143)	3.243*** (0.525)
REPD $\times$ AVG CC RL	-0.523 (0.392)				-0.932* (0.511)			
REP/A or REP/E		21.179*** (5.183)				39.593*** (6.618)		
REP/A or REP/E $\times$ AVG CC RL		-13.013*** (3.466)				-22.442*** (4.376)		
PAYOUTD			-0.280*** (0.049)				-0.366*** (0.070)	
PAYOUTD $\times$ AVG CC RL			-0.076* (0.040)				0.066 (0.065)	
REP6D				0.447 (0.333)				1.068* (0.645)
REP6D $\times$ AVG CC RL				-0.288 (0.226)				-0.864** (0.427)
ASSETS	-1.815*** (0.179)	-1.813*** (0.178)	-0.583*** (0.075)	-2.274*** (0.145)	-1.479*** (0.155)	-2.161*** (0.171)	-0.930*** (0.062)	-1.946*** (0.144)
NI/A or NI/E	-1.840*** (0.318)	-1.865*** (0.319)	-0.243 (0.209)	-3.219*** (0.314)	-0.537*** (0.163)	-0.248* (0.151)	0.493*** (0.143)	-1.111*** (0.149)
DEBT/A or DEBT/E	2.133*** (0.682)	2.129*** (0.681)	0.528 (0.342)	2.928*** (0.573)	0.533*** (0.130)	0.584*** (0.124)	0.641*** (0.083)	0.532*** (0.114)
CASH/A or CASH/E	1.832*** (0.364)	1.831*** (0.364)	1.565*** (0.189)	1.561*** (0.362)	4.143*** (0.273)	3.547*** (0.243)	3.128*** (0.178)	4.765*** (0.277)
PPE/A or PPE/E	-2.249*** (0.513)	-2.256*** (0.513)	-0.218 (0.222)	-2.996*** (0.479)	1.021*** (0.236)	0.844*** (0.227)	0.863*** (0.140)	0.850*** (0.205)
CAPEX/A or CAPEX/E	3.739*** (0.804)	3.735*** (0.804)	1.329*** (0.296)	4.002*** (0.680)	3.901*** (0.609)	3.581*** (0.568)	2.585*** (0.321)	4.415*** (0.496)
RD/A or RD/E	-2.829*** (0.673)	-2.865*** (0.674)	1.394*** (0.447)	-5.717*** (0.666)	0.974** (0.387)	1.485*** (0.361)	3.461*** (0.305)	-0.378 (0.364)
RDD	-0.695*** (0.229)	-0.696*** (0.229)	-0.274*** (0.049)	-0.765*** (0.110)	-0.982*** (0.328)	-0.941*** (0.333)	-0.338*** (0.074)	-0.941*** (0.158)
VOL	0.035 (0.057)	0.036 (0.057)	0.035** (0.014)	-0.002 (0.046)	0.058 (0.089)	0.136 (0.099)	0.032 (0.025)	0.002 (0.077)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.537	0.537	0.568	0.439	0.513	0.574	0.553	0.422
Observations	121,098	121,098	344,468	198,520	121,098	119,002	344,468	198,520

Standard errors robust to clustering at the firm and year levels in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 21: Marginal Effects of REPD on MA/A at Different Levels of Institutional Quality (WGI AVG)

WGI Level	Marg. Effect (dy/dx)	Std. Err.	z-Stat.	95% CI
-2.5	2.111	1.557	1.36	[-0.941, 5.162]
-2.0	1.849	1.361	1.36	[-0.819, 4.517]
-1.5	1.588	1.166	1.36	[-0.697, 3.872]
-1.0	1.326	0.970	1.37	[-0.575, 3.227]
-0.5	1.065	0.774	1.37	[-0.453, 2.582]
0.0	0.803	0.579	1.39	[-0.332, 1.938]
0.5	0.541	0.384	1.41	[-0.211, 1.294]
1.0	0.280	0.191	1.47	[-0.095, 0.654]
1.5	0.018	0.048	0.39	[-0.075, 0.112]
2.0	-0.243	0.212	-1.15	[-0.658, 0.171]
2.5	-0.505	0.405	-1.25	[-1.298, 0.289]

Margins based on Model (1) with interaction. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 22: Marginal Effects of REPA on MA/A at Different Levels of Institutional Quality (WGI AVG)

WGI Level	Marg. Effect (dy/dx)	Std. Err.	z-Stat.	95% CI
-2.5	53.710***	13.840	3.88	[26.583, 80.837]
-2.0	47.204***	12.108	3.90	[23.473, 70.935]
-1.5	40.698***	10.376	3.92	[20.361, 61.034]
-1.0	34.191***	8.644	3.96	[17.249, 51.133]
-0.5	27.685***	6.913	4.00	[14.136, 41.234]
0.0	21.179***	5.183	4.09	[11.020, 31.337]
0.5	14.673***	3.456	4.25	[7.898, 21.447]
1.0	8.166***	1.743	4.69	[4.751, 11.582]
1.5	1.660***	0.366	4.53	[0.942, 2.378]
2.0	-4.846***	1.800	-2.69	[-8.373, -1.319]
2.5	-11.352***	3.514	-3.23	[-18.240, -4.465]

Margins based on Model (2) with interaction. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A final finding regarding repurchase persistence further supports this interpretation. When using a proxy for a history of repurchases (REP6D), I uncover a significant negative interaction with institutional quality (Table 20). This suggests that in well-governed, transparent markets, a habitual repurchase policy may be penalized. A compelling interpretation centers on a more sophisticated view of agency costs. While a single, large buyback can signal undervaluation, a persistent pattern may be viewed with skepticism as a mechanical attempt by management to support the stock price for compensation purposes. In information-rich environments, this recurring behavior is more easily identified and interpreted as managerial opportunism. This finding reinforces the theory: for repurchases, a positive interpretation depends on the act being perceived as a deliberate, timely, and substantial event (validated by scale), rather than a programmatic, recurring policy. This contrasts sharply with a dividend commitment, where persistence is a key component of its credibility. The market appears to discount or even penalize buyback habits, supporting the idea that the credibility of a buyback lies in the intrinsic properties of the specific action, namely its scale and timing.

While institutional quality acts as a filter, the analysis of deep-rooted legal traditions reveals a foundational effect. To test this, I incorporate a country's legal origin as a second moderator. The results from the fully interactive model are presented in Table 23. The baseline coefficient for REPD, representing the effect in Common Law countries, is large and highly significant (4.312 for MA/A). This suggests that a Common Law heritage provides a crucial trust anchor for interpreting managerial motives favorably. By contrast, all other legal traditions exhibit a substantial Civil Law discount, with large, negative interaction terms (e.g., -12.402 for French $\times$ REPD), indicating a deep-seated skepticism that dampens the signal from the outset. Furthermore, the significant and positive three-way interaction terms show a strong catch-up dynamic: in Civil Law systems, improvements in modern governance (WGI) help to offset this initial discount, making the repurchase signal more credible. This two-tiered institutional effect, a foundational trust anchor from legal origin combined with a motivational filter from contemporary governance, might explain the complex global valuation patterns of share repurchases.

Table 23: Institutional Quality and Legal Origin Interactions with Repurchase Status

	MA/A	ME/E
REPD	4.312*** (0.448)	6.986*** (0.778)
REPD $\times$ WGI	-2.504*** (0.294)	-4.147*** (0.517)
French $\times$ REPD	-12.402*** (1.631)	-19.962*** (2.700)
German $\times$ REPD	-5.471*** (0.709)	-10.738*** (1.152)
Nordic $\times$ REPD	0.168 (8.120)	-9.425 (13.633)
Socialist $\times$ REPD	-5.401*** (0.796)	-7.695*** (1.014)
French $\times$ REPD $\times$ WGI	9.563*** (1.280)	15.097*** (2.104)
German $\times$ REPD $\times$ WGI	3.620*** (0.597)	7.264*** (0.920)
Nordic $\times$ REPD $\times$ WGI	0.661 (3.929)	5.738 (6.601)
Socialist $\times$ REPD $\times$ WGI	2.118* (1.156)	1.427 (1.409)
Controls	Yes	Yes
Adj. R ²	0.124	0.209
Obs.	112,792	112,792

All models include the full set of control variables, as well as firm and year fixed effects.

The English Common Law legal origin serves as the benchmark category for all interaction terms.

Standard errors robust to clustering at firm and year levels in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

3.5. Magnitude and Dynamics of the Repurchase Premium

The year-by-year regression analysis (Table 14) reveals what might be termed a "golden era" for repurchases, particularly between 2004 and 2008. During this period, the ME/E premium was substantial, reaching a peak of 29.7%¹¹ in 2007 and remaining positive even through the initial shock of the Global Financial Crisis in 2008. However, this period of investor confidence appears to be temporary.

Table 24: Repurchase Premiums (Regression and Raw, by Year): North America

Year	MA/A Coeff.	MA/A Premium	MA/A Raw	ME/E Coeff.	ME/E Premium	ME/E Raw
1992	-0.190*	-0.089	-0.183	0.092	0.028	-0.186
1993	-0.219***	-0.097	-0.259	-0.174	-0.048	-0.272
1994	-0.138**	-0.068	-0.176	-0.055	-0.017	-0.251
1995	-0.176*	-0.076	-0.220	0.155	0.041	-0.242
1996	-0.076	-0.031	-0.202	0.035	0.009	-0.254
1997	0.042	0.018	-0.120	0.202	0.050	-0.063
1998	-0.389***	-0.174	-0.161	-0.344	-0.087	-0.200
1999	-0.228	-0.071	-0.285	-0.094	-0.017	-0.369
2000	-0.048	-0.019	-0.250	0.404	0.096	-0.282
2001	-0.112	-0.052	-0.203	0.038	0.010	-0.245
2002	0.110	0.060	-0.072	0.415*	0.136	-0.125
2003	-0.076	-0.031	-0.237	0.074	0.017	-0.363
2004	0.298***	0.110	-0.214	1.003***	0.210	-0.232
2005	0.366***	0.145	-0.179	0.883***	0.197	-0.208
2006	0.316***	0.122	-0.196	0.971***	0.212	-0.220
2007	0.370***	0.145	-0.215	1.390***	0.297	-0.135
2008	0.123	0.070	-0.132	0.567**	0.188	-0.118
2009	-0.003	-0.002	-0.193	-0.084	-0.023	-0.293
2010	0.286***	0.125	-0.187	1.007***	0.238	-0.253
2011	0.307***	0.137	-0.274	0.995***	0.241	-0.398
2012	0.101	0.042	-0.353	0.543	0.114	-0.515
2013	0.080	0.029	-0.317	0.416	0.078	-0.327
2014	0.155	0.057	-0.336	0.988***	0.173	-0.310
2015	-0.006	-0.003	-0.305	0.305	0.059	-0.372
2016	-0.104	-0.043	-0.305	0.335	0.063	-0.331
2017	-0.066	-0.024	-0.362	-0.114	-0.018	-0.355
2018	0.214	0.085	-0.279	0.682*	0.130	-0.254
2019	-0.120	-0.045	-0.286	-0.081	-0.015	-0.202
2020	-0.196	-0.062	-0.347	-0.134	-0.020	-0.181
2021	0.203	0.067	-0.176	0.644	0.100	0.015
2022	0.090	0.041	-0.139	0.105	0.022	-0.050
2023	-0.025	-0.011	-0.111	0.095	0.019	0.041
2024	-0.061	-0.024	-0.148	-0.342	-0.063	0.071

Notes: Coeff. = REPD coefficient; Premium = Coeff. / Mean MA/A or ME/E; Raw = Raw Repurchase Premium (see Appendix A). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

¹¹ $1.390/4.507 \approx 0.297$

After 2013, the effect weakens considerably, with declining coefficients and statistical significance. This tendency suggests a diminishing marginal utility as buybacks become commonplace and potentially less informative, indicating that even in its most developed market, the repurchase signal is not perpetually robust.

This North American result differs from the global backdrop, which is characterized not by ambiguity, but by a clear valuation premium in the aggregate. Although the average global premium calculated from the main panel regressions is modest at approximately 1.9%¹² for MA/A and 0.89%¹³ for ME/E, the year-by-year regressions in Table 25 show periods of exceptionally strong positive valuation. The global repurchase premium was particularly strong in the late 1990s and again in the recovery period after the GFC, with the MA/A premium peaking in 2007.

This positive global average, however, conceals deep regional heterogeneity, as shown in Appendix F. The premium is far from universal. In Europe, repurchases are met with skepticism, resulting in a significant average valuation discount. In contrast, the Middle East shows an exceptionally positive response, suggesting a growing acceptance in recent years. Other regions like Asia-Pacific and South America display modest or inconsistent positive premiums, reinforcing the notion that the signaling power of buybacks is highly context-dependent.

¹² $0.05/2.592 \approx 0.019$

¹³ $0.029/3.224 \approx 0.009$

Table 25: Repurchase Premiums (Regression and Raw, by Year): Full Sample

Year	MA/A Coeff.	MA/A Premium	MA/A Raw	ME/E Coeff.	ME/E Premium	ME/E Raw
1992	-0.074	-0.052	-0.153	0.181	0.104	-0.124
1993	-0.112	-0.071	-0.221	0.331	0.161	-0.169
1994	0.089	0.058	-0.072	0.483***	0.252	-0.053
1995	0.084	0.051	-0.137	0.598***	0.281	-0.088
1996	0.671***	0.387	-0.051	1.091***	0.473	-0.067
1997	0.546***	0.303	-0.044	1.038***	0.432	0.099
1998	0.398*	0.204	-0.130	0.848***	0.336	0.000
1999	0.746***	0.320	-0.133	1.334***	0.456	0.095
2000	0.344***	0.155	-0.245	0.790***	0.281	-0.080
2001	0.266**	0.104	-0.498	0.486**	0.158	-0.338
2002	0.460***	0.165	-0.601	0.451*	0.137	-0.411
2003	0.883***	0.278	-0.466	1.121***	0.301	-0.280
2004	1.431***	0.452	-0.327	1.704***	0.459	-0.068
2005	-0.354*	-0.142	-0.288	-0.076	-0.023	-0.005
2006	0.412	0.162	-0.326	0.368	0.110	-0.107
2007	1.589***	0.676	-0.250	1.422***	0.437	-0.006
2008	0.993***	0.579	-0.090	0.835***	0.427	0.259
2009	0.535**	0.236	-0.346	0.542*	0.199	-0.188
2010	0.455***	0.185	-0.230	1.267***	0.412	-0.103
2011	0.723***	0.328	-0.094	2.081***	0.821	-0.021
2012	0.634***	0.255	-0.082	2.068***	0.673	-0.014
2013	0.738***	0.275	-0.136	2.507***	0.751	-0.096
2014	0.118	0.042	-0.356	0.810**	0.233	-0.335
2015	-0.055	-0.018	-0.317	0.158	0.042	-0.388
2016	-0.095	-0.033	-0.320	0.239	0.068	-0.354
2017	-0.108	-0.036	-0.381	-0.251	-0.067	-0.378
2018	0.166	0.061	-0.297	0.488	0.153	-0.273
2019	-0.211	-0.074	-0.305	-0.340	-0.100	-0.228
2020	-0.305*	-0.096	-0.362	-0.425	-0.110	-0.200
2021	0.128	0.040	-0.189	0.472	0.110	-0.010
2022	0.030	0.011	-0.151	-0.076	-0.021	-0.078
2023	-0.078	-0.027	-0.119	0.039	0.010	0.029
2024	-0.068	-0.023	-0.149	-0.358	-0.079	0.070

Notes: Coeff. = REPD coefficient; Premium = Coeff. / Mean MA/A or ME/E; Raw = Raw Repurchase Premium (see Appendix A). * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

In summary, my findings show that repurchases, unlike dividends, do not generate a default valuation effect, positive or negative. While the North American market exhibits a learning curve with a temporary golden era, the global picture is one of extreme heterogeneity. Repurchases seem to be rewarded only when they occur in a market that has learned to interpret them favorably (as was temporarily the case in North America) or where their sheer scale is sufficient to overcome general skepticism. Their valuation relevance thus remains highly context-specific and likely moderated by institutional factors.

3.6. Payout Signal Transmission Channels

My theory posits that the dual valuation effects of dividends and the scale-dependent nature of repurchases operate through distinct economic channels. To move beyond correlation and shed light on the causal mechanisms, I directly test the three primary economic channels through which a validated signal should operate: (1) by conveying new information about future earnings, (2) by reducing perceived risk, and (3) by mitigating agency costs.

The Future Earnings Channel: A credible signal should contain plausible, forward-looking information. I test this by examining whether an institutionally-validated payout signal predicts future firm profitability. I estimate a model where the dependent variable is the net income on assets one and two years ahead (NI/A_{t+1} and NI/A_{t+2}), controlling for current profitability. The assumption behind the mechanism is: The positive association between a payout and future profitability should be stronger in countries with higher institutional quality. The results in Panel A of Table 26 strongly support this hypothesis in the case of dividends. The interaction term $DIVD \times WGI$ is a positive and highly significant predictor of future NI/A . This indicates that the market is rational to reward institutionally-validated dividends and dividends seem to capture informational content about future performance. In contrast, the evidence for share repurchases in Panel A of Table 27 shows that they fail to transmit similar information. While the act of repurchasing ($REPD \times WGI$) shows some predictive power, the scale ($REPA$) does not, and neither signal is robust in a combined model. This suggests that repurchases are not perceived by the market as credible signals of future operational performance.

The Risk Reduction Channel: A credible commitment should reduce uncertainty. I test this by assessing whether a payout signal leads to a tangible reduction in future risk. I specify a model where the dependent variable is future stock return volatility (VOL_{t+1} and VOL_{t+2}), controlling for current volatility. My theory predicts that both validated dividends and large-scale repurchases can reduce risk, but through different mechanisms. The hypothesis is: The risk-reducing effect of a dividend commitment is moderated by the institutional environment, while for repurchases, the effect is primarily driven by intrinsic scale. The findings in Panel B of Table 26 provide specific evidence for the dividend channel. The interaction term $DIVD \times WGI$ does not show a significant effect on next-year volatility, but it is significantly negative for volatility two years ahead (VOL_{t+2}). This suggests that an institutionally-validated dividend commitment is associated with a

reduction in long-term risk. This provides a direct rationale for why investors might apply a lower discount rate to the firm's more distant cash flows, thereby increasing its valuation. The results for repurchases in Panel B of Table 27 again reveal the asymmetric nature of the validation mechanisms. As predicted by the theory, institutional quality does not significantly moderate the risk perception of the repurchase decision ($REPD \times WGI$). However, the scale of the repurchase ($REPA$) is associated with a statistically significant reduction in future risk. A large-scale repurchase, by demonstrating a firm's financial capacity, appears to serve as an intrinsically credible signal of stability. Furthermore, the model that includes both scale and its institutional interaction shows that the interaction term $REPA \times WGI$ is also negative and significant. This suggests that while institutions do not validate the act of repurchasing itself, they appear to amplify the risk-reducing credibility of the transaction's reported scale.

The Agency Cost Mitigation Channel: Finally, I test the agency cost mitigation channel. The theory of agency costs of free cash flow, as famously articulated by (Jensen, 1986), posits that managers of firms with cash flows beyond their profitable investment opportunities are incentivized to invest in value-destroying projects that serve their private interests, such as empire-building or personal benefits. This creates a conflict between managers and shareholders. A firm commitment to pay out excess cash via dividends is therefore a powerful tool to mitigate these agency problems by reducing the discretionary funds available to managers. Following this theoretical framework, the disciplining effect of a payout should be most valuable where agency problems are most severe. I test this by partitioning the sample into firms with high versus low ex-ante agency costs. Consistent with a body of subsequent literature (e.g., Kalcheva and Lins (2007); Dittmar and Mahrt-Smith (2007)), I proxy for high potential agency costs using a firm's level of cash holdings. I classify firms in the top tercile of the annual cash-to-asset distribution as having high free cash flow and thus a greater potential for managerial discretion. I then test my MA/A valuation model separately for this "high agency cost" subsample and the remaining "low/mid agency cost" firms. Building on the information substitution hypothesis, I hypothesize that the positive valuation effect of a dividend in high-agency-cost firms should be strongest in countries with lower institutional quality, where the dividend serves as a crucial, non-redundant signal of managerial discipline. For repurchases, I hypothesize that the positive effect of scale should be significant primarily in the high-agency-cost subsample, independent of institutional quality. The results for dividends of this subsample analysis, presented in Table 26 Panel C, are clear and support

the hypothesis. The key interaction term $DIVA \times WGI$ is not statistically significant in the high-agency-cost subsample. This indicates that the positive valuation effect of a large dividend commitment for high-cash firms is not enhanced by stronger institutions, consistent with the information substitution logic. The disciplining signal of the dividend itself is what matters, and its value does not increase with institutional transparency.

For repurchases, the evidence in Panel C of Table 27 provides further proof of the asymmetric mechanism. First, institutional validation seems to fail entirely (the $REPD \times WGI$ interaction is insignificant in both subsamples). Second, the intrinsic validation mechanism works exactly as predicted by my theory: the valuation effect of repurchase scale (REPA) is large, positive, and highly significant only for the high-agency-cost group, while it is insignificant for firms with less free cash flow.¹⁴

In sum, the provided evidence deepens our understanding of payout signaling. The results demonstrate that dividends and share repurchases are not interchangeable tools but operate through fundamentally different validation logics. Dividends are a long-term commitment whose credibility is validated externally by the institutional environment, signaling information across all three channels of earnings, risk, and agency. Share repurchases are a flexible option whose credibility is generated intrinsically through costly action, primarily serving to mitigate agency costs and signal short-term stability, but not future performance. This asymmetry may explain why their valuation effects are so profoundly different across the global institutional landscape.

¹⁴The standard errors for the repurchase intensity (REPA) coefficient are notably large, a common issue in repurchase studies attributable to the sparse nature of large-scale buyback events. While this affects the precision of the point estimate, the statistical significance in the high-agency-cost subsample remains robust in the primary specification.

Table 26: Channels of the Dividend Signal: Interaction with Institutional Quality

Panel A: Future Earnings Channel						
	WGI x Existing Dividend		Scale Effect		WGI x Scale Effect	
	NI/A _{t+1}	NI/A _{t+2}	NI/A _{t+1}	NI/A _{t+2}	NI/A _{t+1}	NI/A _{t+2}
DIVD	0.007*** (0.001)	0.003* (0.001)				
WGI (AVG CC RL)	-0.004 (0.003)	0.009*** (0.003)			0.003 (0.002)	0.013*** (0.003)
DIVD x WGI	0.010*** (0.001)	0.006*** (0.002)				
DIVA			0.348*** (0.018)	0.282*** (0.020)		
DIVA x WGI					0.036** (0.016)	0.006 (0.018)
Observations	318,070	292,570	318,070	292,570	318,070	292,570
Panel B: Risk Reduction Channel						
	WGI x Existing Dividend		Scale Effect		WGI x Scale Effect	
	VOL _{t+1}	VOL _{t+2}	VOL _{t+1}	VOL _{t+2}	VOL _{t+1}	VOL _{t+2}
DIVD	0.006 (0.006)	-0.026*** (0.009)				
WGI (AVG CC RL)	-0.086*** (0.012)	-0.119*** (0.019)			-0.089*** (0.012)	-0.107*** (0.020)
DIVD x WGI	-0.005 (0.006)	0.027*** (0.008)				
DIVA			-0.167 (0.118)	-0.388*** (0.148)		
DIVA x WGI					0.056 (0.084)	0.231** (0.117)
Observations	317,353	291,561	317,353	291,561	317,353	291,561
Panel C: Agency Cost Channel						
	WGI x Existing Dividend		Scale Effect		WGI x Scale Effect	
MA/A	High Agency MA/A	Low/Mid Agency MA/A	High Agency MA/A	Low/Mid Agency MA/A	High Agency MA/A	Low/Mid Agency MA/A
DIVD	-0.272*** (0.055)	-0.302*** (0.062)				
WGI (AVG CC RL)	-0.380** (0.149)	0.262** (0.107)			-0.426*** (0.159)	0.168* (0.092)
DIVD x WGI	0.012 (0.046)	-0.087 (0.060)				
DIVA			11.397*** (2.298)	8.082*** (1.638)		
DIVA x WGI					-1.658 (1.579)	-1.552 (1.178)
Observations	117,201	218,504	117,201	218,504	117,201	218,504

Standard errors in parentheses. All models include controls, firm and year fixed effects.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 27: Transmission Channels of the Repurchase Signal: Interaction with Institutional Quality

Panel A: Future Earnings Channel						
	WGI x Existing	Repurchase	Scale Effect		WGI x Scale Effect	
	NI/A _{t+1}	NI/A _{t+2}	NI/A _{t+1}	NI/A _{t+2}	NI/A _{t+1}	NI/A _{t+2}
REPD	-0.019** (0.009)	-0.012 (0.009)				
WGI (AVG CC RL)	-0.001 (0.008)	0.027*** (0.009)			0.000 (0.008)	0.027*** (0.009)
REPD x WGI	0.018*** (0.006)	0.016*** (0.006)				
REPA			0.155*** (0.025)	0.128*** (0.024)	-0.122 (0.195)	-0.133 (0.223)
REPA x WGI					0.183 (0.130)	0.170 (0.148)
Observations	113,257	105,595	152,446	142,069	113,257	105,595
Panel B: Risk Reduction Channel						
	WGI x Existing	Repurchase	Scale Effect		WGI x Scale Effect	
	VOL _{t+1}	VOL _{t+2}	VOL _{t+1}	VOL _{t+2}	VOL _{t+1}	VOL _{t+2}
REPD	0.035 (0.039)	0.015 (0.055)				
WGI (AVG CC RL)	0.155*** (0.027)	0.254*** (0.036)	0.154*** (0.027)	0.254*** (0.035)		
REPD x WGI	-0.023 (0.027)	-0.015 (0.037)				
REPA			-0.058* (0.030)	-0.059 (0.039)	0.592 (0.491)	0.459 (0.743)
REPA x WGI					-0.452 (0.335)	-0.374 (0.504)
Observations	112,721	104,984	151,666	141,181	112,721	104,984
Panel C: Agency Cost Channel						
	WGI x Existing	Repurchase	Scale Effect		WGI x Scale Effect	
MA/A	High Agency MA/A	Low/Mid Agency MA/A	High Agency MA/A	Low/Mid Agency MA/A	High Agency MA/A	Low/Mid Agency MA/A
REPD	1.081 (1.377)	0.721* (0.370)				
WGI (AVG CC RL)	0.625 (0.582)	2.145*** (0.493)			0.563 (0.583)	2.143*** (0.487)
REPD x WGI	-0.672 (0.923)	-0.489* (0.257)				
REPA			3.757*** (0.507)	1.764*** (0.460)	21.947** (10.545)	20.593*** (5.724)
REPA x WGI					-12.672* (7.119)	-12.923*** (3.809)
Observations	42,339	73,098	58,424	100,702	42,339	73,098

Standard errors in parentheses. All models include controls, firm and year fixed effects.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

4. Conclusion

This study set out to resolve a persistent enigma in financial economics: how corporate payouts translate into firm value across diverse global markets. The findings reveal that there is no universal payout premium. Instead, the valuation effect of a payout is the net outcome of competing signals whose dominance is determined by the institutional context. This paper develops and tests a Theory of Context-Dependent Signal Dominance and Asymmetric Validation, which posits a fundamental asymmetry in how dividend and repurchase signals are interpreted and validated.

My analysis first reveals a duality in the dividend signal. It simultaneously conveys a negative capital allocation signal and a positive shareholder commitment signal. The institutional environment dictates which signal prevails. In transparent, well-governed markets, the negative signal often dominates from an enterprise value perspective, as the dividend's informational value is substituted by other credible sources. Conversely, from a shareholder perspective, the positive commitment signal is only unlocked and validated in environments with strong investor protection, particularly a robust Rule of Law. This explains the puzzling empirical finding of a widespread global dividend discount at the enterprise level, contrasted by a conditional premium at the equity level in specific institutional settings.

Share repurchases, in contrast, are validated through a fundamentally different, asymmetric mechanism. Their signal is not a commitment to be externally validated by contemporary institutions, but a demonstration of present financial strength whose credibility is generated intrinsically through its financial scale. The market systematically discounts the symbolic act of repurchasing while rewarding large-scale buybacks. While this intrinsic validation makes the signal less sensitive to contemporary governance quality, it is not institutionally insensitive. Its reception is fundamentally anchored in the deep-seated trust shaped by a country's legal origin, with a significant Civil Law discount dampening the signal's value. Contemporary institutions act not as validators, but as motivational filters, allowing investors in transparent markets to penalize persistent buyback patterns that may signal managerial opportunism.

Furthermore, an analysis of the transmission channels confirms this asymmetry. An institutionally-validated dividend credibly signals information about future earnings, reduced long-term risk, and mitigated agency costs. A large-scale repurchase, however, primarily operates by mitigating present agency costs and signaling short-term stability,

conveying no reliable information about future operational performance.

While my findings provide robust and theory-consistent evidence across a comprehensive global panel, this study is subject to the limitations inherent in correlational analyses. Future research could seek to isolate the causal effects that I propose through quasi-experimental designs. For example, exploiting staggered adoptions of investor protection laws or discontinuities in governance ratings could provide cleaner identification of the institutional validation mechanisms. Similarly, analyzing regulatory shocks that exogenously alter the relative costs of dividends versus repurchases could further test the asymmetric validation hypothesis I put forward. Such studies would be a valuable next step in confirming the causal channels through which the institutional context shapes the grammar of corporate signals.

This framework of signal duality and asymmetric validation allows us to reconcile several long-standing debates in the payout literature. The observed heterogeneity of premia suggests that signaling theories (Bhattacharya, 1979) and agency-based explanations (Jensen, 1986) are not mutually exclusive. Rather, their relevance is conditional on the institutional context and the specific payout tool. For instance, a dividend is a more effective forward-looking signal precisely in markets where its commitment is validated by a strong legal system, while a large-scale repurchase is a more universal tool for mitigating current free cash flow problems.

In conclusion, this paper demonstrates that payout policy is not a monolith but a set of distinct communication tools. The "dialect" of a dividend is contextual, its meaning forged by the interplay between institutional transparency and investor protection. The "dialect" of a repurchase is more primal, relying on the brute-force credibility of its scale, yet its accent is shaped by the deep grammar of a country's legal traditions. For investors, managers, and academics alike, the message is clear: to understand the signal, one must first understand the asymmetric rules by which its credibility is judged.

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Appendix A. Variable Definitions

Variable	Definition	Winsorization
MA/A	Market value of assets over book value of assets. Market value of assets is calculated as: book value of assets (Compustat item: AT) – book value of equity (CEQ) + market value of equity (CSHO $\times$ PRCC_F).	0.5% and 99.5%
ME/E	Market value of equity over book value of equity.	0.5% and 99.5%
ASSETS	Natural logarithm of book value of assets	min \$0.5m
DIV/A	Common stock dividends (DVC) over book value of assets.	0.5% and 99.5%
DIV/E	Common stock dividends over book value of equity.	0.5% and 99.5%
DIVD	Equals 1 if DIV/A > 0, and 0 otherwise.	–
DIV6D	Equals 1 if firm paid dividends at least once in the last 6 years, including the current year; 0 otherwise.	–
REP/A	Share repurchases (PRSTKC) over book value of assets.	0.5% and 99.5%
REP/E	Same as REP/A but over book value of equity.	0.5% and 99.5%
REPD	Equals 1 if REP/A > 0, and 0 otherwise.	–
REP/A adj.	Adjusted share repurchases over book value of assets. Calculated as (PRSTKC - decrease in PSTK), with the result floored at zero, following Banyi et al. (2008) .	0.5% and 99.5%
REP/E adj.	Same as REP/A adj. but over book value of equity.	0.5% and 99.5%
REPD adj.	Equals 1 if REP/A adj. > 0, and 0 otherwise.	–
REP6D	Equals 1 if firm repurchased shares at least once in the last 6 years, including the current year; 0 otherwise.	–

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Variable	Definition	Winsorization
PAYOUT/A	Sum of dividends and repurchases over book value of assets.	0.5% and 99.5%
PAYOUT/E	Sum of dividends and repurchases over book value of equity.	0.5% and 99.5%
PAYOUTD	Equals 1 if PAYOUT/A > 0, and 0 otherwise.	–
PAYOUT6D	Equals 1 if firm paid dividends or repurchased shares at least once in the last 6 years, including the current year; 0 otherwise.	–
NI/A	Net income (NI) over book value of assets.	0.5% and 99.5%
NI/A _{t+1} , NI/A _{t+2}	Net income over book value of assets, measured one and two years ahead, respectively.	0.5% and 9.5%
NI/E	Net income over book value of equity.	0.5% and 99.5%
DEBT/A	Total debt (DLTT + DLC) over book value of assets.	0.5% and 99.5%
DEBT/E	Debt over book value of equity.	0.5% and 99.5%
CASH/A	Cash and short-term investments (CHE) over book value of assets.	0.5% and 99.5%
CASH/E	Same as CASH/A but over book value of equity.	0.5% and 99.5%
PPE/A	Net property, plant and equipment (PPENT) over book value of assets.	0.5% and 99.5%
PPE/E	Net PPE over book value of equity.	0.5% and 99.5%
CAPEX/A	Capital expenditures (CAPEX) over book value of assets.	0.5% and 99.5%
CAPEX/E	CAPEX over book value of equity.	0.5% and 99.5%
RD/A	Research and development expenditures (XRD) over book value of assets.	0.5% and 99.5%
RD/E	R&D over book value of equity.	0.5% and 99.5%
RDD	Equals 1 if R&D is not reported in Compustat, and 0 otherwise.	–

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Variable	Definition	Winsorization
VOL	Standard deviation of monthly stock returns over fiscal year.	0.5% and 99.5%
VOL_{t+1}, VOL_{t+2}	Standard deviation of monthly stock returns over the fiscal year, measured one and two years ahead, respectively.	0.5% and 99.5%
AGE	Firm age = last fiscal year in the Dataset (2024) – first available year in the dataset.	0.5% and 99.5%
Asset dividend premium (raw)	Difference in $\log(MA/A)$ between dividend payers and nonpayers.	–
Equity dividend premium (raw)	Difference in $\log(ME/E)$ between dividend payers and nonpayers.	–
Asset dividend premium (regression-based)	MA/A regression-coefficient estimate for DIVD as proxy for dividend premium.	–
Equity dividend premium (regression-based)	ME/E regression-coefficient estimate for DIVD as proxy for dividend premium,	–
SH INDEPENDENCE HIGH	Dummy variable equal to 1 for firms with high ownership independence (BvD/Orbis rating: A+, A, A-), and 0 otherwise.	–
SH INDEPENDENCE MEDIUM	Dummy variable equal to 1 for firms with medium ownership independence (BvD/Orbis rating: B+, B, B-), and 0 otherwise. The reference category is low independence (C/D).	–
SH INDEPENDENCE UNKNOWN	Dummy variable equal to 1 if the ownership independence rating from BvD/Orbis is missing, and 0 otherwise.	–
CC Estimate	The Worldbank Control of Corruption variable.	–
RL Estimate	The Worldbank Rule of Law variable.	–

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Variable	Definition	Winsorization
AVG CC RL	The average of the Worldbank Control of Corruption variable and the Worldbank Rule of Law variable.	–
LO	A set of dummy variables for a country's legal tradition (e.g., English, French, German), based on La Porta et al. (1998)	–

Appendix B. Robustness of Repurchase Measures

Table B.1: Comparison of Original and Preferred-adjusted Repurchase Measures (Full Sample)

	REP (Original) (PRSTKC)	Preferred-adjusted REP (Banyi et al. 2008)
Observations	128,937	114,757
Mean	82.62	93.52
Std. dev.	1,002.20	1,064.46
Min	0.00	0.00
Max	100,390	100,390
Median	0.00	0.00
Correlation		0.9978***
Mean difference (Adj. – Original)		1.25
Median difference		0.00
Max absolute diff.		20,000

This table compares the original Compustat measure of repurchases (PRSTKC, negative values excluded) with a preferred-adjusted version that subtracts decreases in preferred stock capital (delta) and floors negative results at zero, following Banyi et al. (2008). Monetary values in USD million. Correlation is Pearson's ρ . Significance levels: *** $p < 0.01$.

Appendix C. Panel Regression Results for Dividends by Region

A. Europe

Table C.1: Determinants of Market Value (MA/A and ME/E): Dividend-Paying Firms in Europe

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
DIVD	-0.270* (0.158)				-0.060 (0.245)			
DIV/A or DIV/E		8.281*** (1.444)				11.694*** (1.372)		
PAYOUT/A or PAYOUT/E			0.010 (0.014)				0.038 (0.027)	
DIV6D				0.618*** (0.217)				1.433*** (0.373)
ASSETS	-0.570*** (0.149)	-0.536*** (0.146)	-0.579*** (0.146)	-0.711*** (0.135)	-0.664*** (0.134)	-0.849*** (0.136)	-0.668*** (0.134)	-0.676*** (0.142)
NI/A or NI/E	-0.390 (0.781)	-0.747 (0.770)	-0.460 (0.764)	-2.615*** (0.626)	0.226 (0.506)	0.073 (0.607)	0.214 (0.503)	-0.699** (0.339)
DEBT/A or DEBT/E	1.372 (0.907)	1.586* (0.899)	1.409 (0.890)	1.222 (0.789)	0.845*** (0.155)	0.886*** (0.162)	0.843*** (0.155)	0.507*** (0.103)
CASH/A or CASH/E	1.283 (0.837)	0.987 (0.846)	1.287 (0.832)	1.390** (0.683)	3.531*** (0.529)	2.169*** (0.526)	3.535*** (0.523)	3.495*** (0.412)
PPE/A or PPE/E	-0.661* (0.360)	-0.661* (0.358)	-0.662* (0.359)	-0.962** (0.412)	0.800*** (0.290)	0.876*** (0.299)	0.798*** (0.289)	0.729*** (0.196)
CAPEX/A or CAPEX/E	0.331 (1.065)	0.144 (1.068)	0.315 (1.055)	0.960 (0.909)	3.271*** (0.908)	1.985** (0.827)	3.254*** (0.902)	4.587*** (0.763)
RD/A or RD/E	9.411** (4.501)	8.979** (4.381)	9.524** (4.458)	5.893 (3.713)	10.623*** (3.194)	9.252*** (3.134)	10.630*** (3.159)	11.104*** (2.379)
RDD	0.128 (0.134)	0.124 (0.131)	0.128 (0.133)	0.049 (0.125)	0.240 (0.216)	0.162 (0.218)	0.247 (0.215)	0.310 (0.197)
VOL	0.009 (0.011)	0.011 (0.011)	0.010 (0.011)	0.022** (0.011)	0.016 (0.024)	0.022 (0.025)	0.016 (0.024)	0.014 (0.021)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	73,084	73,084	73,288	103,153	73,084	72,305	73,288	103,153
Adjusted R^2	0.704	0.705	0.703	0.577	0.606	0.646	0.604	0.513

Standard errors robust to clustering at the firm and year levels in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

B. Asia Pacific

Table C.2: Determinants of Market Value (MA/A and ME/E): Dividend-Paying Firms in Asia Pacific

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
DIVD	-0.365*** (0.060)				-0.235** (0.092)			
DIV/A or DIV/E		9.421*** (1.161)				12.294*** (1.451)		
PAYOUT/A or PAYOUT/E			0.116 (0.076)				0.225 (0.145)	
DIV6D				-0.448*** (0.067)				-0.796*** (0.134)
ASSETS	-0.561*** (0.114)	-0.556*** (0.113)	-0.579*** (0.112)	-0.886*** (0.109)	-0.802*** (0.095)	-0.944*** (0.112)	-0.812*** (0.093)	-1.104*** (0.111)
NI/A or NI/E	-0.586 (0.639)	-1.096* (0.645)	-0.665 (0.628)	-1.891*** (0.443)	0.539 (0.441)	0.631 (0.460)	0.528 (0.441)	-0.460* (0.236)
DEBT/A or DEBT/E	1.038** (0.453)	1.200*** (0.451)	1.086** (0.449)	1.515*** (0.386)	0.327** (0.130)	0.330*** (0.115)	0.328** (0.130)	0.259*** (0.094)
CASH/A or CASH/E	1.361*** (0.301)	1.245*** (0.303)	1.380*** (0.299)	2.028*** (0.334)	2.911*** (0.345)	2.406*** (0.315)	2.908*** (0.345)	3.253*** (0.350)
PPE/A or PPE/E	-0.572** (0.227)	-0.486** (0.227)	-0.521** (0.229)	-0.982*** (0.239)	1.040*** (0.205)	0.916*** (0.189)	1.044*** (0.204)	0.594*** (0.164)
CAPEX/A or CAPEX/E	0.320 (0.317)	0.205 (0.319)	0.281 (0.319)	1.325*** (0.389)	1.323*** (0.404)	1.111*** (0.382)	1.319*** (0.405)	2.426*** (0.361)
RD/A or RD/E	3.002* (1.789)	1.923 (1.782)	2.430 (1.770)	3.188 (2.108)	-0.854 (1.710)	-0.904 (1.582)	-0.860 (1.697)	6.677*** (1.897)
RDD	-0.214*** (0.042)	-0.094** (0.047)	-0.134*** (0.046)	-0.226*** (0.053)	-0.308*** (0.069)	-0.162** (0.072)	-0.250*** (0.070)	-0.216** (0.087)
VOL	0.064*** (0.009)	0.071*** (0.009)	0.067*** (0.009)	0.068*** (0.014)	0.084*** (0.027)	0.113*** (0.027)	0.085*** (0.027)	0.079** (0.036)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	219,941	219,941	220,016	277,234	219,941	219,022	220,016	277,234
Adjusted R^2	0.434	0.435	0.438	0.462	0.402	0.430	0.405	0.423

Standard errors robust to clustering at the firm and year levels in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

C. South America

Table C.3: Determinants of Market Value (MA/A and ME/E): Dividend-Paying Firms in South America

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
DIVD	5.611*				7.465*			
	(3.093)				(4.023)			
DIV/A or DIV/E		5.218				5.940		
		(13.952)				(7.766)		
PAYOUT/A or PAYOUT/E			-0.029				-0.034	
			(0.041)				(0.059)	
DIV6D				2.345				3.658
				(3.041)				(4.595)
ASSETS	-0.555	-0.471	-0.503	-3.868***	-1.274	-1.178	-1.205	-5.642***
	(0.787)	(0.796)	(0.782)	(1.377)	(1.286)	(1.296)	(1.282)	(1.919)
NI/A or NI/E	10.455	9.310	10.634	1.875	7.961**	6.745*	8.008**	-0.686
	(7.016)	(8.418)	(7.014)	(3.913)	(3.246)	(3.591)	(3.247)	(1.484)
DEBT/A or DEBT/E	-1.930	-1.750	-1.823	-3.798	-0.122	-0.100	-0.100	-0.552
	(3.278)	(3.294)	(3.280)	(3.922)	(0.641)	(0.638)	(0.642)	(0.620)
CASH/A or CASH/E	-2.904	-3.035	-2.924	-1.899	-1.443	-1.451	-1.493	0.439
	(7.156)	(7.042)	(7.205)	(8.165)	(2.422)	(2.411)	(2.427)	(2.594)
PPE/A or PPE/E	7.941*	7.943*	8.004*	1.708	4.965***	4.926***	4.928***	4.797***
	(4.611)	(4.619)	(4.618)	(5.626)	(1.766)	(1.780)	(1.766)	(1.673)
CAPEX/A or CAPEX/E	-8.458	-8.287	-8.339	1.564	0.553	0.324	0.639	1.375
	(11.939)	(11.916)	(11.932)	(8.656)	(4.995)	(4.995)	(4.990)	(4.307)
RD/A or RD/E	17.910	17.350	18.324	16.227	1.306	-0.813	1.275	-12.767
	(66.788)	(66.550)	(66.575)	(35.730)	(38.374)	(38.242)	(38.240)	(24.253)
RDD	-1.387	-1.324	-1.335	-1.134	-0.858	-0.765	-0.794	-1.112
	(2.638)	(2.638)	(2.637)	(2.487)	(3.808)	(3.809)	(3.809)	(3.508)
VOL	-0.209	-0.212	-0.212	-0.490***	-0.396	-0.400	-0.400	-0.767***
	(0.162)	(0.162)	(0.163)	(0.161)	(0.248)	(0.250)	(0.249)	(0.238)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,409	4,409	4,409	7,779	4,409	4,405	4,409	7,779
Adjusted R^2	0.559	0.559	0.559	0.579	0.563	0.563	0.563	0.576

Standard errors robust to clustering at the firm and year levels in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

D. Africa

Table C.4: Determinants of Market Value (MA/A and ME/E): Dividend-Paying Firms in Africa

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
DIVD	-0.164 (0.136)				-0.144 (0.708)			
DIV/A or DIV/E		7.061*** (1.613)				7.470*** (2.749)		
PAYOUT/A or PAYOUT/E			0.002 (0.004)				0.006 (0.013)	
DIV6D				0.002 (0.357)				-0.470 (0.680)
ASSETS	0.057 (0.205)	0.118 (0.200)	0.055 (0.203)	-1.019* (0.580)	0.156 (0.492)	0.318 (0.578)	0.154 (0.489)	-0.368 (0.338)
NI/A or NI/E	0.874 (1.091)	-0.311 (1.205)	0.848 (1.080)	-0.063 (2.079)	-0.623 (1.528)	-0.841 (1.823)	-0.629 (1.519)	-0.282 (0.709)
DEBT/A or DEBT/E	0.156 (0.559)	0.438 (0.586)	0.162 (0.556)	3.302 (2.057)	1.302** (0.622)	1.373* (0.710)	1.302** (0.623)	1.229*** (0.469)
CASH/A or CASH/E	0.128 (0.432)	-0.226 (0.443)	0.135 (0.434)	0.415 (0.679)	-1.906* (1.016)	-2.235** (1.059)	-1.909* (1.018)	2.008 (1.953)
PPE/A or PPE/E	-0.355 (0.729)	-0.329 (0.720)	-0.354 (0.729)	-1.255 (0.847)	-0.321 (0.831)	-0.656 (0.926)	-0.320 (0.831)	-0.038 (0.636)
CAPEX/A or CAPEX/E	0.600 (0.516)	0.564 (0.504)	0.617 (0.507)	2.038*** (0.694)	1.642 (1.014)	1.043 (0.933)	1.645 (1.013)	4.222** (1.725)
RD/A or RD/E	5.322 (5.213)	3.572 (5.672)	5.279 (5.198)	2.723 (6.432)	6.632 (4.480)	6.502 (4.853)	6.623 (4.464)	6.041 (5.250)
RDD	0.045 (0.416)	0.046 (0.416)	0.046 (0.417)	0.165 (0.303)	0.097 (0.560)	0.155 (0.554)	0.098 (0.562)	0.315 (0.491)
VOL	0.010 (0.018)	-0.005 (0.017)	0.009 (0.019)	0.019 (0.042)	0.018 (0.084)	-0.016 (0.083)	0.018 (0.084)	0.170* (0.102)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,267	4,267	4,267	7,048	4,267	4,255	4,267	7,048
Adjusted R^2	0.609	0.616	0.609	0.430	0.613	0.619	0.613	0.563

Standard errors robust to clustering at the firm and year levels in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

E. Middle East

Table C.5: Determinants of Market Value (MA/A and ME/E): Dividend-Paying Firms in Middle East

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
DIVD	-0.013 (0.336)				-0.004 (0.808)			
DIV/A or DIV/E		1.919 (2.012)				2.244 (1.868)		
PAYOUT/A or PAYOUT/E			0.001 (0.001)				-0.001 (0.003)	
DIV6D				0.136 (0.513)				0.860 (0.551)
ASSETS	-0.067 (0.062)	-0.048 (0.074)	-0.061 (0.075)	-2.357*** (0.893)	-0.313** (0.141)	-0.260 (0.158)	-0.344** (0.168)	-0.319 (0.206)
NI/A or NI/E	2.686** (1.282)	2.315** (1.097)	1.780** (0.800)	1.219 (2.045)	5.057** (2.466)	4.790* (2.619)	3.649*** (1.333)	-0.068 (0.909)
DEBT/A or DEBT/E	0.029 (0.217)	0.102 (0.181)	-0.247 (0.283)	5.187* (2.695)	0.352** (0.161)	0.328* (0.169)	0.191* (0.108)	0.318** (0.143)
CASH/A or CASH/E	-0.983 (0.860)	-1.056 (0.800)	0.466 (0.827)	1.808 (1.569)	2.169 (1.344)	2.075 (1.395)	2.748*** (1.000)	1.374 (0.979)
PPE/A or PPE/E	-0.732* (0.418)	-0.711* (0.431)	-0.358 (0.363)	-2.126*** (0.781)	0.099 (0.141)	0.100 (0.134)	0.143 (0.189)	0.385 (0.357)
CAPEX/A or CAPEX/E	1.095 (1.323)	1.064 (1.296)	0.875 (1.371)	6.090** (2.519)	4.343* (2.377)	4.322* (2.384)	4.051* (2.144)	2.213 (1.449)
RD/A or RD/E	1.460 (8.924)	1.311 (8.959)	-2.939 (5.800)	34.663 (34.353)	9.315 (5.821)	9.496 (5.878)	6.580* (3.705)	4.923 (4.521)
RDD	-0.197 (0.182)	-0.197 (0.181)	-0.228 (0.164)	0.056 (0.409)	-0.195 (0.319)	-0.185 (0.319)	0.042 (0.363)	-0.302 (0.303)
VOL	-0.619 (0.605)	-0.623 (0.602)	-0.568 (0.504)	-0.277 (0.303)	-0.842 (0.802)	-0.852 (0.798)	-0.782 (0.672)	-0.437 (0.388)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	7,212	7,212	7,817	12,904	7,212	7,211	7,817	12,904
Adjusted R^2	0.347	0.348	0.433	0.367	0.462	0.462	0.476	0.367

Standard errors robust to clustering at the firm and year levels in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

F. China

Table C.6: Determinants of Market Value (MA/A and ME/E): Dividend-Paying Firms in China

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
DIVID	0.117 (0.091)				0.764*** (0.151)			
DIV/A or DIV/E		5.021*** (1.881)				5.958*** (1.617)		
PAYOUT/A or PAYOUT/E			0.433 (0.492)				1.383 (1.263)	
DIV6D				0.081 (0.117)				0.030 (0.222)
ASSETS	-1.870*** (0.372)	-1.861*** (0.373)	-1.870*** (0.373)	-2.054*** (0.320)	-2.675*** (0.230)	-3.327*** (0.339)	-2.679*** (0.231)	-3.590*** (0.335)
NI/A or NI/E	0.131 (1.076)	0.032 (1.066)	0.143 (1.070)	-0.361 (0.710)	2.994*** (0.856)	3.317*** (1.114)	3.007*** (0.856)	0.838 (0.563)
DEBT/A or DEBT/E	2.635** (1.277)	2.671** (1.280)	2.624** (1.272)	2.146** (0.961)	1.344*** (0.411)	1.549*** (0.424)	1.335*** (0.412)	0.693** (0.290)
CASH/A or CASH/E	2.267*** (0.642)	2.190*** (0.662)	2.266*** (0.647)	2.809*** (0.657)	5.104*** (0.775)	4.477*** (0.725)	5.137*** (0.776)	6.533*** (0.931)
PPE/A or PPE/E	-0.628 (0.599)	-0.647 (0.601)	-0.637 (0.601)	-0.875* (0.490)	2.484*** (0.558)	2.072*** (0.571)	2.471*** (0.559)	2.427*** (0.494)
CAPEX/A or CAPEX/E	1.805*** (0.605)	1.815*** (0.616)	1.854*** (0.619)	2.814*** (0.729)	0.514 (1.054)	0.940 (1.028)	0.624 (1.056)	2.157** (1.009)
RD/A or RD/E	11.187*** (1.871)	10.655*** (1.862)	11.196*** (1.870)	15.460** (6.594)	6.274*** (1.701)	7.515*** (1.734)	6.469*** (1.683)	14.593*** (4.840)
RDD	-0.201** (0.085)	-0.204** (0.093)	-0.234*** (0.090)	0.114 (0.126)	-0.392** (0.152)	-0.545*** (0.153)	-0.612*** (0.149)	0.788*** (0.287)
VOL	0.049** (0.020)	0.050** (0.020)	0.049** (0.020)	0.065*** (0.024)	0.102 (0.078)	0.104 (0.079)	0.098 (0.077)	0.133 (0.109)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	47,153	47,153	47,154	58,676	47,153	46,753	47,154	58,676
Adjusted R^2	0.453	0.454	0.453	0.429	0.425	0.468	0.425	0.446

Standard errors robust to clustering at the firm and year levels in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

G. Other

Table C.7: Determinants of Market Value (MA/A and ME/E): Dividend-Paying Firms in Other Regions

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
DIVID	-1.844*** (0.508)				-3.383*** (0.812)			
DIV/A or DIV/E		14.058*** (3.093)				10.632*** (2.906)		
PAYOUT/A or PAYOUT/E			1.074* (0.646)				2.199* (1.275)	
DIV6D				0.455 (0.586)				0.627 (1.134)
ASSETS	-1.290*** (0.305)	-1.279*** (0.309)	-1.285*** (0.310)	-2.043*** (0.283)	-1.544*** (0.364)	-1.835*** (0.417)	-1.563*** (0.351)	-1.780*** (0.272)
NI/A or NI/E	-2.684 (2.464)	-4.284* (2.574)	-3.340 (2.416)	-4.806*** (1.035)	-0.042 (1.190)	0.106 (1.499)	-0.248 (1.154)	-1.989*** (0.538)
DEBT/A or DEBT/E	1.596 (1.264)	2.093 (1.273)	1.570 (1.249)	3.006*** (1.061)	1.015** (0.407)	1.086** (0.477)	1.065** (0.414)	0.907*** (0.279)
CASH/A or CASH/E	0.895 (0.631)	0.452 (0.636)	0.818 (0.622)	1.447 (0.990)	3.698*** (0.834)	2.963*** (0.861)	3.469*** (0.821)	4.940*** (0.892)
PPE/A or PPE/E	0.312 (0.738)	0.442 (0.741)	0.410 (0.741)	-1.742** (0.767)	1.276** (0.650)	1.295* (0.671)	1.164* (0.633)	1.079** (0.518)
CAPEX/A or CAPEX/E	1.591 (1.402)	1.052 (1.407)	1.117 (1.359)	5.867*** (1.797)	1.425 (1.562)	0.445 (1.547)	1.355 (1.493)	3.111** (1.417)
RD/A or RD/E	-3.230 (10.534)	-4.000 (10.221)	-3.146 (9.128)	12.332 (13.342)	4.606 (14.961)	1.638 (13.966)	4.167 (12.984)	18.850 (11.533)
RDD	-0.035 (0.272)	-0.056 (0.269)	-0.058 (0.265)	0.229 (0.425)	-0.172 (0.514)	-0.242 (0.496)	-0.241 (0.492)	-0.047 (0.553)
VOL	0.163** (0.074)	0.173** (0.075)	0.169** (0.074)	0.085 (0.095)	0.376*** (0.144)	0.410*** (0.147)	0.390*** (0.143)	0.207 (0.164)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	21,251	21,251	21,450	34,801	21,251	21,172	21,450	34,801
Adjusted R^2	0.565	0.566	0.564	0.466	0.621	0.630	0.620	0.513

Standard errors robust to clustering at the firm and year levels in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix D. Marginal Effects of Dividends on ME/E at Different Levels of Institutional Quality

A. Marginal Effects of DIVD on ME/E at Different Levels of Institutional Quality (WGI AVG)

Table D.1: Marginal Effects of DIVD on ME/E at Different Levels of Institutional Quality (WGI AVG)

WGI Level	Marg. Effect (dy/dx)	Std. Err.	z-Stat.	95% CI
-2.5	-0.741***	0.229	-3.24	[-1.189, -0.293]
-2.0	-0.661***	0.190	-3.47	[-1.034, -0.288]
-1.5	-0.581***	0.154	-3.78	[-0.882, -0.280]
-1.0	-0.501***	0.119	-4.20	[-0.734, -0.267]
-0.5	-0.421***	0.090	-4.66	[-0.598, -0.244]
0.0	-0.340***	0.074	-4.63	[-0.485, -0.196]
0.5	-0.260***	0.077	-3.36	[-0.412, -0.109]
1.0	-0.180*	0.099	-1.81	[-0.375, 0.015]
1.5	-0.100	0.131	-0.76	[-0.356, 0.156]
2.0	-0.020	0.166	-0.12	[-0.346, 0.306]
2.5	0.060	0.204	0.30	[-0.339, 0.459]

Margins based on Model (1) with interaction. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

B. Marginal Effects of DIV/E on ME/E at Different Levels of Institutional Quality (WGI AVG)

Table D.2: Marginal Effects of DIVE on ME/E at Different Levels of Institutional Quality (WGI AVG)

WGI Level	Marg. Effect (dy/dx)	Std. Err.	z-Stat.	95% CI
-2.5	14.421***	4.261	3.38	[6.069, 22.773]
-2.0	14.006***	3.713	3.77	[6.729, 21.283]
-1.5	13.591***	3.168	4.29	[7.382, 19.801]
-1.0	13.176***	2.630	5.01	[8.022, 18.330]
-0.5	12.761***	2.102	6.07	[8.642, 16.881]
0.0	12.347***	1.595	7.74	[9.221, 15.472]
0.5	11.932***	1.138	10.48	[9.701, 14.162]
1.0	11.517***	0.820	14.05	[9.910, 13.123]
1.5	11.102***	0.821	13.53	[9.493, 12.710]
2.0	10.687***	1.140	9.37	[8.452, 12.922]
2.5	10.272***	1.597	6.43	[7.142, 13.403]

Margins based on Model (2) with interaction. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix E. Panel Regression Results for Dividends with Moderating WGI Variables

A. Moderating Variable Control of Corruption

Table E.1: Determinants of Market Value (MA/A and ME/E): Global Sample with Institutional Quality (Control of Corruption)

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
DIVD	-0.309*** (0.050)				-0.345*** (0.075)			
CC Estimate	0.364*** (0.068)	0.286*** (0.061)		0.480*** (0.099)	0.843*** (0.123)	0.817*** (0.111)		0.973*** (0.158)
DIVD × CC Estimate	-0.076 (0.050)				0.101 (0.083)			
DIV/A or DIV/E		8.562*** (1.176)				12.214*** (1.433)		
DIV/A or DIV/E × CC Estimate		-1.135 (0.804)				-0.749 (0.980)		
PAYOUT/A			6.256*** (0.481)				9.828*** (0.800)	
DIV6D				-0.271*** (0.060)				-0.576*** (0.119)
DIV6D × CC Estimate				0.198*** (0.067)				0.539*** (0.118)
ASSETS	-0.591*** (0.075)	-0.584*** (0.075)	-2.185*** (0.069)	-1.059*** (0.082)	-0.935*** (0.063)	-1.004*** (0.071)	-1.328*** (0.063)	-1.169*** (0.077)
NI/A or NI/E	-0.239 (0.210)	-0.447** (0.211)	-4.034*** (0.188)	-1.670*** (0.242)	0.487*** (0.143)	0.287** (0.136)	-1.944*** (0.090)	-0.196 (0.124)
DEBT/A or DEBT/E	0.579* (0.342)	0.738** (0.342)	4.647*** (0.266)	1.640*** (0.329)	0.644*** (0.083)	0.566*** (0.077)	0.535*** (0.051)	0.513*** (0.063)
CASH/A or CASH/E	1.551*** (0.190)	1.459*** (0.190)	2.408*** (0.250)	1.835*** (0.231)	3.132*** (0.178)	2.746*** (0.166)	4.768*** (0.161)	3.429*** (0.191)
PPE/A or PPE/E	-0.223 (0.222)	-0.149 (0.221)	-2.805*** (0.295)	-1.177*** (0.253)	0.880*** (0.141)	0.767*** (0.133)	0.281*** (0.093)	0.716*** (0.121)
CAPEX/A or CAPEX/E	1.299*** (0.298)	1.205*** (0.298)	2.975*** (0.441)	2.544*** (0.368)	2.559*** (0.323)	2.270*** (0.301)	3.986*** (0.274)	3.383*** (0.308)
RD/A or RD/E	1.410*** (0.448)	1.122** (0.445)	-6.638*** (0.571)	-1.020** (0.509)	3.445*** (0.306)	3.517*** (0.298)	-0.457* (0.275)	2.555*** (0.296)
RDD	-0.250*** (0.050)	-0.157*** (0.047)	-0.313*** (0.067)	-0.293*** (0.060)	-0.288*** (0.074)	-0.101 (0.070)	-0.283*** (0.092)	-0.375*** (0.087)
VOL	0.036*** (0.014)	0.040*** (0.014)	-0.060*** (0.020)	0.020 (0.016)	0.035 (0.025)	0.053** (0.025)	-0.044 (0.029)	0.007 (0.028)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.567	0.568	0.505	0.535	0.553	0.572	0.469	0.521
Observations	343,403	343,403	518,329	449,982	343,403	341,954	518,329	449,982

Standard errors robust to clustering at the firm and year levels in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

B. Moderating Variable Rule of Law

Table E.2: Determinants of Market Value (MA/A and ME/E): Global Sample with Institutional Quality (Rule of Law)

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
DIVD	-0.259*** (0.050)				-0.286*** (0.074)			
RL Estimate	-0.459*** (0.103)	-0.541*** (0.094)		-0.331*** (0.120)	-0.760*** (0.161)	-0.745*** (0.147)		-0.459** (0.191)
DIVD × RL Estimate	-0.081* (0.047)				0.194** (0.079)			
DIV/A or DIV/E		9.555*** (1.482)				12.488*** (1.739)		
DIV/A or DIV/E × RL Estimate		-2.001* (1.064)				-0.886 (1.232)		
PAYOUT/A			0.020 (0.015)				0.060** (0.030)	
DIV6D				-0.227*** (0.061)				-0.530*** (0.122)
DIV6D × RL Estimate				0.189*** (0.065)				0.588*** (0.115)
ASSETS	-0.591*** (0.075)	-0.582*** (0.075)	-0.548*** (0.063)	-1.056*** (0.082)	-0.939*** (0.062)	-1.005*** (0.071)	-0.885*** (0.055)	-1.169*** (0.077)
NI/A or NI/E	-0.253 (0.210)	-0.459** (0.211)	-0.325* (0.177)	-1.681*** (0.241)	0.480*** (0.143)	0.281** (0.136)	0.376*** (0.124)	-0.202 (0.124)
DEBT/A or DEBT/E	0.517 (0.342)	0.677** (0.342)	0.634** (0.297)	1.582*** (0.329)	0.643*** (0.083)	0.563*** (0.077)	0.565*** (0.071)	0.511*** (0.063)
CASH/A or CASH/E	1.568*** (0.190)	1.470*** (0.190)	1.686*** (0.173)	1.851*** (0.232)	3.137*** (0.179)	2.749*** (0.166)	2.995*** (0.160)	3.433*** (0.191)
PPE/A or PPE/E	-0.273 (0.222)	-0.205 (0.221)	-0.274 (0.187)	-1.210*** (0.254)	0.860*** (0.141)	0.742*** (0.133)	0.760*** (0.123)	0.702*** (0.121)
CAPEX/A or CAPEX/E	1.376*** (0.297)	1.280*** (0.298)	1.437*** (0.269)	2.618*** (0.368)	2.620*** (0.323)	2.333*** (0.301)	2.864*** (0.294)	3.433*** (0.308)
RD/A or RD/E	1.447*** (0.449)	1.163*** (0.447)	1.424*** (0.393)	-0.969* (0.509)	3.435*** (0.306)	3.515*** (0.298)	3.458*** (0.271)	2.550*** (0.296)
RDD	-0.315*** (0.050)	-0.228*** (0.047)	-0.187*** (0.040)	-0.369*** (0.060)	-0.447*** (0.075)	-0.255*** (0.069)	-0.257*** (0.061)	-0.526*** (0.088)
VOL	0.034** (0.014)	0.037*** (0.014)	0.035*** (0.012)	0.016 (0.016)	0.030 (0.025)	0.047* (0.025)	0.031 (0.023)	0.001 (0.028)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.567	0.568	0.558	0.535	0.552	0.572	0.537	0.521
Observations	343,428	343,428	406,651	450,014	343,428	341,979	406,651	450,014

Standard errors robust to clustering at the firm and year levels in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix F. Panel Regression Results Dividends with Ownership Proxy

Table F.1: Determinants of Market Value (MA/A and ME/E): Global Sample with Institutional Quality and Ownership Dummies

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
DIVD	-0.288*** (0.049)				-0.341*** (0.074)			
DIV6D		-0.266*** (0.061)				-0.593*** (0.121)		
PAYOUTD			-0.280*** (0.049)				-0.366*** (0.070)	
DIVA / DIVE				9.051*** (1.330)				12.341*** (1.595)
WGI (AVG CC RL)	0.084 (0.087)	0.309** (0.123)	0.054 (0.083)	-0.013 (0.080)	0.411*** (0.151)	0.768*** (0.193)	0.441*** (0.145)	0.358*** (0.139)
DIVD × WGI	-0.079 (0.049)				0.161** (0.081)			
DIV6D × WGI		0.205*** (0.067)				0.593*** (0.119)		
PAYOUTD × WGI			-0.076* (0.040)				0.067 (0.065)	
DIVA/DIVE × WGI				-1.577* (0.938)				-0.827 (1.118)
SH INDEPENDENCE HIGH	-0.014 (0.124)	0.106 (0.108)	-0.016 (0.122)	-0.014 (0.122)	-0.270 (0.269)	-0.100 (0.238)	-0.256 (0.266)	-0.196 (0.258)
SH INDEPENDENCE MEDIUM	0.038 (0.285)	0.101 (0.206)	0.040 (0.283)	0.044 (0.282)	-0.205 (0.506)	-0.172 (0.375)	-0.200 (0.503)	-0.147 (0.489)
SH INDEPENDENCE UNKNOWN	-0.135 (0.089)	-0.099 (0.086)	-0.129 (0.088)	-0.128 (0.087)	-0.495** (0.224)	-0.447** (0.204)	-0.476** (0.221)	-0.392* (0.204)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adj. R2	0.567	0.535	0.568	0.568	0.552	0.521	0.553	0.572
Observations	343,403	449,982	344,468	343,403	343,403	449,982	344,468	341,954

Standard errors in parentheses. All models include the full set of control variables. SH Independence from BvD/Orbis indicates ownership independence based on reported shareholders and the ultimate owner. Dummies: High=1 for A+, A, A-; Medium=1 for B+, B, B-; reference category combines C and D grades; Unknown=1 for missing. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix G. Panel Regression Results for Repurchases by Region

A. Europe

Table G.1: Determinants of Market Value (MA/A and ME/E): Repurchasing Firms in Europe

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
REPD	-0.244** (0.122)				-0.004 (0.263)			
REP/A or REP/E		-10.992*** (4.195)				0.483 (4.515)		
PAYOUTD			-0.269* (0.155)				-0.055 (0.241)	
REP6D				-0.146 (0.187)				-0.523* (0.310)
ASSETS	-3.577*** (0.412)	-3.583*** (0.412)	-0.571*** (0.148)	-2.582*** (0.263)	-2.171*** (0.423)	-4.055*** (0.448)	-0.668*** (0.133)	-1.508*** (0.262)
NI/A or NI/E	-4.263*** (0.967)	-4.262*** (0.967)	-0.402 (0.780)	-4.671*** (0.686)	-3.321*** (0.482)	-3.031*** (0.536)	0.216 (0.505)	-2.493*** (0.342)
DEBT/A or DEBT/E	5.500** (2.165)	5.495** (2.164)	1.370 (0.904)	3.741*** (1.357)	0.507 (0.314)	0.513 (0.351)	0.842*** (0.155)	0.514** (0.207)
CASH/A or CASH/E	2.208* (1.269)	2.216* (1.269)	1.291 (0.832)	2.803*** (0.940)	4.414*** (0.747)	3.269*** (0.749)	3.536*** (0.523)	4.999*** (0.537)
PPE/A or PPE/E	-3.599*** (1.347)	-3.605*** (1.347)	-0.665* (0.359)	-1.925** (0.764)	0.730 (0.498)	1.096** (0.545)	0.798*** (0.289)	0.467 (0.314)
CAPEX/A or CAPEX/E	0.398 (1.899)	0.395 (1.899)	0.343 (1.057)	0.678 (1.369)	3.188*** (1.152)	2.303** (1.097)	3.256*** (0.903)	4.009*** (0.849)
RD/A or RD/E	-2.972 (4.282)	-2.973 (4.281)	9.515** (4.458)	-4.393 (3.192)	4.509 (2.919)	2.236 (2.811)	10.626*** (3.159)	6.458*** (2.198)
RDD	-0.149 (0.260)	-0.152 (0.260)	0.128 (0.133)	-0.146 (0.186)	0.474 (0.464)	0.032 (0.429)	0.246 (0.215)	0.540** (0.275)
VOL	-0.032 (0.043)	-0.031 (0.043)	0.009 (0.011)	0.049* (0.028)	0.034 (0.070)	0.047 (0.069)	0.016 (0.024)	0.086* (0.047)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	32,113	32,113	73,288	54,996	32,113	31,112	73,288	54,996
Adjusted R^2	0.594	0.594	0.704	0.478	0.493	0.583	0.604	0.412

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

B. Asia Pacific

Table G.2: Determinants of Market Value (MA/A and ME/E): Repurchasing Firms in Asia Pacific

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
REPD	0.085 (0.111)				0.104 (0.187)			
REP/A or REP/E		0.636 (8.657)				-6.961*** (2.612)		
PAYOUTD			-0.364*** (0.060)				-0.236*** (0.091)	
REP6D				0.076 (0.204)				0.074 (0.210)
ASSETS	-2.841*** (0.384)	-2.841*** (0.384)	-0.560*** (0.114)	-2.716*** (0.239)	-2.237*** (0.324)	-3.641*** (0.407)	-0.800*** (0.095)	-2.474*** (0.241)
NI/A or NI/E	-3.270*** (0.833)	-3.269*** (0.833)	-0.596 (0.634)	-4.131*** (0.621)	-1.243*** (0.477)	-0.515 (0.516)	0.536 (0.441)	-2.013*** (0.352)
DEBT/A or DEBT/E	1.961** (0.802)	1.960** (0.801)	1.034** (0.453)	2.760*** (0.736)	-0.348 (0.251)	0.174 (0.256)	0.327** (0.130)	-0.023 (0.209)
CASH/A or CASH/E	2.314** (0.988)	2.313** (0.988)	1.355*** (0.301)	1.135* (0.635)	6.480*** (0.802)	4.910*** (0.679)	2.908*** (0.345)	6.490*** (0.661)
PPE/A or PPE/E	-1.568** (0.683)	-1.568** (0.683)	-0.572** (0.227)	-2.804*** (0.537)	1.508*** (0.388)	1.196*** (0.405)	1.037*** (0.205)	0.922*** (0.335)
CAPEX/A or CAPEX/E	3.495*** (0.941)	3.494*** (0.941)	0.321 (0.317)	3.058*** (0.818)	3.499*** (0.887)	3.606*** (0.823)	1.327*** (0.404)	4.289*** (0.678)
RD/A or RD/E	4.446 (9.035)	4.448 (9.034)	2.941* (1.775)	-5.319 (3.983)	5.279 (5.570)	5.814 (5.523)	-0.787 (1.703)	5.242 (3.409)
RDD	-0.338** (0.159)	-0.337** (0.159)	-0.214*** (0.042)	-0.945*** (0.142)	-0.312 (0.270)	-0.344 (0.282)	-0.306*** (0.069)	-0.908*** (0.189)
VOL	0.030 (0.036)	0.030 (0.036)	0.064*** (0.009)	0.070 (0.044)	0.065 (0.089)	0.142 (0.106)	0.083*** (0.027)	0.102 (0.088)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	55,447	55,447	220,016	98,029	55,447	53,944	220,016	98,029
Adjusted R^2	0.496	0.496	0.438	0.455	0.367	0.486	0.405	0.398

Standard errors robust to clustering at the firm and year levels in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

C. South America

Table G.3: Determinants of Market Value (MA/A and ME/E): Repurchasing Firms in South America

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
REPD	0.712 (3.165)				2.103 (3.876)			
REP/A or REP/E		-22.175 (63.796)				2.890 (48.562)		
PAYOUTD			5.611* (3.093)				7.465* (4.023)	
REP6D				3.984 (2.855)				8.962 (5.474)
ASSETS	0.143 (3.368)	0.136 (3.368)	-0.555 (0.787)	-3.468 (2.669)	0.214 (3.653)	-4.444 (3.669)	-1.274 (1.286)	-5.183 (3.732)
NI/A or NI/E	-0.086 (8.902)	-0.117 (8.884)	10.455 (7.016)	-7.479 (6.080)	-5.236 (3.361)	-1.567 (4.197)	7.961** (3.246)	-5.676** (2.509)
DEBT/A or DEBT/E	-4.305 (8.783)	-4.331 (8.780)	-1.930 (3.278)	-7.142 (6.650)	1.432 (1.284)	1.040 (1.523)	-0.122 (0.641)	-3.311** (1.603)
CASH/A or CASH/E	-1.432 (10.390)	-1.573 (10.382)	-2.904 (7.156)	-3.687 (10.422)	9.505 (5.939)	8.290 (5.342)	-1.443 (2.422)	11.919* (6.219)
PPE/A or PPE/E	-21.334** (10.709)	-21.336** (10.747)	7.941* (4.611)	-13.178 (11.053)	1.234 (1.687)	0.453 (1.877)	4.965*** (1.766)	7.100*** (2.342)
CAPEX/A or CAPEX/E	4.059 (11.586)	4.035 (11.602)	-8.458 (11.939)	23.931** (11.926)	-2.033 (7.009)	4.493 (6.636)	0.553 (4.995)	4.915 (5.995)
RD/A or RD/E	303.528 (507.392)	299.333 (507.956)	17.910 (66.788)	-550.070 (384.878)	246.573 (258.576)	254.142 (252.090)	1.306 (38.374)	-169.944 (115.138)
RDD	-5.584 (5.006)	-5.622 (5.012)	-1.387 (2.638)	-5.740 (3.701)	-4.856 (6.296)	-4.541 (6.259)	-0.858 (3.808)	-6.621 (4.787)
VOL	0.461 (0.785)	0.459 (0.784)	-0.209 (0.162)	-1.414*** (0.505)	0.472 (0.980)	0.482 (1.015)	-0.396 (0.248)	-2.079*** (0.713)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,357	2,357	4,409	4,003	2,357	2,273	4,409	4,003
Adjusted R^2	0.580	0.580	0.559	0.431	0.631	0.655	0.563	0.433

Standard errors in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

D. Africa

Table G.4: Determinants of Market Value (MA/A and ME/E): Repurchasing Firms in Africa

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
REPD	-0.036 (0.139)				-0.039 (0.493)			
REP/A or REP/E		-6.569 (5.794)				-5.007 (6.241)		
PAYOUTD			-0.164 (0.136)				-0.144 (0.708)	
REP6D				-0.265 (0.416)				-0.595 (0.780)
ASSETS	-1.092** (0.473)	-1.091** (0.473)	0.057 (0.205)	-2.243*** (0.697)	-1.575 (1.332)	-2.401* (1.276)	0.156 (0.492)	-3.470*** (1.014)
NI/A or NI/E	-7.299** (3.654)	-7.302** (3.654)	0.874 (1.091)	-6.536** (3.006)	-2.255** (0.964)	-1.610* (0.840)	-0.623 (1.528)	-1.349 (1.469)
DEBT/A or DEBT/E	-0.139 (2.048)	-0.130 (2.047)	0.156 (0.559)	2.423 (2.377)	1.370 (1.570)	0.735 (0.966)	1.302** (0.622)	0.550 (0.962)
CASH/A or CASH/E	-2.484 (2.080)	-2.481 (2.078)	0.128 (0.432)	-0.050 (3.141)	2.276 (2.774)	2.673 (2.489)	-1.906* (1.016)	6.057*** (2.306)
PPE/A or PPE/E	1.759 (1.671)	1.782 (1.676)	-0.355 (0.729)	-2.144 (2.153)	0.995 (2.761)	2.161 (1.972)	-0.321 (0.831)	2.652 (2.207)
CAPEX/A or CAPEX/E	-1.711 (1.707)	-1.718 (1.705)	0.600 (0.516)	0.248 (1.881)	-9.904 (7.890)	-9.954 (7.635)	1.642 (1.014)	-2.946 (4.008)
RD/A or RD/E	-19.879* (11.040)	-19.784* (10.985)	5.322 (5.213)	-12.957* (7.397)	-7.142* (3.991)	-7.268* (4.012)	6.632 (4.480)	-8.674 (6.310)
RDD	-0.381 (0.358)	-0.385 (0.359)	0.045 (0.416)	-0.096 (0.239)	-0.309 (0.506)	-0.378 (0.513)	0.097 (0.560)	-0.776 (0.542)
VOL	0.150 (0.102)	0.150 (0.102)	0.010 (0.018)	0.268 (0.204)	0.198 (0.444)	0.199 (0.453)	0.018 (0.084)	0.964 (0.602)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,104	1,104	4,267	2,502	1,104	1,096	4,267	2,502
Adjusted R^2	0.649	0.649	0.609	0.416	0.568	0.644	0.613	0.440

Standard errors robust to clustering at the firm and year levels in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

E. Middle East

Table G.5: Determinants of Market Value (MA/A and ME/E): Repurchasing Firms in the Middle East

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
REPD	-1.181 (1.494)				-0.005 (2.023)			
REP/A or REP/E		3.328 (61.035)				46.534 (48.796)		
PAYOUTD			0.002 (0.180)				0.561 (0.472)	
REP6D				-1.577 (1.313)				-3.212 (2.127)
ASSETS	-1.798 (1.469)	-1.797 (1.468)	-0.061 (0.075)	-0.512 (0.352)	0.588 (1.114)	0.427 (1.128)	-0.335** (0.168)	-0.170 (0.757)
NI/A or NI/E	-4.473 (4.469)	-4.432 (4.423)	1.780** (0.809)	-2.378* (1.212)	5.804 (3.755)	6.785* (4.026)	3.593*** (1.347)	1.355 (1.942)
DEBT/A or DEBT/E	-11.890 (7.588)	-11.570 (7.416)	-0.247 (0.285)	0.385 (2.021)	1.762*** (0.369)	2.268 (1.577)	0.190* (0.107)	0.951** (0.402)
CASH/A or CASH/E	-2.963 (3.019)	-2.733 (3.042)	0.466 (0.826)	-0.071 (1.817)	1.533 (1.716)	1.236 (1.757)	2.747*** (1.001)	1.457* (0.852)
PPE/A or PPE/E	-6.573 (8.920)	-6.719 (8.964)	-0.358 (0.365)	-1.352 (1.685)	-1.152 (1.004)	-1.284 (1.556)	0.143 (0.188)	-0.522* (0.286)
CAPEX/A or CAPEX/E	-55.533 (37.808)	-55.590 (37.821)	0.875 (1.371)	-2.367 (5.635)	-3.107 (12.479)	-2.607 (13.510)	4.035* (2.149)	3.145 (2.433)
RD/A or RD/E	-3.476 (16.273)	-4.281 (16.150)	-2.939 (5.804)	3.342 (4.996)	25.537** (12.396)	21.242 (14.215)	6.656* (3.658)	19.386*** (7.179)
RDD	0.082 (2.102)	0.056 (2.099)	-0.228 (0.164)	-0.626 (0.598)	-0.303 (2.374)	-0.780 (2.444)	0.022 (0.354)	-0.307 (1.079)
VOL	-6.265 (4.916)	-6.252 (4.909)	-0.568 (0.504)	-5.644 (4.363)	-9.002 (7.619)	-9.197 (7.935)	-0.783 (0.672)	-8.212 (6.573)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	393	393	7,817	1,877	393	386	7,817	1,877
Adjusted R^2	0.745	0.745	0.433	0.617	0.768	0.768	0.477	0.638

Standard errors robust to clustering at the firm and year levels in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

F. Other

Table G.6: Determinants of Market Value (MA/A and ME/E): Repurchasing Firms in Other Regions

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
REPD	0.521*				-0.543			
	(0.305)				(0.471)			
REP/A or REP/E		-7.969				-28.267***		
		(12.492)				(10.461)		
PAYOUTD			-1.646***				-2.855***	
			(0.469)				(0.793)	
REP6D				0.099				-1.066
				(0.482)				(0.697)
ASSETS	-5.549***	-5.532***	-1.282***	-4.134***	-3.444***	-6.058***	-1.568***	-2.485***
	(1.006)	(1.003)	(0.304)	(0.480)	(1.156)	(1.519)	(0.363)	(0.530)
NI/A or NI/E	-5.527**	-5.540**	-2.670	-7.388***	-3.855***	-2.411*	0.074	-4.104***
	(2.226)	(2.224)	(2.441)	(1.382)	(1.092)	(1.324)	(1.172)	(0.805)
DEBT/A or DEBT/E	1.908	1.903	1.465	3.539**	0.004	-0.128	1.068***	0.255
	(2.617)	(2.617)	(1.242)	(1.638)	(0.892)	(0.788)	(0.413)	(0.665)
CASH/A or CASH/E	4.459	4.483	0.875	1.283	14.647***	12.426***	3.526***	10.096***
	(3.288)	(3.286)	(0.621)	(1.957)	(2.619)	(2.466)	(0.822)	(1.745)
PPE/A or PPE/E	2.309	2.314	0.314	-1.239	1.922	2.901**	1.073*	2.104**
	(2.243)	(2.243)	(0.733)	(1.513)	(1.367)	(1.223)	(0.632)	(1.000)
CAPEX/A or CAPEX/E	3.656	3.799	1.521	5.753*	0.441	-0.617	1.544	0.602
	(5.184)	(5.192)	(1.337)	(2.959)	(3.586)	(3.446)	(1.487)	(2.212)
RD/A or RD/E	24.642	24.615	-2.614	30.003	-5.667	-4.938	4.526	20.423
	(25.307)	(25.349)	(9.217)	(20.049)	(22.742)	(23.225)	(12.975)	(16.442)
RDD	0.936	0.920	-0.030	-0.275	-2.165	-1.649	-0.184	-1.374
	(0.856)	(0.856)	(0.266)	(0.520)	(1.648)	(1.674)	(0.492)	(0.923)
VOL	0.357	0.352	0.157**	0.297*	0.436	0.693	0.366***	0.483
	(0.244)	(0.244)	(0.073)	(0.164)	(0.522)	(0.448)	(0.142)	(0.329)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,839	4,839	21,450	10,924	4,839	4,643	21,450	10,924
Adjusted R^2	0.574	0.574	0.564	0.425	0.555	0.615	0.619	0.425

Standard errors robust to clustering at the firm and year levels in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix H. Marginal Effects of Repurchases on ME/E at Different Levels of Institutional Quality

A. Marginal Effects of REPD on ME/E at Different Levels of Institutional Quality (WGI AVG)

Table H.1: Marginal Effects of REPD on ME/E at Different Levels of Institutional Quality (WGI AVG)

WGI Level	Marg. Effect (dy/dx)	Std. Err.	z-Stat.	95% CI
-2.5	3.783*	2.027	1.87	[-0.190, 7.757]
-2.0	3.317*	1.772	1.87	[-0.156, 6.791]
-1.5	2.851*	1.517	1.88	[-0.123, 5.825]
-1.0	2.385*	1.263	1.89	[-0.089, 4.860]
-0.5	1.920*	1.008	1.90	[-0.056, 3.895]
0.0	1.454*	0.754	1.93	[-0.024, 2.931]
0.5	0.988**	0.501	1.97	[0.006, 1.969]
1.0	0.522**	0.253	2.07	[0.027, 1.017]
1.5	0.056	0.084	0.66	[-0.109, 0.220]
2.0	-0.410	0.284	-1.44	[-0.967, 0.146]
2.5	-0.876	0.533	-1.64	[-1.921, 0.169]

Margins based on Model (1) with interaction. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

B. Marginal Effects of REP/E on ME/E at Different Levels of Institutional Quality (WGI AVG)

Table H.2: Marginal Effects of REPE on ME/E at Different Levels of Institutional Quality (WGI AVG)

WGI Level	Marg. Effect (dy/dx)	Std. Err.	z-Stat.	95% CI
-2.5	95.698***	17.541	5.46	[61.318, 130.078]
-2.0	84.477***	15.354	5.50	[54.383, 114.571]
-1.5	73.256***	13.168	5.56	[47.446, 99.065]
-1.0	62.035***	10.983	5.65	[40.508, 83.561]
-0.5	50.814***	8.799	5.77	[33.568, 68.059]
0.0	39.593***	6.617	5.98	[26.623, 52.563]
0.5	28.372***	4.442	6.39	[19.664, 37.079]
1.0	17.150***	2.292	7.48	[12.657, 21.644]
1.5	5.929***	0.591	10.02	[4.770, 7.089]
2.0	-5.292**	2.240	-2.36	[-9.683, -0.901]
2.5	-16.513***	4.389	-3.76	[-25.115, -7.910]

Margins based on Model (2) with interaction. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Appendix I. Panel Regression Results for Repurchases with Moderating WGI Variables

A. Moderating Variable Control of Corruption

Table I.1: Determinants of Market Value (MA/A and ME/E): Global Sample with Institutional Quality (Control of Corruption)

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
REPD	0.502 (0.373)				1.006** (0.507)			
CC Estimate	1.797*** (0.260)	1.776*** (0.246)		2.218*** (0.311)	3.076*** (0.374)	3.706*** (0.366)		3.289*** (0.435)
REPD $\times$ CC Estimate	-0.315 (0.257)				-0.624* (0.349)			
REP/A or REP/E		10.459*** (3.142)				25.318*** (4.342)		
REP/A or REP/E $\times$ CC Estimate		-5.909*** (2.186)				-13.231*** (2.972)		
PAYOUTD			-0.357*** (0.034)				-0.313*** (0.058)	
REP6D				0.570** (0.261)				1.118** (0.495)
REP6D $\times$ CC Estimate				-0.366** (0.177)				-0.885*** (0.323)
ASSETS	-1.822*** (0.179)	-1.821*** (0.178)	-0.526*** (0.063)	-2.281*** (0.145)	-1.489*** (0.156)	-2.176*** (0.171)	-0.867*** (0.056)	-1.960*** (0.144)
NI/A or NI/E	-1.829*** (0.319)	-1.852*** (0.320)	-0.291 (0.178)	-3.212*** (0.315)	-0.535*** (0.163)	-0.241 (0.151)	0.382*** (0.124)	-1.109*** (0.149)
DEBT/A or DEBT/E	2.154*** (0.682)	2.151*** (0.681)	0.582* (0.300)	2.945*** (0.573)	0.536*** (0.130)	0.592*** (0.124)	0.564*** (0.071)	0.534*** (0.114)
CASH/A or CASH/E	1.829*** (0.364)	1.828*** (0.364)	1.669*** (0.174)	1.544*** (0.362)	4.144*** (0.273)	3.547*** (0.242)	2.996*** (0.160)	4.766*** (0.277)
PPE/A or PPE/E	-2.292*** (0.514)	-2.300*** (0.513)	-0.301 (0.187)	-3.025*** (0.480)	1.014*** (0.236)	0.835*** (0.227)	0.755*** (0.123)	0.849*** (0.205)
CAPEX/A or CAPEX/E	3.791*** (0.805)	3.788*** (0.805)	1.433*** (0.269)	3.990*** (0.680)	3.903*** (0.609)	3.579*** (0.568)	2.870*** (0.294)	4.407*** (0.496)
RD/A or RD/E	-2.826*** (0.673)	-2.863*** (0.674)	1.481*** (0.395)	-5.720*** (0.666)	0.972** (0.387)	1.490*** (0.361)	3.468*** (0.271)	-0.379 (0.364)
RDD	-0.695*** (0.229)	-0.696*** (0.229)	-0.245*** (0.040)	-0.769*** (0.109)	-0.981*** (0.328)	-0.940*** (0.333)	-0.309*** (0.063)	-0.924*** (0.156)
VOL	0.035 (0.057)	0.036 (0.057)	0.033*** (0.012)	-0.003 (0.046)	0.058 (0.089)	0.135 (0.099)	0.028 (0.023)	0.000 (0.077)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.537	0.538	0.558	0.439	0.514	0.575	0.537	0.422
Observations	121,098	121,098	406,651	198,520	121,098	119,002	406,651	198,520

Standard errors robust to clustering at the firm and year levels in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

B. Moderating Variable Rule of Law

Table I.2: Determinants of Market Value (MA/A and ME/E): Global Sample with Institutional Quality (Rule of Law)

	MA/A				ME/E			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
REPD	1.453** (0.708)				2.411*** (0.906)			
RL Estimate	0.121 (0.321)	0.096 (0.326)		0.816*** (0.251)	0.251 (0.480)	0.267 (0.450)		0.606 (0.383)
REPD $\times$ RL Estimate	-0.956** (0.467)				-1.567*** (0.598)			
REP/A or REP/E		39.488*** (6.603)				52.518*** (8.165)		
REP/A or REP/E $\times$ RL Estimate		-24.316*** (4.223)				-29.728*** (5.159)		
PAYOUTD			-0.357*** (0.034)				-0.313*** (0.058)	
REP6D				0.592 (0.384)				1.364* (0.745)
REP6D $\times$ RL Estimate				-0.406 (0.258)				-1.092** (0.492)
ASSETS	-1.798*** (0.178)	-1.798*** (0.178)	-0.526*** (0.063)	-2.250*** (0.144)	-1.454*** (0.155)	-2.134*** (0.170)	-0.867*** (0.056)	-1.918*** (0.144)
NI/A or NI/E	-1.856*** (0.318)	-1.881*** (0.319)	-0.291 (0.178)	-3.242*** (0.314)	-0.539*** (0.163)	-0.246 (0.151)	0.382*** (0.124)	-1.115*** (0.149)
DEBT/A or DEBT/E	2.105*** (0.681)	2.104*** (0.680)	0.582* (0.300)	2.883*** (0.573)	0.531*** (0.130)	0.579*** (0.124)	0.564*** (0.071)	0.531*** (0.114)
CASH/A or CASH/E	1.845*** (0.364)	1.840*** (0.364)	1.669*** (0.174)	1.588*** (0.362)	4.146*** (0.274)	3.556*** (0.243)	2.996*** (0.160)	4.774*** (0.277)
PPE/A or PPE/E	-2.261*** (0.515)	-2.270*** (0.514)	-0.301 (0.187)	-3.051*** (0.481)	1.021*** (0.236)	0.848*** (0.227)	0.755*** (0.123)	0.845*** (0.205)
CAPEX/A or CAPEX/E	3.733*** (0.804)	3.727*** (0.804)	1.433*** (0.269)	4.006*** (0.680)	3.908*** (0.609)	3.592*** (0.569)	2.870*** (0.294)	4.412*** (0.497)
RD/A or RD/E	-2.808*** (0.673)	-2.839*** (0.674)	1.481*** (0.395)	-5.682*** (0.666)	0.976** (0.387)	1.499*** (0.362)	3.468*** (0.271)	-0.381 (0.365)
RDD	-0.697*** (0.229)	-0.697*** (0.229)	-0.245*** (0.040)	-0.859*** (0.109)	-0.987*** (0.328)	-0.940*** (0.334)	-0.309*** (0.063)	-1.084*** (0.155)
VOL	0.036 (0.057)	0.037 (0.057)	0.033*** (0.012)	-0.000 (0.046)	0.059 (0.089)	0.137 (0.099)	0.028 (0.023)	0.003 (0.077)
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R^2	0.537	0.537	0.558	0.438	0.513	0.574	0.537	0.421
Observations	121,103	121,103	406,651	198,530	121,103	119,007	406,651	198,530

Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$