Signals in the Noise: Global Valuation Effects of Dividends and Buybacks

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Abstract

This study examines the valuation effects of corporate payout policy using a global firm-level panel from 1992 to 2024. Contrary to the Dividend Irrelevance Theory dividend-paying firms trade at a 17.3% premium based on assets and an 8.0% premium based on equity outside North America. The effect is particularly strong in Europe and the Middle East (with premia exceeding 20%) but turns negative in South America. In North America, premia reach 8.9% for assets and 16.2% for equity, and rise during periods of crisis, underscoring the role of dividends as a signal of resilience. Repurchase premia are less consistent and depend on the scale rather than incidence. North American repurchasing firms enjoy premia of 8.4% for assets and 15.9% for equity while effects elsewhere vary and often vanish in market noise. The results suggest that dividends cut through informational noise as valuation signal, whereas repurchases tend to be lost in that noise unless their scale is substantial. Payout policy thus remains a key driver of valuation in global capital markets.

Keywords: Payout Policy, Firm Valuation, Dividends, Share Repurchases, Dividend Premium, Capital Structure, International Finance, Corporate Signals

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1. Introduction

Payout policy remains one of the most enduring and contested topics in financial economics. While dividends have long been at the center of this debate, the increasing prevalence of share repurchases has expanded the analytical focus in recent decades. Despite extensive theoretical development and decades of empirical work, the fundamental question of why firms return capital to shareholders, and how such policies affect firm valuation, remains unresolved. As Allen and Michaely (1995) emphasize, consensus in both theory and evidence is still elusive. Leading finance textbooks such as Brealey et al. (2014) continue to list dividend policy among the "top ten unsolved problems in finance", highlighting its continued importance.

The debate dates back to early work by Graham and Dodd (1934), who argued that investors may prefer the certainty of dividends over uncertain capital gains. The classic irrelevance proposition by Miller and Modigliani (1961) holds that dividend policy should not affect firm value under perfect capital markets. However, subsequent theories recognize that real-world frictions, such as agency costs (Jensen, 1986), information asymmetries (Bhattacharya, 1979), behavioral preferences (Baker and Wurgler, 2004a,b), and signaling incentives can lead to meaningful valuation effects.

Empirical patterns often contradict theory, fueling what Black (1976) famously labeled the "dividend puzzle." Despite potential tax disadvantages and the growing popularity of repurchases, dividends remain a central feature of corporate payout policy. A large body of research has documented a persistent *dividend premium*, that is, dividend-paying firms tend to trade at higher valuation multiples than nonpayers, particularly in U.S. equity markets (Baker and Wurgler, 2004a; Karpavičius and Yu, 2018). However, evidence outside the U.S. or across different economic regimes remains scarce.

At the same time, corporate payout practices have evolved substantially. Share repurchases have gained traction as an alternative form of capital return, especially since the early 2000s (Brav et al., 2005). Firms increasingly use buybacks to adjust their capital structure, signal undervaluation, or return excess cash to shareholders in a more flexible manner. The literature has grown in parallel, exploring the motives, implications, and estimation challenges surrounding repurchases (Banyi et al., 2008). Yet, it remains unclear whether repurchases elicit comparable valuation effects as dividends and whether markets interpret them as equally credible signals of firm quality.

This paper evaluates both the dividend and repurchase premium using a global panel of firms from 1992 to 2024, covering North America, Europe, Asia-Pacific, South America, Africa, the Middle East, and other regions. I estimate fixed-effects regressions and year-by-year cross-sectional models to assess whether payout policies systematically affect firm valuation and under which conditions.

The analysis finds that dividend payers in North America are valued 8.9% higher based on the firm´s assets and 16.2% higher based on the firm´s equity, in line with prior literature. Outside of North America, dividend premiums remain sizable, with global averages of 17.3% (MA/A) and 8.0% (ME/E). The premium is particularly strong in Asia-Pacific and Europe, and negative in South America. Year-by-year regressions reveal that dividend premium tends to intensify during crisis periods such as the global financial crisis and COVID-19. While dividend payments are consistently associated with higher valuations across regions and time, the valuation impact of share repurchases is more nuanced. In many markets, the mere presence of a repurchase does not generate a valuation premium. Instead, it is the *intensity* of buybacks that matters, a pattern particularly evident in North America, where repurchasing firms enjoy premia of up to 22.4% (ME/E), compared to muted or negative effects in regions such as Europe or Africa. This distinction suggests that repurchases are rewarded only when perceived as meaningful and credible, in contrast to dividends, where even a binary indicator suffices to trigger a valuation effect. In this sense, dividends appear to act as reliable valuation signals that cut through informational noise, while repurchases often get lost in it, unless supported by scale.

This study **contributes** to the literature by combining insights from foundational theories with a robust empirical approach, and by including dataset of worldwide firms, in several ways. First, it provides comprehensive global evidence on the dividend and repurchase premium, capturing regional heterogeneity and temporal dynamics. Second, it highlights the contextual nature of payout relevance, with dividends acting as a robust signal across settings, while repurchases are interpreted more selectively. Third, it advances our understanding of how payout policies affect valuation in modern capital markets, thereby offering timely insights into the evolving corporate landscape.

By combining insights from foundational theories with a robust empirical approach, and by including dataset of worldwide firms, I contribute to the literature. The study not only seeks to clarify whether a dividend premium exists but also to provide new empirical evidence that advances our understanding of firm valuation in an international context.

2. Data and Sample Construction

This study draws on the entire Compustat database from 1992 to 2024, incorporating both firm fundamentals (such as balance sheet and income statement variables) and stock price data. For North American companies, monthly stock prices are used, while for firms outside North America, daily stock prices are employed, as Compustat offers longer historical coverage for international stocks. All accounting and market data have been converted to US dollars using Compustat-provided exchange rates to ensure international comparability. To increase accuracy, different conversion methods were applied: balance sheet items were converted at year-end exchange rates, while income statement and cash flow items are translated using annual average exchange rates[1].

The initial dataset comprises 59,153 global companies with more than 1,2 million observations and 25,714 North American companies with roughly 250,000 observations. 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 are removed, given their unique regulatory and accounting environments. 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 North American sample consists of 15,448 firms and 140,631 observations, while the global sample includes 56,128 firms and 859,059 observations. It should be noted that the global sample explicitly excludes North American companies. Throughout this study, the international dataset is referred to as **Global** to avoid ambiguity. Furthermore, I subdivide the global dataset into five distinct geographic regions: *Europe*, *Asia-Pacific*, *South America*, *Middle East*, and a residual category labeled *Other* to examine regional variation in the relationship between dividend policy and firm valuation. Table 5 provides an overview of the regional composition of the global sample. Asia-Pacific and Europe dominate the dataset, accounting for nearly 60% and 25% of all observations, respectively. Japan and China alone contribute more than one-fourth of all firm-level data points within the Asia-Pacific region. Smaller but still significant portions of the sample stem from Africa, the Middle East, South America, and the residual

[1]Exchanges rates are retrieved from Compustat

category *Other*. This geographic breakdown highlights the global nature of the dataset while also revealing strong regional asymmetries in firm coverage.

Tables 1 to 4 summarize the main characteristics of the cleaned samples. Tables 1 and 2 (Panel A and B) present descriptive statistics for the North American sample, while Tables 3 and 4 report the corresponding figures for the global sample excluding North America. In each case, Panel A focuses on ratios based on the book value of assets, and Panel B examines ratios based on the book value of equity.

Table 1: Panel A: Ratios based on Book Value of Assets (North America)

	Mean (Payer)	MMean (Nonpayer)	Difference	t-stat	Average
MA/A	2.427	2.899	0.472	6.43***	2.771
DIV/A	0.042	0.000	-0.042	-183.62***	0.012
NI/A	0.066	-0.154	-0.220	-73.94***	-0.094
REP/A	0.025	0.031	0.006	5.99***	0.030
DEBT/A	0.248	0.195	-0.054	-44.24***	0.209
CASH/A	0.119	0.269	0.150	99.35***	0.229
PPE/A	0.325	0.220	-0.105	-73.44***	0.248
CAPEX/A	0.056	0.053	-0.003	-7.57***	0.054
RD/A	0.030	0.141	0.111	67.69***	0.116
RE/A	0.228	-1.371	-1.600	-44.90***	-0.958
VOL	0.130	0.226	0.096	186.76***	0.201
AGE	21.904	15.242	-6.662	-114.37***	17.036
RDD	0.478	0.352	-0.126	-43.43***	0.386
Observations	37,864	102,767	140,631		

*** p<0.01

Dividend-paying firms consistently exhibit significantly different financial profiles compared to nonpayers, both globally and in North America. Across both regions, several common patterns emerge:

Valuation multiples (MA/A and ME/E) are substantially lower for dividend payers. This suggests that dividend-paying firms are perceived as more mature, stable, and less speculative. Also underscored by sheer size as measured by total asset (see Figure 1 and Figure 2). These findings support the catering theory of dividends proposed by Baker and Wurgler (2004b), where firms respond to investor demand for safer, income-generating stocks by maintaining dividend payments, even at the expense of higher valuations.

Profitability and retained earnings (NI/A, NI/E, RE/A, RE/E) are markedly higher among payers, indicating stronger financial performance. This aligns with signaling theo-

Table 2: Panel B: Ratios based on Book Value of Equity (North America)

	Mean (Payer)	Mean (Nonpayer)	Difference	t-stat	Average
ME/E	4.166	4.988	0.822	11.14***	4.765
DIV/E	0.114	-0.000	-0.114	-168.97***	0.031
NI/E	0.206	-0.436	-0.643	-61.89***	-0.263
REP/E	0.076	0.061	-0.015	-5.15***	0.065
DEBT/E	1.184	1.095	-0.089	-4.60***	1.119
CASH/E	0.303	0.581	0.279	53.13***	0.506
PPE/E	1.076	0.794	-0.281	-25.23***	0.869
CAPEX/E	0.176	0.164	-0.012	-5.42***	0.168
RD/E	0.084	0.327	0.243	44.03***	0.271
RE/E	0.537	-3.625	-4.163	-59.89***	-2.550
VOL	0.130	0.226	0.096	186.76***	0.201
AGE	21.904	15.242	-6.662	-114.37***	17.036
RDD	0.478	0.352	-0.126	-43.43***	0.386
Observations	37,864	102,767	140,631		

*** p<0.01

ries (Bhattacharya, 1979; Miller and Rock, 1985), which argue that firms use dividends to credibly signal positive future prospects and stable earnings potential. *Volatility and age*: Dividend payers tend to be older and less volatile, reinforcing the "bird-in-hand" view of dividends (Karpavičius and Yu, 2018), whereby investors interpret dividend payments as a sign of lower firm risk and greater long-term stability.

Research and development intensity (RD/A, RD/E) is significantly lower for dividend payers. This supports the hypothesis that firms with considerable growth opportunities (typically R&D-intensive) prefer to reinvest profits rather than distribute them as dividends, consistent with findings by Fama and French (2001) and Baker and Wurgler (2004a).

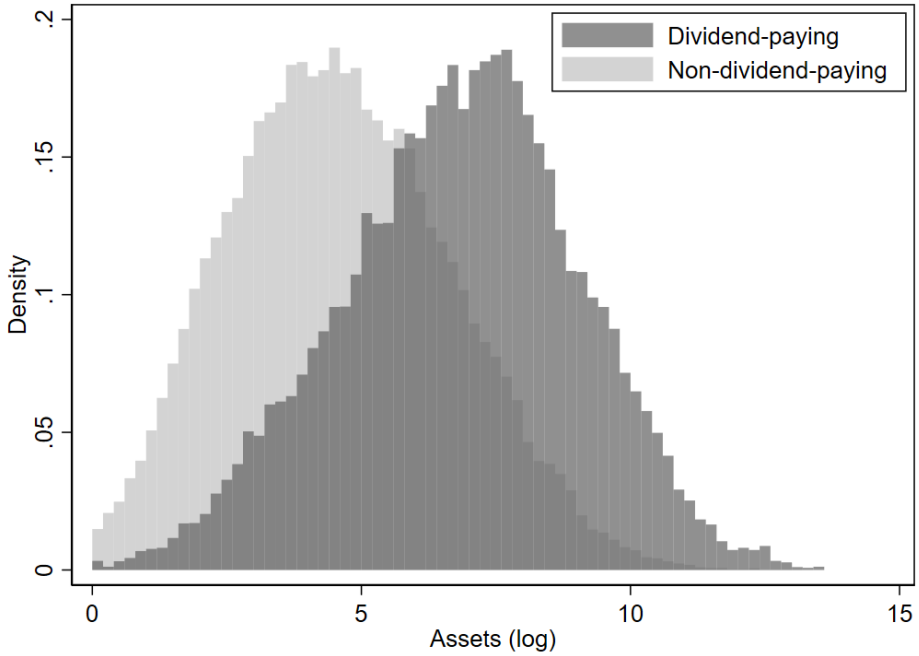

Fig. 1. Distribution of Assets by Dividend Status (North America)

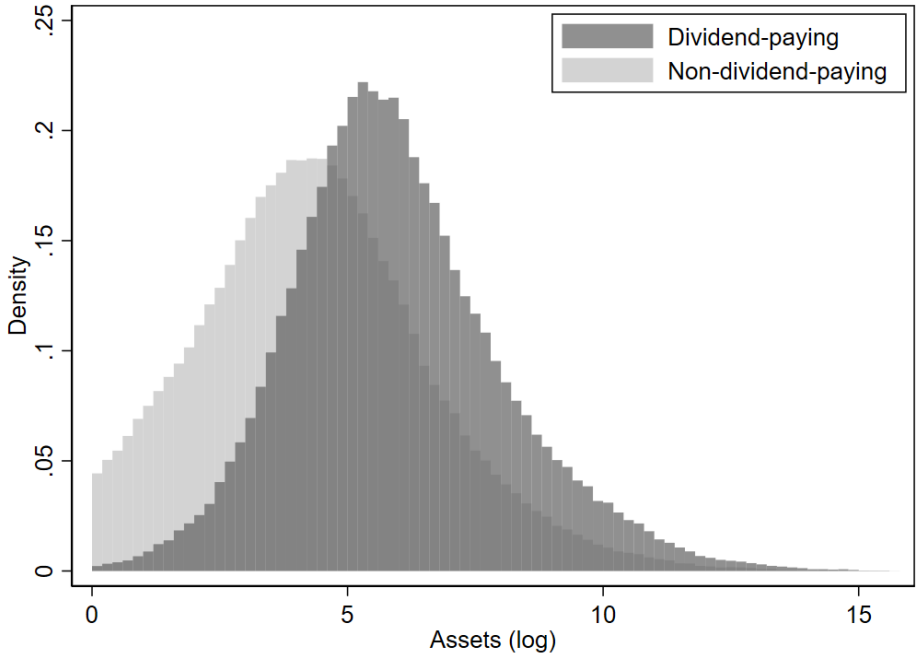

Fig. 2. Distribution of Assets by Dividend Status (Global)

Although these core patterns are retained across both datasets, the magnitude of the differences varies by region. In the global sample (Tables 3 and 4), differences in valuation are more pronounced: dividend payers exhibit a 0.472-point lower MA/A ratio and a 0.82-point lower ME/E ratio compared to nonpayers. By contrast, in the North American sample (Tables 1 and 2), the differences shrink to 0.47 and 0.82, respectively. This suggests that the dividend-paying status is an even stronger valuation signal internationally than within the more mature and information-efficient North American capital markets.

Table 3: Panel A: Ratios based on Book Value of Assets (Global)

	Mean (Payer)	Mean (Nonpayer)	Difference	t-stat	Average
MA/A	3.362	1.497	-1.865	76.80***	2.613
DIV/A	0.000	0.024	0.024	-557.24***	0.010
NI/A	-0.058	0.046	0.104	-206.51***	-0.017
REP/A	0.000	0.000	0.000	-14.46***	0.000
DEBT/A	0.253	0.200	-0.053	92.30***	0.232
CASH/A	0.144	0.141	-0.003	7.16***	0.143
PPE/A	0.246	0.254	0.008	-14.66***	0.249
CAPEX/A	0.039	0.038	-0.000	3.63***	0.038
RD/A	0.013	0.009	-0.004	47.99***	0.011
RE/A	-0.695	0.214	0.909	-157.68***	-0.330
VOL	0.810	0.651	-0.159	53.84***	0.741
AGE	18.426	21.194	2.768	-160.56***	19.538
RDD	0.766	0.632	-0.134	135.63***	0.712
Observations	344,979	514,070			859,049

*** $p < 0.01$

Table 4: Panel B: Ratios based on Book Value of Equity (Global)

	Mean (Payer)	Mean (Nonpayer)	Difference	t-stat	Average
ME/E	3.781	1.916	-1.864	58.37***	3.032
DIV/E	0.000	0.051	0.051	-564.07***	0.020
NI/E	-0.066	0.093	0.160	-124.50***	-0.002
REP/E	0.000	0.000	0.000	-10.90***	0.000
DEBT/E	0.875	0.762	-0.113	22.58***	0.830
CASH/E	0.298	0.297	-0.001	0.96	0.297
PPE/E	0.672	0.648	-0.024	9.16***	0.663
CAPEX/E	0.097	0.092	-0.005	12.29***	0.095
RD/E	0.024	0.018	-0.006	37.84***	0.021
RE/E	-0.521	0.423	0.944	-115.25***	-0.142
VOL	0.810	0.651	-0.159	53.84***	0.741
AGE	18.426	21.194	2.768	-160.56***	19.538
RDD	0.766	0.632	-0.134	135.63***	0.712
Observations	344,979	514,070			859,049

*** $p < 0.01$

Further regional nuances are observed in other variables. While leverage (DEBT/A and DEBT/E) is consistently lower among dividend payers, the effect is stronger globally than in North America. Capital expenditures (CAPEX) and property, plant, and equipment (PPE) relative to equity are higher among North American payers, possibly indicating a higher investment intensity in more capital-rich firms. Notably, the patterns for volatility, R&D spending, and firm age remain robust across both regions. Figures 3 and 4 illustrate the evolution of aggregate dividend and repurchase volumes over time in North America and the rest of the world. In North America, aggregate dividend payments show a steady upward trend, with a noticeable uptick shortly after 2003. This rise may be linked to the U.S. Jobs and Growth Tax Relief Reconciliation Act of 2003, which substantially reduced the tax rate on dividends and capital gains, thereby increasing the attractiveness of dividend payouts for investors (Chetty and Saez, 2005).

More pronounced, however, is the surge in share repurchases starting in the early 2000s. Repurchase volumes begin to outpace dividend payments and eventually become the dominant form of cash distribution in U.S. capital markets. This shift reflects a broader trend toward favoring repurchases over dividends, driven by their inherent financial flexibility and tax efficiency (Jagannathan et al., 2000; Grullon and Michaely, 2002). The global pattern appears more stable. Outside of North America, dividends remain the primary payout mechanism, while repurchase volumes remain relatively low and stable. This in-

dicates regional differences in payout preferences, regulatory environments, and capital market maturity. While U.S. firms increasingly adopt repurchases as a strategic financial tool, sometimes even in reaction to competitor behavior in concentrated industries (Massa et al., 2007), companies in many other regions continue to emphasize dividends, possibly reflecting more conservative financial cultures or stronger institutional norms. From a methodological standpoint, it is important to note that the estimation of repurchase volumes often relies on Compustat's "Purchase of Common and Preferred Stock" (Item PRSTKC). However, several studies highlight that this measure can be imprecise and subject to significant error, especially when repurchases coincide with stock issuances or option exercises (Banyi et al., 2008). Consequently, the repurchase figures in this study should be interpreted with caution.

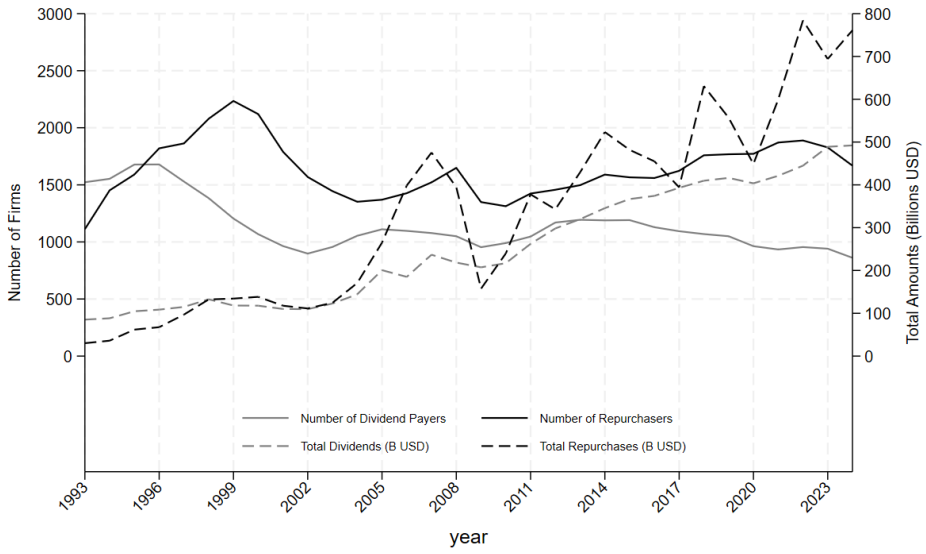

Fig. 3. Dividend and Repurchase Volume over time (North America)

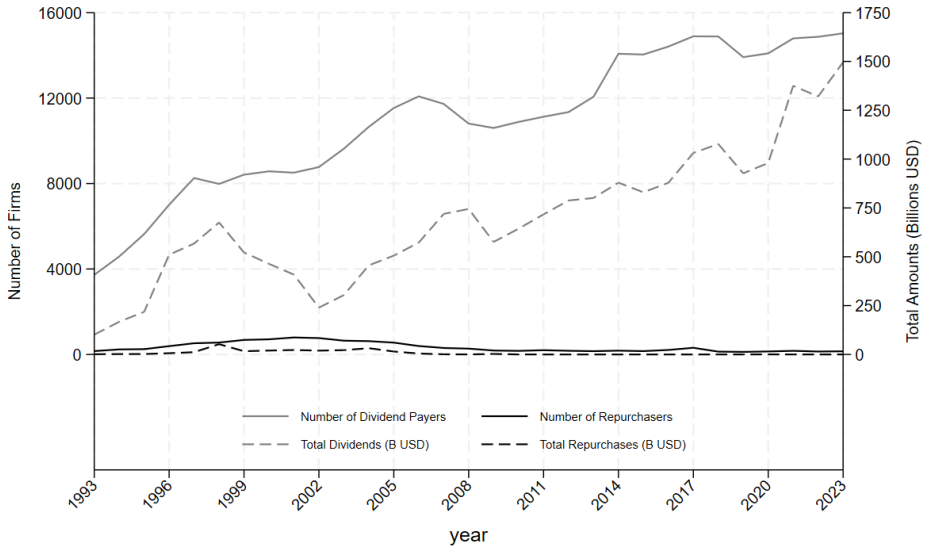

Fig. 4. Dividend and Repurchase Volume over time (Global)

These descriptive statistics highlight fundamental differences between dividend payers and nonpayers in terms of valuation, performance, investment behavior, and risk profile. They also provide initial support for the view that dividend policy reflects not just firm fundamentals but also managerial responses to investor preferences and capital market signals, consistent with the catering theory of dividends (Baker and Wurgler, 2004a,b) and more recent international evidence (Karpavičius and Yu, 2018).

Table 5: Observations and Firms by Region (Global)

Region	Observations	% of Total	Firms	% of Region (Firms)
Africa	13,498	1.57%	864	–
Asia Pacific	510,703	59.45%	31,822	
China	88,567	10.31%	5,654	17.8%
Japan	97,440	11.34%	5,377	16.9%
Europe	210,734	24.53%	15,312	–
Middle East	30,639	3.57%	1,987	–
South America	20,497	2.39%	1,121	–
Other	72,978	8.50%	5,022	–
Total	859,049	100.00%	56,128	

3. Results

3.1. Panel data regressions for Dividends

To examine the relationship between dividend payments and firm value, I follow prior literature (Karpavičius and Yu, 2018) and estimate fixed effects models. These models incorporate both firm and year fixed effects to account for unobserved firm-level heterogeneity and time-specific influences. The dependent variables are market-to-book ratios. I compute either the market value of assets divided by the book value of assets (MA/A) or the market value of equity divided by the book value of equity (ME/E), both of which serve as proxies for firm valuation (see Appendix Table A for detailed variable definitions). Unlike Baker and Wurgler (2004a,b), who define the dividend premium as the raw difference in average market-to-book ratios between dividend payers and nonpayers, my regression-based approach controls for a set of firm-level characteristics. This allows to isolate the independent effect of dividend status on firm valuation, net of confounding influences such as profitability, size, leverage, investment, and risk. Thus, the resulting coefficients provide a cleaner estimate of the valuation relevance of dividends. The key explanatory variable of interest is a dividend-payer indicator (DIVD), which is a dummy variable equal to one if a firm pays dividends and zero otherwise. This variable is supplemented by a set of control variables capturing important firm characteristics. The selection of controls is based on prior research, including Coles et al. (2008); Karpavičius and Yu (2018) and Kalcheva and Lins (2007).

Formally, I estimate the following model:

$$Y_{it} = \beta_0 + \beta_1 \text{DIVD}_{it} + \mathbf{X}'_{it}\boldsymbol{\beta} + \lambda_t + \mu_i + \varepsilon_{it}$$

where Y_{it} denotes the firm value proxy (MA/A or ME/E) for firm i in year t, $\mathbf{X}_{it}$ is the vector of control variables, λ_t captures year fixed effects, μ_i captures firm fixed effects, and ε_{it} is the error term.

More precisely, the model and the vector of control variables[2] include:

$X_{it,1}$ = DIVD	Dividend payer dummy
$X_{it,2}$ = ASSETS	Firm size (ln(Assets))
$X_{it,3}$ = NI/A or NI/E	Net income to assets or equity
$X_{it,4}$ = DEBT/A or DEBT/E	Debt to assets or equity
$X_{it,5}$ = CASH/A or CASH/E	Cash to assets or equity
$X_{it,6}$ = PPE/A or PPE/E	Property, plant & equipment to assets or equity
$X_{it,7}$ = CAPEX/A or CAPEX/E	Capital expenditures to assets or equity
$X_{it,8}$ = RD/A or RD/E	R&D to assets or equity
$X_{it,9}$ = RDD	R&D disclosure dummy (equals 1 if R&D not reported)
$X_{it,10}$ = VOL	Volatility of monthly stock returns
$X_{it,11} = \lambda_t$	Year fixed effect
$X_{it,12} = \mu_i$	Firm fixed effect

To test the robustness of the baseline findings, I estimate several alternative specifications. First, DIVD with continuous payout ratios such as *DIV/A*, *DIV/E*, and *PAYOUT/A*, which capture the intensity of dividend and repurchase activity. Second, I include alternative dividend history variables such as *DIV6D*, which identifies firms that paid dividends at least once over the past six years. These specifications help distinguish between persistent and sporadic dividend behavior. Each alternative model allows for a different interpretation of dividend policy, whether as a binary signal, a continuous financial policy, or a persistent strategic choice. The consistency of results across these variants strengthens the credibility of the findings and shows robustness.

Throughout all panel regressions in this study, I cluster standard errors at both the firm and year levels to address potential heteroskedasticity and serial correlation within firms over time.

[2]Please see Appendix A for detailed variable definitions

3.1.1. Dividends in North America

The results for North American firms are presented in Tables 6 and 7. Across all model specifications, the coefficient on DIVD is positive and statistically significant at the 1% level, indicating that dividend-paying firms exhibit higher valuation multiples than non-payers, even after controlling for firm size, profitability, capital structure, liquidity, and investment intensity. This finding is consistent with the literature on the *dividend premium* and suggests that investors value dividend-paying firms higher (Karpavičius and Yu, 2018; Fama and French, 2001; Brav et al., 2005), possibly due to perceived stability, transparency, or catering to investor preferences (Baker and Wurgler, 2004b,b).

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

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
DIVD	0.247***				0.268***	0.169***	0.190**
	[4.98]				[3.86]	[3.03]	[2.33]
DIV/A		2.876***					
		[4.07]					
PAYOUT/A			1.752***				
			[6.14]				
DIV6D				0.094*			
				[1.88]			
ASSETS	-0.365***	-0.351***	-0.340***	-0.358***	-0.596***	-0.567***	-0.414***
	[11.58]	[11.22]	[10.61]	[11.42]	[10.54]	[8.18]	[6.12]
NI/A	-0.166	-0.179*	-0.204*	-0.164	0.530***	-0.282	-0.529***
	[-1.60]	[-1.73]	[-1.81]	[-1.57]	[3.61]	[-1.48]	[-2.90]
DEBT/A	-0.612***	-0.620***	-0.526***	-0.625***	-0.509**	-0.630***	-1.049***
	[-5.22]	[-5.29]	[-4.38]	[-5.34]	[-2.27]	[-2.70]	[-4.38]
CASH/A	1.897***	1.890***	1.701***	1.902***	2.295***	1.651***	1.016***
	[13.35]	[13.29]	[11.47]	[13.39]	[9.62]	[6.45]	[4.01]
PPE/A	-1.379***	-1.376***	-1.309***	-1.377***	-1.529***	-1.779***	-0.887**
	[-6.41]	[-6.40]	[-5.96]	[-6.40]	[-4.43]	[-3.61]	[-2.44]
CAPEX/A	5.001***	4.994***	5.082***	5.005***	3.543***	4.034***	3.768***
	[13.98]	[13.96]	[13.53]	[13.99]	[8.51]	[5.46]	[4.14]
RD/A	1.921***	1.929***	2.055***	1.935***	2.347***	2.061***	0.583
	[7.37]	[7.38]	[6.83]	[7.41]	[5.69]	[4.06]	[1.59]
RDD	-0.540***	-0.531***	-0.461***	-0.539***	-0.370	-0.655**	-0.719**
	[-3.50]	[-3.41]	[-3.06]	[-3.50]	[-1.49]	[-2.02]	[-2.29]
VOL	0.236***	0.227***	0.228***	0.229***	0.229***	0.262***	-0.048
	[4.47]	[4.30]	[4.30]	[4.33]	[3.01]	[3.17]	[-0.53]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	76,682	76,559	69,295	76,682	30,542	23,882	21,530
Adjusted R^2	0.473	0.474	0.494	0.473	0.489	0.623	0.593

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

The economic relevance of the DIVD coefficient is larger for ME/E than for MA/A, implying that dividends are particularly relevant in equity market valuations (e.g. the stock market). Furthermore, the use of payout ratio measures (DIV/A, PAYOUT/A) confirms the positive relationship between dividend policy and firm value.

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	0.7726***				0.7637***	0.5361***	0.8591***
	[6.26]				[3.75]	[3.78]	[2.82]
DIV/E		11.8125***					
		[8.90]					
PAYOUT/A			7.4313***				
			[9.35]				
DIV6D				0.3180**			
				[2.46]			
ASSETS	-0.8123***	-0.6904***	-0.7585***	-0.7952***	-1.1146***	-1.0284***	-0.9198***
	[9.78]	[8.72]	[8.64]	[9.61]	[8.25]	[5.41]	[4.87]
NI/E	0.2349**	0.0306	0.3060**	0.2358**	0.2797*	-0.3720*	0.3568*
	[2.06]	[0.29]	[2.52]	[2.07]	[1.74]	[-1.86]	[1.75]
DEBT/E	0.6108***	0.5437***	0.6356***	0.6086***	0.3017*	0.3867**	0.9833***
	[6.88]	[6.34]	[6.73]	[6.86]	[1.90]	[2.42]	[6.12]
CASH/E	2.9473***	2.8811***	2.8169***	2.9470***	2.7189***	3.3311***	3.0453***
	[16.84]	[16.79]	[15.21]	[16.81]	[9.26]	[11.46]	[9.44]
PPE/E	0.3026*	0.1970	0.3133*	0.2974*	0.3769	0.1675	0.1314
	[1.73]	[1.22]	[1.72]	[1.70]	[1.29]	[0.65]	[0.43]
CAPEX/E	4.5721***	4.2374***	4.6062***	4.5874***	3.3918***	5.4639***	5.1746***
	[8.96]	[8.50]	[8.58]	[8.98]	[5.84]	[6.07]	[4.31]
RD/E	3.3498***	3.1912***	3.4761***	3.3592***	3.3126***	2.9483***	2.6866***
	[12.77]	[12.61]	[12.15]	[12.80]	[8.41]	[6.14]	[6.42]
RDD	-0.4913	-0.3888	-0.2910	-0.4915	-0.2553	-0.8547	-0.0446
	[-1.31]	[-1.00]	[-0.78]	[-1.30]	[-0.41]	[-1.55]	[-0.05]
VOL	-0.2032	-0.2172*	-0.1180	-0.2246*	-0.1205	-0.1198	-0.6026**
	[-1.55]	[-1.67]	[-0.88]	[-1.72]	[-0.64]	[-0.54]	[-2.35]
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	76,682	76,559	69,295	76,682	30,542	23,882	21,530
Adjusted R^2	0.572	0.582	0.590	0.571	0.524	0.668	0.697

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

I also observe that the R&D disclosure dummy (RDD), which equals one if a firm does not report R&D expenditures in Compustat, is negatively associated with firm value. This suggests that firms failing to disclose R&D investments may face a valuation discount, possibly due to higher information asymmetries or investor concerns about the firm's innovation capacity. Volatility is negatively correlated with ME/E and generally insignificant for MA/A, suggesting that riskier firms are discounted by equity markets but not necessarily by total firm value proxies.

3.1.2. Dividends Global

Turning to the global sample (Tables 8 and 9), I find qualitatively similar but economically stronger effects compared to North America. The coefficient on DIVD remains significantly positive across most model specifications and is particularly large during the later period (2014-2024), suggesting that dividend payments become increasingly valuable as a signal amid rising macroeconomic uncertainty (including the oil price collapse, Brexit, the U.S.-China trade war, the COVID-19 pandemic, surging inflation, and the war in Ukraine). Focusing on the benchmark model specifications (Model 1), the estimated coefficient for DIVD is 0.453 in the MA/A regression (Table 8) and 0.244 in the ME/E regression. These consistently positive and statistically significant coefficients indicate that dividend-paying firms are, on average, valued more highly than nonpayers in global markets, even after controlling for firm size, profitability, leverage, investment, volatility, and fixed effects. The magnitude of the effect is slightly larger for total firm value (MA/A) than for equity value (ME/E), suggesting that dividends have broad valuation relevance in international contexts. This relationship proves robust across alternative model specifications.

The regional fixed effects regressions reported in Appendix Tables 1 to 14 reveal regional differences in the estimated effect of dividend payer status on firm valuation. The coefficient for DIVD is the largest and statistically significant in *Europe*. Beyond the well-established effects in *Europe* and *Asia-Pacific*, I also find significantly positive coefficients in the *Middle East*, and to a lesser extent in *Africa*, particularly for MA/A. This suggests that dividend-paying firms in these regions are, at least in some periods, associated with higher valuation multiples relative to nonpayers. These effects are most robust for the MA/A ratio and hold across several model specifications. The *Other* region exhibits a smaller but generally positive and statistically significant coefficient on DIVD, suggesting a modest positive valuation effect of dividend payments. The estimated effect in *South America* is *negative* or statistically insignificant in most specifications. This result indicates that, unlike in other regions, dividend payments in South America do not lead to higher firm valuations and may even be perceived unfavorably by investors. Possible explanations include heightened macroeconomic risk, weaker investor protection, or structural differences in firm behavior and investor expectations.

These regional findings support the argument by Karpavičius and Yu (2018) that the informational content and valuation impact of dividend payments are shaped by institu-

Table 8: Determinants of Market Value of Assets scaled by Book Value of Assets (MA/A): Global

	Full Sample				**1992–2002** / **2003–2013** / **2014–2024**		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
DIVD	0.453***				0.421***	-0.023	0.608***
	[9.34]				[5.76]	[0.32]	[16.38]
DIV/A		9.861***					
		[11.36]					
PAYOUT/A			9.517***				
			[11.43]				
DIV6D				0.127			
				[1.46]			
ASSETS	-2.298***	-2.274***	-2.274***	-2.287***	-2.810***	-3.197***	-3.563***
	[31.06]	[30.94]	[30.94]	[30.67]	[11.17]	[23.09]	[26.81]
NI/A	-4.447***	-4.479***	-4.477***	-4.407***	-4.796***	-3.059***	-2.481***
	[21.19]	[21.31]	[21.30]	[21.07]	[7.80]	[9.41]	[9.43]
DEBT/A	4.687***	4.695***	4.694***	4.641***	2.032***	4.814***	5.329***
	[16.97]	[17.03]	[17.03]	[16.86]	[3.00]	[9.32]	[15.14]
CASH/A	2.492***	2.443***	2.443***	2.536***	3.267***	1.209**	2.831***
	[8.74]	[8.55]	[8.55]	[8.87]	[3.58]	[2.53]	[7.46]
PPE/A	-2.706***	-2.728***	-2.729***	-2.741***	-2.251***	-2.424***	-3.430***
	[8.79]	[8.86]	[8.86]	[8.91]	[2.86]	[5.31]	[8.20]
CAPEX/A	2.546***	2.607***	2.605***	2.701***	0.417	2.777***	4.773***
	[5.44]	[5.56]	[5.56]	[5.77]	[0.48]	[3.86]	[7.58]
RD/A	-6.510***	-6.557***	-6.555***	-6.484***	-0.716	-4.351*	-9.138***
	[4.75]	[4.79]	[4.79]	[4.73]	[0.21]	[1.73]	[5.52]
RDD	-0.266***	-0.289***	-0.289***	-0.296***	0.121	-0.044	-0.200**
	[3.76]	[4.06]	[4.06]	[4.22]	[1.13]	[0.37]	[2.20]
VOL	-0.058***	-0.059***	-0.060***	-0.062***	0.061***	-0.120***	-0.028
	[2.84]	[2.88]	[2.89]	[3.00]	[2.81]	[2.87]	[1.34]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	698,793	698,793	698,793	698,793	101,468	260,034	332,463
Adjusted R^2	0.509	0.509	0.509	0.509	0.734	0.437	0.758

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

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

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
DIVD	0.244***				0.554***	-0.255**	0.513***
	[3.69]				[5.90]	[-2.42]	[10.32]
DIV/E		8.397***					
		[10.07]					
PAYOUT/A			11.206***				
			[8.88]				
DIV6D				-0.354***			
				[-2.96]			
ASSETS	-1.344***	-1.336***	-1.330***	-1.311***	-2.278***	-1.971***	-1.487***
	[-19.70]	[-19.72]	[-19.62]	[-19.17]	[-8.57]	[-14.84]	[-14.42]
NI/E	-2.367***	-2.412***	-2.378***	-2.361***	-3.200***	-1.972***	-1.698***
	[-22.55]	[-23.06]	[-22.66]	[-22.49]	[-10.70]	[-11.79]	[-12.47]
DEBT/E	0.458***	0.455***	0.460***	0.458***	0.050	0.330***	0.886***
	[8.48]	[8.43]	[8.53]	[8.48]	[0.41]	[4.15]	[10.41]
CASH/E	5.121***	5.061***	5.098***	5.127***	3.460***	5.881***	5.895***
	[27.29]	[26.91]	[27.13]	[27.31]	[6.86]	[18.38]	[23.68]
PPE/E	0.259***	0.257***	0.260***	0.249**	0.200	0.753***	0.012
	[2.65]	[2.64]	[2.66]	[2.56]	[0.96]	[4.84]	[0.08]
CAPEX/E	3.799***	3.738***	3.806***	3.836***	4.350***	3.467***	4.251***
	[12.89]	[12.70]	[12.91]	[13.02]	[7.37]	[7.71]	[8.92]
RD/E	5.341***	5.269***	5.347***	5.303***	2.097	4.870***	6.484***
	[5.75]	[5.68]	[5.76]	[5.71]	[0.92]	[2.90]	[5.15]
RDD	0.088	0.091	0.087	0.036	0.331*	0.322*	0.610***
	[0.91]	[0.94]	[0.90]	[0.38]	[1.78]	[1.88]	[4.64]
VOL	-0.045	-0.040	-0.042	-0.049*	0.061**	-0.048	-0.042
	[-1.52]	[-1.36]	[-1.45]	[-1.67]	[2.05]	[-0.81]	[-1.43]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	698,793	698,793	698,793	698,793	101,468	260,034	332,463
Adjusted R^2	0.469	0.470	0.470	0.469	0.632	0.399	0.712

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

tional and market-specific factors. In developed markets with strong legal frameworks and transparent financial systems, such as those in Europe and Asia-Pacific, dividends may serve as credible signals of firm quality. In regions with less stable institutional environments, such as *South America*, dividends might fail to reassure investors or may even be interpreted as a sign of financial rigidity or misallocation of capital. Further the Appendix Tables 1 to 14 are structured by decade and allow for a more detailed assessment of the temporal evolution of the DIVD coefficient within each region. In *Asia-Pacific* and *Europe*, the positive effect of dividend payer status on firm valuation remains consistently strong and statistically significant across all three subperiods (1992–2002, 2003–2013, 2014–2024), suggesting a stable and persistent valuation relevance of dividends. In the *Other* region, the effect of DIVD is positive but more variable across decades, with significance levels and coefficient magnitudes fluctuating over time. The South American subsample reveals a time-varying relationship between dividend payments and firm valuation. While the coefficient on DIVD is significantly negative in the 2003-2013 period (-7.242), it turns positive in the 2014–2024 period (0.645), but without statistical significance. This reversal suggests that the market perception of dividends in South America may have evolved over time. One plausible interpretation is offered by La Porta et al. (2000), who argue that the value and signal of dividend payments depend heavily on the legal and institutional quality of a country. In environments with weak investor protection, dividends may be interpreted as inefficient or even value-destroying, reflecting agency conflicts or forced cash outflows. As South American capital markets gradually mature, with improvements in corporate governance, reporting standards, and investor protections (Carvalho and Pennacchi, 2012; Bank, 2020), dividends may have regained credibility as a signal of firm quality and shareholder orientation (La Porta et al., 1998). The negative or insignificant valuation effects observed during 2003–2013 in South America may also reflect heightened sensitivity to global liquidity conditions. The aftermath of the Argentine debt crisis in the early 2000s has already eroded investor confidence and contributes to prolonged macro-financial instability in the region. In particular, the 2013 Taper Tantrum constitutes a salient uncertainty shock that exposed the fragility of emerging capital markets and may have weakened the signaling power of dividends during this period. This interpretation aligns with the framework of La Porta et al. (1998), who argue that in countries with weak investor protection, dividends serve as a substitute governance mechanism. However, during periods of global financial stress, this signaling function may break down or even reverse, as investors prioritize liquidity and stability over payout assurances. The revealed decade-wise patterns underscore the importance of

considering both cross-sectional and temporal heterogeneity when interpreting the role of dividends in firm valuation. They also reinforce the notion that institutional development and macroeconomic stability shape how investors respond to corporate payout decisions.

In terms of control variables, several global patterns stand out: *Firm size (ASSETS)* shows a strong and consistently negative association with firm value across all regions. This may reflect agency-related inefficiencies in larger firms or the market's lower valuation of mature, slower-growing entities.
Cash holdings (CASH/E) and *capital expenditures (CAPEX/E)* are both positively related to firm value, suggesting that liquidity and reinvestment capacity are highly valued across countries.
Profitability (NI/E) and *R&D intensity (RD/E)* exhibit robust positive coefficients, particularly in later years. This highlights the growing importance of intangible assets and innovation, especially in developed markets.
Leverage (DEBT/E) has mixed effects: while it is negatively related to valuation in North America, it shows more benign or even positive associations in the global sample. This may reflect different investor expectations regarding capital structure and default risk.

In summary, the results suggest that the effect of dividend payer status on firm valuation is economically meaningful and statistically robust in many parts of the world - but not universal. The strength and direction of this relationship appear to depend critically on regional capital market characteristics, institutional quality and investor perceptions, highlighting that dividends are not a universally interpreted signal.

3.2. Dividend Premia

Model (1) in Tables 6 and 7 reports the estimated coefficients for DIVD in North America. The results indicate that dividend-paying firms are associated with significantly higher valuations, both statistically and economically. The coefficient for DIVD is 0.247 in the MA/A regression and 0.773 in the ME/E regression. Given the average MA/A of 2.771 and ME/E of 4.765 (see Tables 1 and 4), this translates into implied valuation premiums of approximately 8.9% and 16.2%, respectively, which is in line with the findings of Karpavičius and Yu (2018).

A reversed pattern emerges globally. The coefficient for DIVD is 0.453 in the MA/A regression and 0.244 in the ME/E regression (Tables 8 and 9). Based on the global

sample averages of 2.613 for MA/A and 3.032 for ME/E, this corresponds to a firm-level dividend premium of approximately 17.3% and 8.0%. These findings suggest that dividend payer status is positively associated with firm valuation, though the effect is stronger when measured relative to total assets.

Regional breakdowns add further insight. In *Europe*, dividend-paying firms show the highest valuation advantages, with estimated premia of 27.5%[3] for MA/A and 25.1%[4] for ME/E. *Africa* follows with 25.1%[5] for MA/A and a more modest 3.1%[6] for ME/E. In *Asia-Pacific*, dividend-paying firms also enjoy solid valuation advantages, with premia of 19.7%[7] for MA/A and 6.5%[8] for ME/E. The *Middle East* reports similarly strong effects: 20.9%[9] for MA/A and 21.2%[10] for ME/E. The *Other* region shows a sizable MA/A premium of 16.2%[11], but only a small ME/E premium of 1.7%[12]. In contrast, *South America* stands out for its negative association: estimated premia are -40.5%[13] for MA/A and -42.7%[14] for ME/E, suggesting that dividend payments may be interpreted less favorably by investors in this region. These relative differences support the interpretation proposed by Karpavičius and Yu (2018), who argue that the valuation relevance of dividends is context-dependent. In markets where legal institutions are strong and capital is abundant, dividends serve as a credible signal of firm quality. Conversely, in environments with higher macroeconomic risk or weaker investor protection, dividends may be discounted or even viewed skeptically. This may explain the strong negative coefficients observed in South America, where high inflation, unstable institutions, and concentrated ownership structures often lead investors to perceive dividend payments not as a sign of strength, but rather as inefficient capital allocation or opportunistic behavior by controlling shareholders (La Porta et al., 1998). To better capture temporal variation, I complement these panel regression estimates with year-by-year regressions of Model 1 that omit fixed effects but include industry controls based on GIC Sub-Industries.[15]

[3] 0.673 / 2.447 ≈ 0.275
[4] 0.762 / 3.035 ≈ 0.251
[5] 0.444 / 1.766 ≈ 0.251
[6] 0.079 / 2.529 ≈ 0.031
[7] 0.476 / 2.413 ≈ 0.197
[8] 0.171 / 2.617 ≈ 0.065
[9] 0.395 / 1.888 ≈ 0.209
[10] 0.458 / 2.157 ≈ 0.212
[11] 0.443 / 2.742 ≈ 0.162
[12] 0.061 / 3.492 ≈ 0.017
[13] -4.239 / 10.471 ≈ -0.405
[14] -5.702 / 13.353 ≈ -0.427
[15] This follows the approach in Karpavičius and Yu (2018), who use annual cross-sectional regressions with industry fixed effects to estimate yearly dividend premia.

These simplified OLS models provide regression-based estimates of the annual valuation effect of dividend payer status.

Fig. 5. Dividend Premium Estimates Northamerica

Fig. 6. Dividend Premium Estimates Global

In addition, similar to Baker and Wurgler (2004b,a), I compute raw dividend premia for MA/A and ME/E as the difference between the natural logarithms of average valuation ratios for dividend payers and nonpayers.[16] These raw estimates reflect unconditional valuation gaps and help visualize long-term trends across regions and time. The distinction between raw and regression-based dividend premia is conceptually important. While raw premia simply capture unconditional valuation differences between dividend-paying and non-paying firms, they do not account for differences in firm fundamentals. Regression-based premia control for observable firm characteristics such as size, profitability, leverage, and industry. As such, they provide a more accurate estimate of the marginal valuation effect attributable to dividends alone. Both sets of estimates are reported in Tables 10, 11, and 12. Together, they provide a nuanced picture of how the valuation relevance of dividends varies across regions (see also Figure 5 and Figure 6), time periods, and market conditions.

In *North America*, the dividend premium follows a cyclical pattern closely linked to macro-financial conditions. After moderate levels in the early 1990s, the MA/A and ME/E premiums rise noticeably in the aftermath of the dot-com bubble, peaking between 2004 and 2007, potentially reflecting a flight to quality ahead of the global financial crisis,

[16] i.e. $\log(\text{mean MA/A}_{\text{payers}}) - \log(\text{mean MA/A}_{\text{nonpayers}})$, following the definition in Appendix Table A.

which emerged earlier in the U.S. housing and credit markets, compared to the rest of the world. The premium weakens temporarily during the 2008-2009 financial crisis. Although coefficients remain positive, the MA/A premium drops to 0.073 in 2008 and recovers only gradually. A second decline occurs around the COVID-19 pandemic: in 2020, the MA/A premium turns significantly negative (-0.137), accompanied by a negative ME/E premium (-0.115). These reversals indicate that dividends may lose part of their signaling power during extreme uncertainty, possibly because of fears over payout sustainability. In the years that follow, the premium recovers partially. By 2024, the MA/A premium returns to 0.084 and the ME/E premium rises to 0.159, indicating that dividends regain some of their valuation relevance in the post-pandemic environment. However, the volatility of these estimates over the last decade underscores the changing investor perception of dividends, not as a static signal, but one whose informational content is contingent on the macro-financial environment.

The *Global* dividend premium shows substantial variation over time and is not consistently positive. While premiums are mostly negative between 1994 and 2007, there is a notable improvement during the global financial crisis, with the MA/A premium turning positive in 2008 (0.110) and 2020 (0.126). This suggests that dividend-paying firms may be perceived more favorably during periods of heightened uncertainty. However, outside such crisis episodes, global valuation effects remain weak or negative, especially for ME/E, which shows persistent valuation discounts throughout the sample. However, because the global sample aggregates diverse regions with varying economic and institutional characteristics, the results likely masks substantial underlying diversity. To explore these regional dynamics more closely, Table 12 presents raw MA/A-based dividend premia separately for each region. The regional breakdown reveals distinct valuation patterns across global markets. In *South America*, dividend-paying firms consistently trade at a substantial discount, with regression-based MA/A premia frequently below –0.5 after 2010 and reaching –1.1 in 2015. This suggests that dividends may be viewed as a signal of weak growth prospects or inflexibility in volatile environments. *Asia-Pacific* also shows mostly negative premia, though with less extreme values. However, a notable shift occurs during crisis periods: during the global financial crisis (2008–2010) and again after 2020, the premium turns mildly positive, implying that investors temporarily reassess dividends as signals of resilience. By contrast, *Europe* exhibits a transition from modestly negative or near-zero premia before 2005 to clearly positive values during and after the financial crisis, peaking at 0.723 in 2014. This shift aligns with improved perceptions of dividend

sustainability amid tighter governance standards. The *Middle East* and *Africa* show stronger and more consistent positive premia after 2008, with Africa's premium reaching 1.497 in 2001 and peaking at 6.458 in 2024. These trends suggest that in regions facing higher political or economic uncertainty, dividends may carry heightened informational value.

Finally, the *Other* region presents a mixed picture, with sporadic positive premia (e.g., 2008, 2017) likely driven by country-specific conditions. Overall, these findings confirm that dividend premia are not uniform but instead shaped by region-specific institutional and macroeconomic dynamics.

Overall, these findings demonstrate that the valuation implications of dividend payments are highly context-sensitive. Macroeconomic disruptions such as the global financial crisis and COVID-19 pandemic appear to temporarily raise the relative attractiveness of dividend-paying firms. Yet this effect is neither uniform nor permanent, it varies by region, institutional setting, and the nature of the crisis itself.

Table 10: 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	0.228*	0.108	-0.217	0.658**	0.198	-0.302
1993	0.304***	0.135	-0.236	0.826***	0.229	-0.316
1994	0.185**	0.091	-0.196	0.472***	0.145	-0.259
1995	0.254*	0.109	-0.287	0.955**	0.253	-0.316
1996	0.236**	0.096	-0.280	0.834***	0.209	-0.258
1997	0.192**	0.082	-0.159	0.809***	0.200	-0.169
1998	0.315***	0.141	-0.135	1.069***	0.272	-0.145
1999	0.325**	0.101	-0.590	1.276***	0.225	-0.594
2000	0.267*	0.103	-0.370	1.753***	0.416	-0.266
2001	0.292**	0.135	-0.165	0.950**	0.261	-0.104
2002	0.302***	0.166	-0.001	0.942***	0.306	0.037
2003	0.419***	0.170	-0.243	1.128***	0.261	-0.288
2004	0.504***	0.185	-0.265	1.061***	0.222	-0.301
2005	0.304***	0.120	-0.163	0.616**	0.138	-0.214
2006	0.542***	0.210	-0.187	1.126***	0.246	-0.222
2007	0.512***	0.201	-0.190	1.533***	0.328	-0.146
2008	0.129	0.073	-0.043	0.425	0.141	0.029
2009	0.288***	0.142	-0.101	0.863***	0.235	-0.081
2010	0.439***	0.192	-0.124	1.082***	0.256	-0.116
2011	0.519***	0.232	-0.165	1.195***	0.289	-0.168
2012	0.583***	0.242	-0.271	1.284***	0.271	-0.268
2013	0.219	0.079	-0.346	0.631*	0.118	-0.376
2014	0.282*	0.103	-0.334	1.264***	0.221	-0.222
2015	0.126	0.051	-0.297	1.107**	0.214	-0.197
2016	0.231*	0.095	-0.237	1.201***	0.227	-0.118
2017	0.319**	0.114	-0.322	0.932**	0.150	-0.310
2018	0.328**	0.131	-0.292	0.984**	0.188	-0.204
2019	0.107	0.040	-0.330	0.632	0.114	-0.284
2020	-0.436**	-0.137	-0.514	-0.770	-0.115	-0.361
2021	0.191	0.063	-0.258	0.413	0.064	-0.104
2022	0.068	0.031	-0.044	0.145	0.030	0.016
2023	-0.007	-0.003	-0.072	0.423	0.087	0.083
2024	0.210	0.084	-0.136	0.868	0.159	-0.025

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 11: Dividend Premiums (Regression and Raw, by Year): Global

Year	MA/A Coeff.	MA/A Premium	MA/A Raw	ME/E Coeff.	ME/E Premium	ME/E Raw
1992	-0.010	-0.010	-0.580	0.098	0.151	-0.189
1993	0.019	0.019	-0.720	-0.068	-0.087	-0.928
1994	-0.624***	-0.528	-0.959	-0.517*	-0.536	-1.182
1995	-0.614***	-0.491	-1.029	-0.433	-0.378	-1.395
1996	-0.286	-0.208	-0.944	-0.323	-0.220	-1.203
1997	-0.531***	-0.333	-0.990	-0.637***	-0.358	-1.223
1998	-0.325*	-0.175	-1.014	-0.183	-0.089	-1.148
1999	0.087	0.042	-1.149	-0.574***	-0.274	-1.318
2000	-0.331**	-0.155	-1.260	-0.638***	-0.263	-1.598
2001	-0.104	-0.039	-1.445	-0.535***	-0.181	-1.773
2002	0.164	0.055	-1.558	-0.486**	-0.146	-1.969
2003	0.524***	0.159	-1.628	-0.569**	-0.157	-1.877
2004	0.363**	0.112	-1.688	-0.790***	-0.223	-2.042
2005	-0.254	-0.102	-0.568	-0.466*	-0.152	-0.359
2006	0.061	0.024	-0.524	-0.357	-0.112	-0.318
2007	-0.090	-0.039	-0.499	-0.549***	-0.179	-0.318
2008	0.188	0.110	-0.476	-0.131	-0.072	-0.273
2009	-0.004	-0.002	-0.633	-0.410**	-0.156	-0.436
2010	-0.144	-0.058	-0.623	-0.632***	-0.214	-0.452
2011	-0.166	-0.075	-0.637	-0.568***	-0.239	-0.457
2012	-0.121	-0.049	-0.561	-0.404**	-0.138	-0.387
2013	-0.224	-0.084	-0.719	-1.019***	-0.324	-0.588
2014	-0.096	-0.034	-0.694	-0.980***	-0.301	-0.476
2015	-0.080	-0.026	-0.636	-0.958***	-0.264	-0.409
2016	-0.025	-0.009	-0.658	-0.950***	-0.282	-0.419
2017	0.124	0.041	-0.672	-0.990***	-0.279	-0.436
2018	0.042	0.015	-0.767	-1.101***	-0.363	-0.531
2019	0.274*	0.096	-0.673	-0.827***	-0.257	-0.429
2020	0.401**	0.126	-0.700	-0.841***	-0.232	-0.444
2021	0.128	0.040	-0.627	-0.940***	-0.230	-0.495
2022	-0.056	-0.019	-0.732	-1.035***	-0.299	-0.569
2023	-0.149	-0.051	-0.693	-1.075***	-0.296	-0.596
2024	1.156***	0.351	-0.876	-0.159	-0.042	-0.624

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 12: Dividend Premiums (Coefficient, Premium and Raw Estimates for MA/A, by Year and Region)

Year	Europe			Asia Pacific			South America			Other			Middle East			Africa		
	Coeff.	Prem.	Raw	Coeff.	Prem.	Raw	Coeff.	Prem.	Raw	Coeff.	Prem.	Raw	Coeff.	Prem.	Raw	Coeff.	Prem.	Raw
1992	0.217	0.205	-0.281	-0.235	-0.267	-1.029	0.050	0.048	-0.815	0.444	0.559	0.488			-0.770	0.028	0.047	0.333
1993	-0.153	-0.132	-0.528	0.068	0.075	-0.918	-0.297***	-0.141	-1.548	0.630	0.798	0.498			0.239	-0.326	-0.567	0.380
1994	-0.254	-0.229	-0.465	-0.377**	-0.354	-1.202	-1.893	-0.222	-0.148	0.062	0.084	0.313			1.010	0.008	0.015	0.420
1995	-0.295	-0.225	-0.695	-0.387**	-0.409	-0.934	-3.806	-0.371	-0.828	-0.107	-0.126	-0.021	0.022	0.023	0.550	0.013	0.020	-0.796
1996	0.143	0.094	-0.817	-0.270	-0.282	-0.804	2.906	0.289	-0.356	-0.131	-0.096	-0.753	0.022	0.023	0.380	-0.085	-0.119	-0.418
1997	-0.046	-0.028	-0.824	-0.063	-0.052	-0.996	-1.173	-0.124	-0.596	-0.138	-0.108	-0.385	0.088	0.086	-0.126	-0.017	-0.020	-0.310
1998	-0.086	-0.047	-0.995	-0.117	-0.085	-1.067	6.530*	0.585	-0.153	-0.241	-0.149	-0.661	0.188	0.099	-0.470	0.166	0.168	-0.630
1999	0.394	0.204	-1.055	0.274	0.169	-1.245	7.191	0.646	0.053	0.232	0.101	-0.903	-5.565	-3.143	-0.502	0.000	0.000	-0.591
2000	0.051	0.026	-1.056	0.039	0.023	-1.321	-0.555	-0.053	-0.370	-0.722	-0.216	-1.361	-0.334	-0.218	-0.325	0.030	0.025	-0.834
2001	0.111	0.041	-1.345	0.214	0.102	-1.541	0.637	0.057	-0.279	-0.331	-0.072	-1.313	0.214	0.150	0.055	2.399*	1.497	-1.222
2002	0.491*	0.144	-1.560	0.476**	0.214	-1.575	-4.695	-0.445	-0.522	-0.942	-0.164	-1.489	-0.470	-0.284	-0.519	1.861	0.966	-1.433
2003	0.718**	0.197	-1.522	0.882***	0.330	-1.812	-1.259	-0.126	-0.382	0.378	0.066	-1.543	0.940	0.601	-0.037	1.362	0.505	-1.796
2004	0.936***	0.244	-1.649	0.591***	0.221	-1.782	-3.916	-0.513	-1.021	-0.380	-0.084	-1.662	0.319	0.191	-0.221	1.960	0.655	-1.829
2005	0.321	0.133	-0.669	0.391**	0.204	-0.462	2.726	0.162	-0.043	-0.260	-0.115	-0.664	-0.818	-0.355	-0.388	0.340	0.151	-0.629
2006	0.549**	0.220	-0.457	0.224	0.110	-0.651	10.629*	0.660	0.183	0.383	0.170	-0.456	-0.001	-0.000	-0.228	0.591	0.253	-0.305
2007	0.373*	0.172	-0.463	-0.249*	-0.120	-0.553	-0.290	-0.031	-0.425	0.742	0.291	-0.391	-0.294**	-0.154	-0.205	2.290***	1.006	-0.088
2008	0.804***	0.468	-0.433	0.012	0.008	-0.364	-5.574*	-0.664	-1.209	1.117**	0.579	-0.525	0.968	0.694	-0.166	0.589	0.356	-0.038
2009	1.151***	0.574	-0.519	0.049	0.024	-0.636	-10.007***	-0.915	-1.269	-0.111	-0.041	-0.537	0.044	0.025	-0.342	0.893*	0.512	-0.075
2010	1.076***	0.543	-0.374	-0.037	-0.016	-0.737	-12.750***	-1.114	-1.105	-0.046	-0.016	-0.400	0.495	0.252	-0.220	0.077	0.044	-0.052
2011	1.119***	0.621	-0.132	-0.057	-0.028	-0.737	-6.747**	-0.563	-1.412	0.032	0.014	-0.476	0.286**	0.165	-0.374	0.059	0.039	-0.305
2012	1.351***	0.671	-0.170	-0.328*	-0.137	-0.691	-5.415*	-0.481	-1.147	0.364	0.148	-0.167	0.738*	0.405	-0.418	-0.096	-0.070	-0.057
2013	1.419***	0.625	-0.176	-0.484***	-0.186	-0.900	-7.083**	-0.667	-1.341	0.429	0.175	-0.357	1.211***	0.590	-0.492	0.573	0.317	-0.370
2014	1.652***	0.723	-0.201	-0.155	-0.054	-0.849	-8.403***	-0.834	-1.410	0.327	0.133	-0.328	0.598	0.320	-0.431	-0.016	-0.010	-0.159
2015	1.879***	0.719	-0.248	-0.285	-0.092	-0.734	-10.442***	-1.087	-1.980	0.174	0.066	-0.348	0.575*	0.322	-0.375	0.381	0.192	-0.385
2016	1.503***	0.557	-0.348	-0.005	-0.002	-0.742	-8.576***	-0.827	-1.327	0.501	0.196	-0.439	0.292*	0.170	-0.293	0.984**	0.489	-0.294
2017	1.511***	0.560	-0.304	0.042	0.014	-0.791	-7.491**	-0.723	-1.083	1.034**	0.375	-0.448	0.851***	0.419	-0.530	0.797*	0.402	-0.213
2018	1.401***	0.560	-0.385	-0.004	-0.002	-0.882	-6.155*	-0.643	-1.083	0.543	0.196	-0.622	0.601	0.308	-0.528	0.407	0.219	-0.238
2019	1.660***	0.596	-0.319	0.161	0.058	-0.810	-5.120	-0.551	-0.992	1.080***	0.394	-0.327	0.711***	0.385	-0.393	0.436	0.240	-0.263
2020	2.302***	0.665	-0.488	0.432**	0.142	-0.753	-7.307***	-0.785	-1.548	0.441	0.160	-0.394	0.411	0.201	-0.521	-0.450	-0.260	-0.383
2021	2.175***	0.614	-0.417	-0.046	-0.015	-0.673	-6.363**	-0.723	-1.342	0.361	0.126	-0.380	0.733**	0.334	-0.424	0.493	0.212	-0.716
2022	1.617***	0.536	-0.490	-0.020	-0.007	-0.776	-9.932***	-1.025	-1.970	0.279	0.109	-0.463	0.322**	0.160	-0.390	0.087	0.056	-0.166
2023	1.557***	0.576	-0.346	-0.214	-0.075	-0.769	-5.629**	-0.566	-1.270	0.386	0.139	-0.541	0.438**	0.178	-0.465	0.035	0.025	-0.074
2024	0.828	0.271	-1.055	1.803***	0.502	-0.884	0.150***	0.167	-0.030	-0.427	-0.186	-0.790	15.257***	6.458	0.316	-0.079	-0.061	0.119

Notes: Coeff. = Dividend dummy coefficient. Prem. = Coeff. ÷ Mean of dependent variable. Raw = URaw premium. Empty spaces indicate not enough observations for the year. $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$

3.3. Panel data regressions for Share Repurchases

3.3.1. Repurchases in North America

In addition to dividends, share repurchases play an increasingly important role in corporate payout policies, especially in North America. Since the early 2000s, buybacks regularly exceed dividend payouts in the U.S. (see Figure 3, signaling a major shift in how firms return capital to shareholders and raising the question of whether markets systematically reward repurchasing firms with higher valuations and how this relationship evolves over time and across regions.

Table 13: Determinants of MA/A: Repurchasing Firms in North America

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
REPD	-0.051**				-0.160***	-0.009	0.029
	[-2.07]				[-4.24]	[-0.32]	[0.58]
REP/A		1.679***					
		[9.08]					
PAYOUTD			-0.178***				
			[-6.32]				
REP6D				-0.271***			
				[-6.89]			
ASSETS	-0.353***	-0.326***	-0.342***	-0.343***	-0.592***	-0.556***	-0.412***
	[-11.23]	[-9.93]	[-10.86]	[-10.96]	[-10.29]	[-8.11]	[-6.15]
NI/A	-0.163	-0.090	-0.162	-0.167	0.535***	-0.249	-0.519***
	[-1.58]	[-0.80]	[-1.56]	[-1.62]	[3.61]	[-1.32]	[-2.88]
DEBT/A	-0.636***	-0.538***	-0.661***	-0.659***	-0.560**	-0.623***	-1.047***
	[-5.42]	[-4.46]	[-5.62]	[-5.63]	[-2.47]	[-2.68]	[-4.41]
CASH/A	1.910***	1.580***	1.908***	1.911***	2.330***	1.646***	1.022***
	[13.42]	[10.66]	[13.42]	[13.46]	[9.68]	[6.49]	[4.06]
PPE/A	-1.371***	-1.167***	-1.353***	-1.347***	-1.544***	-1.851***	-0.922**
	[-6.37]	[-5.32]	[-6.27]	[-6.25]	[-4.45]	[-3.78]	[-2.56]
CAPEX/A	4.999***	4.917***	4.981***	4.941***	3.552***	3.948***	3.813***
	[13.98]	[13.42]	[13.93]	[13.85]	[8.50]	[5.39]	[4.24]
RD/A	1.935***	2.192***	1.951***	1.947***	2.357***	1.959***	0.592
	[7.41]	[7.15]	[7.48]	[7.47]	[5.68]	[3.93]	[1.63]
RDD	-0.534***	-0.441***	-0.528***	-0.537***	-0.412*	-0.682**	-0.682**
	[-3.47]	[-2.90]	[-3.43]	[-3.49]	[-1.65]	[-2.08]	[-2.23]
VOL	0.223***	0.238***	0.211***	0.214***	0.199***	0.230***	-0.041
	[4.24]	[4.58]	[4.01]	[4.05]	[2.59]	[2.81]	[-0.46]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	76,682	66,637	76,682	76,682	30,157	24,007	21,784
Adjusted R^2	0.473	0.493	0.473	0.474	0.490	0.621	0.592

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 14: Determinants of ME/E: Repurchasing Firms in North America

	Full Sample				**1992–2002** / **2003–2013** / **2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
REPD	0.113*				-0.193**	0.223***	0.124
	[1.88]				[-2.23]	[2.81]	[0.91]
REP/E		4.000***					
		[11.82]					
PAYOUTD			-0.064				
			[-0.91]				
REP6D				-0.334***			
				[-3.45]			
ASSETS	-0.795***	-0.681***	-0.784***	-0.775***	-1.110***	-0.988***	-0.922***
	[-9.61]	[-7.84]	[-9.44]	[-9.36]	[-8.12]	[-5.32]	[-4.93]
NI/E	0.235**	0.303***	0.236**	0.235**	0.274*	-0.359*	0.367*
	[2.06]	[2.60]	[2.07]	[2.06]	[1.70]	[-1.80]	[1.81]
DEBT/E	0.609***	0.620***	0.608***	0.606***	0.303*	0.375**	0.987***
	[6.86]	[6.68]	[6.84]	[6.82]	[1.89]	[2.34]	[6.16]
CASH/E	2.946***	2.796***	2.947***	2.945***	2.722***	3.361***	3.038***
	[16.82]	[15.23]	[16.81]	[16.78]	[9.18]	[11.59]	[9.46]
PPE/E	0.296*	0.320*	0.297*	0.300*	0.362	0.210	0.126
	[1.69]	[1.78]	[1.70]	[1.71]	[1.23]	[0.82]	[0.41]
CAPEX/E	4.591***	4.255***	4.589***	4.581***	3.410***	5.394***	5.203***
	[8.99]	[8.06]	[8.98]	[8.97]	[5.85]	[5.99]	[4.36]
RD/E	3.362***	3.425***	3.362***	3.359***	3.317***	2.930***	2.700***
	[12.81]	[12.10]	[12.80]	[12.79]	[8.34]	[6.15]	[6.47]
RDD	-0.475	-0.208	-0.473	-0.481	-0.339	-0.890	-0.050
	[-1.27]	[-0.57]	[-1.26]	[-1.28]	[-0.53]	[-1.60]	[-0.06]
VOLA	-0.220*	-0.134	-0.236*	-0.247*	-0.155	-0.200	-0.595**
	[-1.68]	[-1.05]	[-1.81]	[-1.88]	[-0.81]	[-0.90]	[-2.32]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	76,682	66,637	76,682	76,682	30,157	24,007	21,784
Adjusted R^2	0.571	0.604	0.571	0.572	0.522	0.666	0.695

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

In the North American sample, I find that the repurchase dummy (REPD) is negatively associated with firm value in the early period 1992–2002 (–0.160 for MA/A, significant at the 1% level), but this effect weakens and even turns slightly positive in later decades. Interestingly, the effect is stronger for ME/E than for MA/A in some subperiods, suggesting that the stock market reacts more sensitively to repurchases when valuation is measured relative to equity rather than total assets. This highlights a key difference: while MA/A reflects the overall market valuation of the firm, ME/E captures investor sentiment specifically toward the firm's equity. Further, I find that the actual intensity of repurchases, measured by REP/A (see Table 13)or REP/E (see Table 14, is consistently and strongly positively related to both valuation measures. This implies that markets differentiate between symbolic repurchase announcements and financially substantial buyback programs. Similar patterns hold for alternative intensity measures like REP6D. The evidence suggests that buybacks serve as credible signals only when they are substantial in scale. This relationships seems to be time-varying and reflects a broader institutional shift in U.S. capital markets: while buybacks were less accepted in the 1990s, they have since become the dominant payout method in the U.S.. Over time, investor interpretation seems to shift from skepticism to a more favorable view, particularly when repurchases are sizable and sustained. This evolution is visible in my time-split regressions, where valuation effects become more positive and more significant in the 2003–2013 and 2014–2024 subsamples.

3.3.2. Repurchases Global

Globally, the picture is less consistent. In the full sample, REPD shows a mildly positive association with MA/A (0.153), but results are unstable across time and largely insignificant for ME/E. Again, repurchase intensity in form of REP/A proves a stronger valuation driver than the binary presence of a repurchase. When examining regional clusters, I find substantial heterogeneity: In *Europe*, repurchases do not produce clear valuation effects. All, REPD, REP6D and REP/A (REP/E) are insignificant, indicating limited investor response to buybacks. In *Asia-Pacific*, I observe emerging relevance. REP6D becomes significantly positive in the most recent decade, suggesting growing acceptance in developed Asian markets. In the *Middle East*, results are mixed but show interesting dynamics. While repurchase dummies (REPD) are not significant in earlier decades, I observe a strong and significant positive association in the most recent period (2014–2024), both for MA/A (2.561 and ME/E (3.233). This suggests that repurchases

have gained credibility as a signaling device in recent years. However, intensity measures such as REP/A and REP/E remain statistically insignificant, and alternative proxies like REP6D are even negative, though not robust.

Table 15: Determinants of MA/A: Repurchasing Firms in the Global Sample

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
REPD	0.153**				-0.013	0.024	0.343***
	[1.99]				[-0.16]	[0.17]	[2.91]
REP/A		23.533*					
		[1.89]					
PAYOUTD			0.451***				
			[9.38]				
REP6D				0.446**			
				[2.07]			
ASSETS	-2.279***	-2.279***	-2.298***	-3.813***	-2.783***	-3.197***	-3.550***
	[-31.02]	[-31.02]	[-31.06]	[-7.17]	[-11.13]	[-23.14]	[-26.74]
NI/A	-4.409***	-4.409***	-4.447***	-2.005**	-4.751***	-3.060***	-2.439***
	[-21.07]	[-21.07]	[-21.21]	[-2.21]	[-7.76]	[-9.43]	[-9.28]
DEBT/A	4.637***	4.637***	4.687***	2.011	1.933***	4.817***	5.295***
	[16.87]	[16.87]	[16.98]	[1.48]	[2.88]	[9.35]	[15.06]
CASH/A	2.537***	2.536***	2.492***	2.102	3.269***	1.207**	2.894***
	[8.87]	[8.87]	[8.74]	[1.64]	[3.58]	[2.53]	[7.62]
PPE/A	-2.750***	-2.750***	-2.707***	-1.146	-2.302***	-2.423***	-3.489***
	[-8.93]	[-8.93]	[-8.80]	[-1.26]	[-2.93]	[-5.30]	[-8.33]
CAPEX/A	2.712***	2.713***	2.544***	2.817*	0.595	2.770***	4.918***
	[5.79]	[5.79]	[5.44]	[1.76]	[0.68]	[3.85]	[7.81]
RD/A	-6.478***	-6.477***	-6.508***	-2.548	-0.593	-4.354*	-9.148***
	[-4.72]	[-4.72]	[-4.74]	[-0.37]	[-0.17]	[-1.73]	[-5.52]
RDD	-0.306***	-0.306***	-0.266***	0.193	0.115	-0.043	-0.203**
	[-4.29]	[-4.29]	[-3.77]	[0.84]	[1.07]	[-0.36]	[-2.23]
VOL	-0.063***	-0.063***	-0.058***	-0.061	0.060***	-0.119***	-0.030
	[-3.05]	[-3.05]	[-2.84]	[-0.92]	[2.76]	[-2.86]	[-1.45]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	698,793	698,793	698,793	42,770	101,468	260,034	332,463
Adjusted R^2	0.509	0.509	0.509	0.541	0.734	0.437	0.758

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 16: Determinants of ME/E: Repurchasing Firms in the Global Sample

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
REPD	0.154				-0.051	0.072	0.329
	[1.17]				[-0.36]	[0.27]	[1.25]
REP/E		15.765*					
		[1.86]					
PAYOUTD			0.249***				
			[3.81]				
REP6D				0.608**			
				[1.98]			
ASSETS	-1.332***	-1.332***	-1.344***	-2.827***	-2.237***	-1.980***	-1.472***
	[-19.63]	[-19.63]	[-19.71]	[-6.21]	[-8.45]	[-14.91]	[-14.30]
NI/E	-2.361***	-2.362***	-2.367***	-1.293***	-3.185***	-1.976***	-1.689***
	[-22.49]	[-22.49]	[-22.55]	[-2.83]	[-10.66]	[-11.82]	[-12.42]
DEBT/E	0.457***	0.457***	0.458***	-0.088	0.050	0.332***	0.885***
	[8.46]	[8.46]	[8.48]	[-0.29]	[0.41]	[4.17]	[10.40]
CASH/E	5.127***	5.126***	5.121***	6.296***	3.460***	5.875***	5.907***
	[27.30]	[27.30]	[27.29]	[7.44]	[6.86]	[18.36]	[23.73]
PPE/E	0.254***	0.254***	0.259***	1.504***	0.188	0.758***	0.005
	[2.60]	[2.60]	[2.65]	[2.97]	[0.91]	[4.87]	[0.03]
CAPEX/E	3.821***	3.820***	3.798***	4.765***	4.406***	3.448***	4.269***
	[12.96]	[12.95]	[12.89]	[3.59]	[7.47]	[7.68]	[8.96]
RD/E	5.317***	5.319***	5.342***	2.438	2.074	4.884***	6.425***
	[5.72]	[5.72]	[5.75]	[0.54]	[0.90]	[2.91]	[5.10]
RDD	0.065	0.065	0.089	0.096	0.315*	0.326*	0.606***
	[0.67]	[0.67]	[0.92]	[0.19]	[1.70]	[1.91]	[4.61]
VOL	-0.047	-0.047	-0.044	0.085	0.059**	-0.045	-0.044
	[-1.61]	[-1.61]	[-1.51]	[0.83]	[1.99]	[-0.76]	[-1.50]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	698,793	698,793	698,793	42,770	101,468	260,034	332,463
Adjusted R^2	0.469	0.469	0.469	0.428	0.631	0.399	0.712

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

In *South America*, *Africa*, and *Other* regions, valuation responses are weak or inconsistent, pointing to either limited use of buybacks or different investor interpretations.

3.4. Repurchase Premia

The estimated repurchase premiums in *North America* are -1.8%[17] for MA/A and 2.4%[18] for ME/E, indicating that repurchasing firms trade at slightly lower asset-based valuations but receive a modest equity-based premium in North American markets. The diverging patterns indicate that equity investors may be more responsive to repurchase announcements than debt or asset-based stakeholders. *North America*, valuation effects of share repurchases differ from the global pattern. Unlike the generally negative or unstable global premiums, North American coefficients are predominantly positive and often significant, especially during the period from 2004 to 2011. For instance, the ME/E repurchase premium reaches 22.4% in 2007 and remains above 20% through the aftermath of the global financial crisis. Even during crisis years such as 2008–2011, repurchase coefficients for ME/E stay positive and significant, suggesting that markets in the U.S. and Canada view buybacks as credible signals of confidence and financial flexibility.

However, valuation effects weaken markedly after 2012. While the ME/E premium remains mostly positive, coefficients decline and significance levels drop. The MA/A premium fluctuates around zero and turns negative in several years. These patterns point to a diminishing marginal effect of buybacks as they become more widespread and potentially less informative. Unlike dividends, which retain their countercyclical signaling strength, repurchases appear more vulnerable to market saturation and shifting investor skepticism.

[17] -0.051 / 2.771 ≈ -0.018
[18] 0.113 / 4.765 ≈ 0.024

Table 17: Repurchase Premiums (Regression-Based and Premium, by Year): Global

Year	Coef MAA	Premium MAA	Coef MEE	Premium MEE
1992	0.000***	0.000	0.000***	0.000
1993	-0.125	-0.056	-0.064	-0.018
1994	-0.102	-0.050	0.063	0.019
1995	-0.178*	-0.076	-0.064	-0.017
1996	-0.140	-0.057	-0.140	-0.035
1997	0.047	0.020	0.256	0.063
1998	-0.266**	-0.119	0.001	0.000
1999	-0.230	-0.071	-0.240	-0.042
2000	-0.159	-0.062	0.348	0.083
2001	-0.084	-0.039	0.249	0.068
2002	0.158**	0.087	0.579**	0.188
2003	-0.025	-0.010	0.170	0.039
2004	0.321***	0.118	0.968***	0.202
2005	0.318***	0.126	0.885***	0.198
2006	0.403***	0.156	0.890***	0.194
2007	0.339***	0.133	1.048***	0.224
2008	0.039	0.022	0.529**	0.175
2009	-0.074	-0.037	-0.023	-0.006
2010	0.231**	0.101	0.927***	0.219
2011	0.199**	0.089	0.855***	0.207
2012	0.133	0.055	0.407	0.086
2013	0.073	0.026	0.592*	0.110
2014	0.008	0.003	0.481	0.084
2015	-0.007	-0.003	0.620	0.120
2016	-0.002	-0.001	0.366	0.069
2017	0.124	0.044	0.225	0.036
2018	0.129	0.051	0.718**	0.137
2019	-0.068	-0.026	0.005	0.001
2020	-0.030	-0.009	0.166	0.025
2021	-0.027	-0.009	0.177	0.027
2022	0.136	0.062	0.327	0.067
2023	0.092	0.041	0.411	0.084
2024	-0.044	-0.018	0.127	0.023

Notes: Coeff. = REPD coefficient; Premium = Coeff. divided by Mean MA/A or ME/E. $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$

Table 18: Repurchase Premiums (Regression-Based and Premium, by Year): Global

Year	Coef MAA	Premium MAA	Coef MEE	Premium MEE
1992	0.113	0.118	-0.141	-0.217
1993	0.260*	0.256	0.334	0.425
1994	-0.021	-0.018	-0.032	-0.033
1995	-0.114	-0.091	-0.807***	-0.705
1996	0.572*	0.416	0.689	0.468
1997	0.250	0.157	0.894	0.503
1998	0.594	0.319	0.677	0.330
1999	0.064	0.031	0.535	0.255
2000	-0.010	-0.005	-0.454	-0.187
2001	0.171	0.065	-0.379	-0.129
2002	-0.015	-0.005	-0.039	-0.012
2003	0.767*	0.233	1.092	0.302
2004	0.970**	0.300	0.755	0.213
2005	-0.800***	-0.322	-1.269***	-0.413
2006	0.348	0.137	0.004	0.001
2007	-0.397*	-0.171	-1.306**	-0.425
2008	-0.655***	-0.384	-0.946***	-0.518
2009	-0.889***	-0.388	-1.325***	-0.505
2010	0.736	0.298	-0.439	-0.149
2011	-0.531	-0.241	-0.348	-0.146
2012	-1.645***	-0.661	-2.234***	-0.767
2013	-0.562	-0.210	0.450	0.143
2014	-1.803***	-0.644	-2.490***	-0.764
2015	-0.842**	-0.278	-0.700	-0.193
2016	-1.586***	-0.541	-1.988***	-0.589
2017	-1.937***	-0.641	-0.346	-0.098
2018	-1.019*	-0.373	-1.136	-0.375
2019	-0.405	-0.142	-2.146***	-0.668
2020	-0.476	-0.150	-0.147	-0.041
2021	-0.975***	-0.303	-0.843	-0.206
2022	-0.933***	-0.322	-0.685	-0.198
2023	-0.462	-0.157	-0.784	-0.216
2024	-0.858	-0.261	-1.539	-0.407

Notes: Coeff. = REPD coefficient; Premium = Coeff. divided by Mean MA/A or ME/E. $^{*}p < 0.1$, $^{**}p < 0.05$, $^{***}p < 0.01$

Globally, the estimated repurchase premiums from the panel data regessions are 5.9%[19] for MA/A and 5.1%[20] for ME/E, suggesting a modest valuation premium for repurchasing firms in global markets, both in terms of assets and equity. The year by year regression estimates suggest less stable and often negative premia, indicating a more ambiguous role of buybacks outside North America. Regression-based valuation effects for repurchasing firms fluctuate substantially over time and are rarely statistically significant. While isolated years such as 2003–2004 show positive ME/E premiums, the broader pattern from 2005 onward is characterized by negative or insignificant coefficients. For example, global ME/E premiums turn sharply negative during and after the global financial crisis, reaching -0.767 in 2012 and -0.764 in 2014, with similarly weak results for MA/A. This suggests that, in many markets, share repurchases are not yet perceived as a reliable or credible signal of firm quality. Instead, they may be interpreted as opportunistic or driven by financial engineering, especially in environments lacking strong shareholder protections or transparent capital allocation norms. This interpretation is supported by the fact that repurchase premiums are negative in *Europe* (-1.1%[21] for MA/A; –4.7% [22] for ME/E), *Africa* (–32.8%[23] for ME/E), and the *Other* region (–3.5%[24] for MA/A; –7.8%[25] for ME/E). However, some regions exhibit positive valuation effects. In particular, the *Middle East* shows the strongest and most consistent premiums (MA/A: 37.4%[26], ME/E: 39.9%[27]), suggesting that repurchases may have gained credibility as a signaling device in recent years. Similarly, *South America* shows unusually large premiums (MA/A: 52.4%[28], ME/E: 85.4%[29]), though the extremely high magnitudes raise questions about possible distortions due to outliers or data structure. Other regions such as *Asia-Pacific* (MA/A: 1.3%[30], ME/E: 2.7%[31]) and *Africa* (MA/A: 6.3%[32]) display only modest valuation responses, which suggests that buybacks may still lack strong signaling value outside North America. Overall, these findings highlight that while dividends enjoy broad investor

[19] $0.153 \,/\, 2.613 \approx 0.059$
[20] $0.154 \,/\, 3.032 \approx 0.051$
[21] $-0.028/2.4474 = -0.0114$
[22] $-0.142/3.0345 = -0.0468$
[23] $-0.83/2.5292 = -0.3282$
[24] $-0.095/2.742 = -0.0346$
[25] $-0.273/3.4918 = -0.0782$
[26] $0.707/1.8881 = 0.3745$
[27] $0.86/2.1572 = 0.3987$
[28] $5.487/10.471 = 0.5240$
[29] $11.403/13.3529 = 0.8540$
[30] $0.032/2.4133 = 0.0133$
[31] $0.071/2.6166 = 0.0271$
[32] $0.111/1.766 = 0.0629$

trust, the valuation relevance of repurchases remains context-specific and institutionally contingent.

In summary, my findings show that repurchases do not generate a valuation premium by default. Rather, the scale of repurchase activity drives market response. While dividends are consistently associated with higher firm valuations across contexts, repurchases operate more selectively, rewarded only when they are large and embedded in markets that recognize them as credible signals.

4. Conclusion

This study provides robust evidence for the existence of a statistically and economically meaningful dividend premium across global capital markets. Dividend-paying firms are systematically valued higher than nonpayers, both in terms of market-to-book ratios for assets (MA/A) and equity (ME/E). On average, the dividend premium amounts to approximately 11.4% for MA/A and 10.8% for ME/E. These effects are particularly strong in Asia-Pacific (19.7% MA/A; 6.5% ME/E), the Middle East (20.9% MA/A; 21.2% ME/E), and Africa (25.1% MA/A), while persistently negative premia in South America suggest that dividend signals may be interpreted differently in contexts with high macroeconomic volatility and weaker institutions. Importantly, the dividend premium is not stable over time. It tends to rise during periods of heightened uncertainty, such as the global financial crisis, the COVID-19 pandemic, or the Ukraine war, when dividends signal financial resilience. By contrast, during boom phases like the late 1990s or pre-crisis years, the premium often weakens or turns negative. This underlines the cyclical and context-dependent nature of dividend relevance.

Building on the growing use of share repurchases (particularly in North America) and an expanding academic literature, this study also analyzes their valuation effects. While repurchases have become a dominant payout mechanism, their market impact remains less consistent. In North America, the average repurchase premium reaches 8.4% for MA/A and 15.9% for ME/E, indicating substantial investor recognition when buybacks are implemented effectively. However, the global average repurchase premium is more modest (5.9% (MA/A) and 5.1% (ME/E)) and varies significantly across regions. In the Middle East, repurchases now yield the strongest valuation response among all regions, with premiums of 37.4% (MA/A) and 39.9% (ME/E). By comparison, the effects in Africa (6.3% MA/A; -32.8% ME/E) and especially South America (52.4% MA/A; 85.4% ME/E) are more volatile and difficult to interpret. Asia-Pacific shows moderate but positive valuation responses (1.3% MA/A; 2.7% ME/E), consistent with rising acceptance of repurchases in developed Asian markets.

I reveal that, unlike dividends, merely conducting a share repurchase does not guarantee a valuation premium. Instead, the intensity or scale of the buyback appears to be the key driver. This finding contrasts with dividends, where the binary act of paying, even at low level, already signals firm quality and long-term stability. Dividends seem to act as clear valuation signals that cut through informational noise, while repurchases tend to be lost

in that noise unless their scale is substantial. In other words, the presence of buybacks alone is insufficient, only sizable repurchase activity is interpreted as meaningful by the market.

The observed effects reinforce the view that dividends remain the more universally accepted and robust signal of firm quality and commitment, particularly in uncertain environments. Repurchases, on the other hand, are rewarded only selectively, typically in markets with strong investor protections, transparent governance, and a mature understanding of capital return strategies. This asymmetric pattern confirms concerns raised in the literature (Brav et al., 2005; Banyi et al., 2008) about the signaling credibility of buybacks. The observed cyclicality of the dividend premium supports catering-based explanations (Baker and Wurgler, 2004b) and reinforces its informational value during crises. Meanwhile, the cross-regional heterogeneity aligns with institutional theories of investor protection (La Porta et al., 2000), suggesting that payout policies are interpreted through a contextual lens. In sum, payout policy remains a key valuation driver in international equity markets, but its impact is shaped by regional norms, macroeconomic conditions, and firm-specific fundamentals.

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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 (AT) − book value of equity (CEQ) + market value of equity (CSHO × 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.	–
REP6D	Equals 1 if firm repurchased shares at least once in the last 6 years, including the current year; 0 otherwise.	–
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/E	Net income over book value of equity.	0.5% and 99.5%

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Variable	Definition	Winsorization
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.	–
VOL	Standard deviation of monthly stock returns over fiscal year.	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%
RE/A	Retained earnings (RE) over book value of assets.	0.5% and 99.5%
RE/E	Retained earnings over book value of equity.	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.	–

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Variable	**Definition**	**Winsorization**
Equity dividend premium (regression-based)	ME/E regression-coefficient estimate for DIVD as proxy for dividend premium,	–

Appendix B. Panel Regression Results for Dividends by Region

A. Europe

Table 1: Determinants of Market-to-Assets Ratio (MA/A): Europe

	Full Sample				**1992–2002** / **2003–2013** / **2014–2024**		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
DIVD	0.673***				0.195*	0.553***	0.488***
	[10.18]				[1.67]	[6.47]	[6.00]
DIV/A		12.611***					
		[8.21]					
PAYOUT/A			10.929***				
			[7.78]				
DIV6D				0.787***			
				[8.17]			
ASSETS	-2.082***	-2.053***	-2.053***	-2.098***	-2.823***	-2.407***	-3.594***
	[-15.56]	[-15.39]	[-15.39]	[-15.63]	[-9.08]	[-10.30]	[-12.89]
NI/A	-3.794***	-3.829***	-3.819***	-3.750***	-4.994***	-2.504***	-1.520***
	[-10.54]	[-10.61]	[-10.58]	[-10.44]	[-5.75]	[-4.68]	[-2.91]
DEBT/A	5.161***	5.185***	5.175***	5.134***	4.875***	3.763***	7.238***
	[8.80]	[8.83]	[8.81]	[8.77]	[3.53]	[4.11]	[8.13]
CASH/A	2.851***	2.756***	2.760***	2.861***	3.034**	2.915***	1.714**
	[5.55]	[5.34]	[5.35]	[5.57]	[2.19]	[3.33]	[2.53]
PPE/A	-1.421***	-1.434***	-1.436***	-1.450***	-2.586**	-0.968*	-2.855***
	[-3.45]	[-3.48]	[-3.48]	[-3.52]	[-2.51]	[-1.82]	[-3.43]
CAPEX/A	2.062**	2.055**	2.056**	2.135**	-0.899	3.664***	1.795
	[2.36]	[2.36]	[2.36]	[2.44]	[-0.66]	[2.67]	[1.40]
RD/A	-6.945***	-7.015***	-7.003***	-6.938***	-2.114	-4.809	-8.900***
	[-3.98]	[-4.04]	[-4.03]	[-3.98]	[-0.70]	[-1.55]	[-3.95]
RDD	-0.228**	-0.239**	-0.238**	-0.233**	-0.352	0.208	-0.483***
	[-2.08]	[-2.19]	[-2.18]	[-2.13]	[-1.05]	[1.46]	[-3.27]
VOL	-0.016	-0.018	-0.018	-0.016	0.032	0.046	-0.138***
	[-0.90]	[-1.02]	[-1.06]	[-0.92]	[1.49]	[1.60]	[-4.82]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	176,558	176,558	176,558	176,558	41,212	67,380	66,778
Adjusted R^2	0.476	0.476	0.476	0.476	0.710	0.430	0.603

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 2: Determinants of Market-to-Equity Ratio (ME/E): Europe

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
DIVD	0.762***				0.471***	0.740***	0.454***
	[8.45]				[2.83]	[5.54]	[4.24]
DIV/E		12.774***					
		[9.73]					
PAYOUT/A			14.928***				
			[7.05]				
DIV6D				0.837***			
				[5.89]			
ASSETS	-1.136***	-1.108***	-1.103***	-1.147***	-2.024***	-1.239***	-1.719***
	[-9.85]	[-9.63]	[-9.56]	[-9.93]	[-6.37]	[-5.33]	[-8.17]
NI/E	-2.314***	-2.409***	-2.319***	-2.304***	-3.774***	-1.751***	-1.832***
	[-12.71]	[-13.40]	[-12.74]	[-12.66]	[-7.64]	[-6.55]	[-6.94]
DEBT/E	0.646***	0.640***	0.647***	0.644***	0.326*	0.534***	1.167***
	[6.61]	[6.57]	[6.61]	[6.58]	[1.71]	[4.61]	[6.21]
CASH/E	5.427***	5.307***	5.404***	5.437***	3.673***	6.434***	5.963***
	[17.66]	[17.27]	[17.54]	[17.68]	[5.12]	[12.21]	[12.31]
PPE/E	0.071	0.048	0.070	0.069	1.211***	-0.050	-0.627**
	[0.43]	[0.30]	[0.43]	[0.42]	[3.55]	[-0.23]	[-1.98]
CAPEX/E	4.361***	4.209***	4.374***	4.371***	4.109***	4.787***	4.849***
	[7.49]	[7.25]	[7.51]	[7.51]	[4.43]	[5.23]	[4.14]
RD/E	4.616***	4.441***	4.624***	4.610***	5.072*	6.312***	2.689
	[3.72]	[3.60]	[3.73]	[3.72]	[1.70]	[3.00]	[1.53]
RDD	0.488***	0.482***	0.481***	0.482***	0.061	1.175***	0.546**
	[2.96]	[2.93]	[2.92]	[2.92]	[0.12]	[4.91]	[2.42]
VOL	-0.013	-0.010	-0.015	-0.015	0.071*	0.055	-0.147***
	[-0.53]	[-0.40]	[-0.61]	[-0.59]	[1.65]	[1.25]	[-3.30]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	176,558	176,558	176,558	176,558	41,212	67,380	66,778
Adjusted R^2	0.438	0.439	0.438	0.438	0.575	0.389	0.559

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

B. Asia Pacific

Table 3: Determinants of Market-to-Assets Ratio (MA/A): Asia Pacific

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
DIVD	0.476***				0.496***	-0.026	0.713***
	[7.52]				[5.54]	[-0.32]	[18.36]
DIV/A		10.158***					
		[9.41]					
PAYOUT/A			9.963***				
			[9.35]				
DIV6D				-0.153			
				[-1.29]			
ASSETS	-2.482***	-2.456***	-2.456***	-2.450***	-2.641***	-3.527***	-3.823***
	[-24.20]	[-24.21]	[-24.21]	[-23.59]	[-7.12]	[-18.21]	[-22.22]
NI/A	-4.600***	-4.624***	-4.623***	-4.562***	-5.218***	-3.001***	-2.663***
	[-15.83]	[-15.88]	[-15.87]	[-15.73]	[-5.87]	[-6.47]	[-7.52]
DEBT/A	4.922***	4.918***	4.918***	4.862***	0.483	5.617***	5.305***
	[13.68]	[13.70]	[13.70]	[13.57]	[0.75]	[7.66]	[12.15]
CASH/A	2.186***	2.151***	2.153***	2.240***	3.270**	0.526	3.299***
	[6.08]	[5.96]	[5.97]	[6.22]	[2.57]	[0.83]	[6.44]
PPE/A	-2.965***	-2.995***	-2.995***	-3.030***	-0.516	-2.921***	-3.377***
	[-8.01]	[-8.08]	[-8.08]	[-8.18]	[-0.64]	[-5.32]	[-6.11]
CAPEX/A	2.163***	2.268***	2.268***	2.398***	1.661	1.906**	5.294***
	[3.71]	[3.88]	[3.88]	[4.11]	[1.49]	[2.13]	[6.78]
RD/A	-6.686***	-6.699***	-6.692***	-6.585***	-1.804	-5.179	-9.057***
	[-2.88]	[-2.89]	[-2.88]	[-2.84]	[-0.17]	[-1.32]	[-3.33]
RDD	-0.329***	-0.365***	-0.366***	-0.396***	0.240*	0.043	-0.034
	[-4.24]	[-4.56]	[-4.57]	[-5.19]	[1.78]	[0.32]	[-0.27]
VOL	-0.039	-0.040	-0.040	-0.044*	0.024	-0.138***	0.042
	[-1.53]	[-1.55]	[-1.56]	[-1.70]	[1.00]	[-2.61]	[1.21]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	410,230	410,230	410,230	410,230	50,630	150,166	206,597
Adjusted R^2	0.513	0.513	0.513	0.513	0.715	0.378	0.771

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 4: Determinants of Market Equity-to-Equity Ratio (ME/E): Asia Pacific

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
DIVD	0.171**				0.431***	-0.276**	0.584***
	[2.16]				[4.83]	[-2.46]	[11.70]
DIV/E		6.959***					
		[6.14]					
PAYOUT/A			10.748***				
			[6.27]				
DIV6D				-0.854***			
				[-5.46]			
ASSETS	-1.396***	-1.393***	-1.387***	-1.331***	-2.159***	-2.181***	-1.535***
	[-14.64]	[-14.77]	[-14.70]	[-13.89]	[-6.33]	[-11.91]	[-11.13]
NI/E	-2.271***	-2.292***	-2.282***	-2.268***	-2.726***	-1.800***	-1.482***
	[-15.75]	[-15.93]	[-15.83]	[-15.75]	[-7.65]	[-7.65]	[-7.99]
DEBT/E	0.391***	0.389***	0.393***	0.392***	-0.036	0.251**	0.832***
	[5.28]	[5.27]	[5.31]	[5.30]	[-0.23]	[2.12]	[7.30]
CASH/E	4.815***	4.783***	4.794***	4.809***	1.797***	5.560***	6.490***
	[18.37]	[18.20]	[18.26]	[18.34]	[3.00]	[12.55]	[18.69]
PPE/E	0.088	0.089	0.088	0.071	-0.212	0.733***	0.143
	[0.69]	[0.70]	[0.69]	[0.56]	[-0.96]	[3.51]	[0.68]
CAPEX/E	3.568***	3.536***	3.571***	3.636***	2.878***	3.142***	4.290***
	[9.98]	[9.89]	[9.98]	[10.19]	[4.38]	[6.03]	[7.40]
RD/E	5.907***	5.889***	5.915***	5.871***	-3.739	2.119	8.713***
	[4.00]	[3.99]	[4.01]	[3.97]	[-1.19]	[0.82]	[4.31]
RDD	0.017	0.016	0.016	-0.084	0.258*	0.161	0.724***
	[0.18]	[0.16]	[0.16]	[-0.87]	[1.85]	[0.91]	[4.11]
VOL	-0.010	-0.006	-0.007	-0.016	-0.011	-0.071	0.038
	[-0.25]	[-0.15]	[-0.18]	[-0.41]	[-0.35]	[-1.06]	[0.85]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	410,230	410,230	410,230	410,230	50,630	150,166	206,597
Adjusted R^2	0.458	0.458	0.458	0.458	0.592	0.343	0.715

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

C. South America

Table 5: Determinants of Market Assets-to-Assets Ratio (MA/A): South America

	Full Sample				**1992–2002** / **2003–2013** / **2014–2024**		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
DIVD	-4.239***				-0.431	-7.242***	0.645
	[-3.93]				[-0.40]	[-5.39]	[1.27]
DIV/A		-29.400**					
		[-2.12]					
PAYOUT/A			-24.430*				
			[-1.83]				
DIV6D				-4.113***			
				[-2.75]			
ASSETS	-1.245	-1.416	-1.407	-1.186	-9.397***	-4.696**	-3.469***
	[-1.36]	[-1.53]	[-1.52]	[-1.30]	[-3.13]	[-2.43]	[-3.38]
NI/A	-5.583**	-5.712**	-5.772**	-6.090**	6.517	-3.229	-5.322*
	[-2.00]	[-2.05]	[-2.08]	[-2.20]	[0.81]	[-1.04]	[-1.93]
DEBT/A	-5.826**	-5.741**	-5.714**	-5.586**	8.802	-5.905	-3.902**
	[-2.08]	[-2.05]	[-2.04]	[-2.00]	[0.85]	[-1.60]	[-2.13]
CASH/A	-5.536	-5.545	-5.626	-5.786	13.255	-21.115***	-10.860
	[-0.62]	[-0.62]	[-0.63]	[-0.64]	[1.59]	[-2.76]	[-1.28]
PPE/A	-6.477	-5.886	-5.897	-6.626	-10.278*	-9.009	-7.481*
	[-1.11]	[-1.01]	[-1.01]	[-1.15]	[-1.74]	[-1.15]	[-1.80]
CAPEX/A	0.374	-0.403	-0.439	-0.264	-12.420	9.848	2.256
	[0.04]	[-0.05]	[-0.05]	[-0.03]	[-1.32]	[0.87]	[0.42]
RD/A	37.789	36.505	36.737	36.833	1026.75**	-37.384	-17.391
	[0.54]	[0.53]	[0.53]	[0.55]	[2.38]	[-0.39]	[-1.38]
RDD	0.194	0.365	0.380	0.168	3.064*	-3.984	-0.166
	[0.08]	[0.16]	[0.16]	[0.07]	[1.70]	[-1.30]	[-0.64]
VOL	-0.730***	-0.727***	-0.725***	-0.702***	0.311	-1.043***	-0.004
	[-3.35]	[-3.32]	[-3.32]	[-3.21]	[0.69]	[-3.33]	[-0.04]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	15,577	15,577	15,577	15,577	2,245	6,396	6,870
Adjusted R^2	0.545	0.544	0.544	0.545	0.845	0.526	0.901

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 6: Determinants of Market Equity-to-Equity Ratio (ME/E): South America

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
DIVD	-5.702***				0.141	-10.072***	1.007
	[-3.60]				[0.08]	[-5.01]	[1.45]
DIV/E		-15.118					
		[-1.45]					
PAYOUT/A			-24.148				
			[-1.28]				
DIV6D				-5.880***			
				[-2.76]			
ln(Assets)	-0.574	-0.768	-0.781	-0.517	-10.468***	-5.138**	-1.945**
	[-0.50]	[-0.66]	[-0.67]	[-0.45]	[-2.94]	[-1.99]	[-2.09]
NI/E	-2.336**	-2.336**	-2.424**	-2.585***	-2.266	-0.373	-2.309**
	[-2.42]	[-2.42]	[-2.50]	[-2.67]	[-1.02]	[-0.18]	[-2.42]
DEBT/E	-0.853*	-0.836*	-0.856*	-0.835*	1.864**	-1.217*	0.431
	[-1.77]	[-1.73]	[-1.78]	[-1.74]	[2.06]	[-1.69]	[0.67]
CASH/E	3.894	3.851	3.783	4.059	12.556**	-1.242	2.116
	[1.36]	[1.34]	[1.32]	[1.42]	[2.42]	[-0.30]	[1.17]
PPE/E	4.146***	4.246***	4.255***	4.079***	-0.477	7.257***	0.619
	[3.57]	[3.65]	[3.66]	[3.53]	[-0.47]	[3.92]	[0.62]
CAPEX/E	3.120	2.906	2.834	3.012	-4.545	3.253	3.167
	[0.84]	[0.78]	[0.76]	[0.81]	[-0.88]	[0.56]	[0.90]
RD/E	41.839	42.917	43.112	43.121	321.264**	35.165	29.747
	[0.78]	[0.81]	[0.81]	[0.82]	[2.36]	[0.43]	[0.61]
RDD	1.229	1.471	1.560	1.209	2.778	-3.739	0.499
	[0.37]	[0.44]	[0.47]	[0.36]	[1.42]	[-0.83]	[0.81]
Volatility	-1.051***	-1.044***	-1.041***	-1.011***	-0.198	-1.069**	-0.016
	[-3.49]	[-3.47]	[-3.46]	[-3.34]	[-0.37]	[-2.38]	[-0.14]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	15,577	15,577	15,577	15,577	2,245	6,396	6,870
Adjusted R^2	0.532	0.531	0.530	0.532	0.846	0.482	0.916

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

D. Africa

Table 7: Determinants of Market Assets-to-Assets Ratio (MA/A): Africa

	Full Sample				**1992–2002** / **2003–2013** / **2014–2024**		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
DIVD	0.444***				0.248**	0.225	0.380*
	[2.71]				[2.16]	[1.12]	[1.73]
DIV/A		7.522***					
		[2.74]					
PAYOUT/A			7.424***				
			[2.77]				
DIV6D				-0.004			
				[-0.02]			
ASSETS	-2.712***	-2.689***	-2.690***	-2.694***	-1.140***	-4.491***	-3.103*
	[-5.50]	[-5.49]	[-5.49]	[-5.48]	[-2.71]	[-5.27]	[-1.95]
NI/A	-6.050***	-6.107***	-6.105***	-6.005***	0.067	-5.902*	-1.495
	[-2.85]	[-2.86]	[-2.86]	[-2.83]	[0.03]	[-1.80]	[-0.44]
DEBT/A	7.253***	7.296***	7.293***	7.243***	5.943	9.303***	4.677
	[2.91]	[2.91]	[2.91]	[2.90]	[1.37]	[2.69]	[1.54]
CASH/A	1.379	1.323	1.332	1.469	0.045	-3.859**	5.747
	[0.73]	[0.70]	[0.71]	[0.77]	[0.06]	[-2.16]	[1.34]
PPE/A	-2.606**	-2.595**	-2.602**	-2.636**	-0.389	-3.933**	-5.552**
	[-2.35]	[-2.33]	[-2.34]	[-2.37]	[-0.58]	[-2.04]	[-2.55]
CAPEX/A	1.968	1.993	1.989	2.073*	-0.738	3.159*	-0.337
	[1.62]	[1.64]	[1.64]	[1.70]	[-0.61]	[1.71]	[-0.08]
RD/A	-0.501	-0.533	-0.597	-0.384	-3.361	-4.376	12.425
	[-0.04]	[-0.04]	[-0.05]	[-0.03]	[-0.49]	[-0.29]	[0.60]
RDD	-0.409	-0.403	-0.402	-0.404	-0.123	-1.178	-0.355
	[-0.75]	[-0.74]	[-0.74]	[-0.74]	[-0.99]	[-1.00]	[-1.12]
VOL	0.073	0.066	0.066	0.068	0.240**	-0.021	-0.086
	[0.55]	[0.49]	[0.49]	[0.51]	[2.50]	[-0.09]	[-1.15]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,825	11,825	11,825	11,825	2,210	4,852	4,702
Adjusted R^2	0.380	0.380	0.380	0.380	0.775	0.464	0.541

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 8: Determinants of Market Equity-to-Equity Ratio (ME/E): Africa

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
DIVD	0.079				0.324	-0.182	0.148
	[0.41]				[0.91]	[-0.61]	[0.66]
DIV/E		1.798					
		[1.00]					
PAYOUT/A			1.367				
			[0.43]				
DIV6D				-0.142			
				[-0.51]			
ASSETS	-1.477***	-1.476***	-1.474***	-1.467***	-1.953**	-2.714***	-0.500
	[-4.56]	[-4.55]	[-4.54]	[-4.52]	[-2.40]	[-3.21]	[-1.36]
NI/E	-2.143**	-2.154**	-2.144**	-2.139**	-1.925**	-2.693*	-0.286
	[-2.35]	[-2.35]	[-2.35]	[-2.35]	[-2.40]	[-1.82]	[-0.24]
DEBT/E	0.874**	0.874**	0.875**	0.874**	0.410	1.373**	0.784
	[2.36]	[2.36]	[2.37]	[2.37]	[0.98]	[2.27]	[1.62]
CASH/E	6.472***	6.453***	6.470***	6.481***	5.118**	6.873**	6.288***
	[3.72]	[3.70]	[3.72]	[3.73]	[2.00]	[2.17]	[2.76]
PPE/E	0.499	0.499	0.499	0.498	2.984*	0.315	-0.303
	[0.71]	[0.71]	[0.71]	[0.71]	[1.89]	[0.27]	[-0.66]
CAPEX/E	0.315	0.300	0.318	0.318	-8.209*	2.159	6.072**
	[0.15]	[0.14]	[0.15]	[0.15]	[-1.76]	[0.60]	[2.44]
RD/E	2.261	2.226	2.250	2.308	-3.071	22.202	-13.782
	[0.20]	[0.20]	[0.20]	[0.21]	[-0.49]	[0.77]	[-0.51]
RDD	-0.197	-0.197	-0.196	-0.197	-1.118**	-0.809	-0.140
	[-0.29]	[-0.29]	[-0.28]	[-0.29]	[-2.23]	[-0.51]	[-0.27]
VOL	0.625***	0.624***	0.624***	0.624***	0.357	1.069**	-0.076
	[3.59]	[3.58]	[3.58]	[3.58]	[1.10]	[2.52]	[-0.87]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,825	11,825	11,825	11,825	2,210	4,852	4,702
Adjusted R^2	0.379	0.379	0.379	0.379	0.668	0.439	0.447

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

E. Middle East

Table 9: Determinants of Market Assets-to-Assets Ratio (MA/A): Middle East

	Full Sample				**1992–2002** / **2003–2013** / **2014–2024**		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
DIVD	0.395***				0.724	0.220*	0.258***
	[5.35]				[1.46]	[1.94]	[4.01]
DIV/A		5.433***					
		[2.75]					
PAYOUT/A			5.397***				
			[2.74]				
DIV6D				0.553***			
				[4.48]			
ASSETS	-2.471***	-2.456***	-2.456***	-2.488***	-1.391	-3.353***	-3.736***
	[-6.29]	[-6.25]	[-6.25]	[-6.29]	[-1.48]	[-4.16]	[-5.35]
NI/A	-1.888**	-1.913**	-1.913**	-1.853**	-0.608	-0.023	-0.406
	[-2.38]	[-2.40]	[-2.40]	[-2.35]	[-0.69]	[-0.02]	[-0.44]
DEBT/A	6.440***	6.453***	6.453***	6.455***	-1.385	5.702***	8.029***
	[5.52]	[5.55]	[5.55]	[5.54]	[-0.53]	[2.78]	[4.71]
CASH/A	1.637*	1.604*	1.605*	1.656*	0.443	1.249	1.940
	[1.81]	[1.78]	[1.78]	[1.83]	[0.25]	[0.90]	[1.24]
PPE/A	-2.656***	-2.644***	-2.644***	-2.612***	1.102	-3.043**	-3.100*
	[-4.15]	[-4.14]	[-4.14]	[-4.10]	[0.34]	[-2.34]	[-1.79]
CAPEX/A	5.132**	5.112**	5.111**	5.079**	-7.490	5.504*	5.879*
	[2.35]	[2.34]	[2.34]	[2.34]	[-0.82]	[1.85]	[1.76]
RD/A	-8.225**	-8.240**	-8.242**	-8.159**	-3.840	4.352	-15.167***
	[-2.18]	[-2.19]	[-2.19]	[-2.17]	[-0.51]	[0.40]	[-3.38]
RDD	-0.103	-0.099	-0.099	-0.088	0.040	-0.725	-0.297
	[-0.33]	[-0.31]	[-0.31]	[-0.28]	[0.09]	[-1.36]	[-0.55]
VOL	-0.301	-0.304	-0.304	-0.293	-0.278	-0.768	0.035
	[-1.45]	[-1.46]	[-1.46]	[-1.41]	[-0.84]	[-1.12]	[0.34]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	24,837	24,837	24,837	24,837	903	10,416	13,376
Adjusted R^2	0.463	0.463	0.463	0.463	0.823	0.448	0.525

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 10: Determinants of Market Equity-to-Equity Ratio (ME/E): Middle East

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
DIVD	0.458***				1.601	0.228	0.337***
	[5.24]				[1.30]	[1.53]	[4.16]
DIV/E		4.961***					
		[3.31]					
PAYOUT/A			8.325***				
			[3.39]				
DIV6D				0.199			
				[1.35]			
ASSETS	-0.301**	-0.285*	-0.281*	-0.303**	-0.650	-0.704**	-0.098
	[-2.04]	[-1.93]	[-1.90]	[-2.05]	[-0.85]	[-2.06]	[-0.33]
NI/E	-2.806***	-2.833***	-2.810***	-2.791***	0.530	-1.514**	-3.563***
	[-6.46]	[-6.54]	[-6.47]	[-6.43]	[0.34]	[-2.31]	[-6.90]
DEBT/E	0.177	0.172	0.177	0.176	0.921***	0.126	0.359
	[1.21]	[1.18]	[1.21]	[1.21]	[3.06]	[0.85]	[1.06]
CASH/E	3.765***	3.725***	3.751***	3.785***	1.220	3.942***	3.782***
	[5.13]	[5.07]	[5.10]	[5.15]	[1.36]	[3.10]	[3.86]
PPE/E	0.712**	0.711**	0.715**	0.713**	-0.908**	0.650*	0.613
	[2.32]	[2.32]	[2.33]	[2.32]	[-2.09]	[1.91]	[0.94]
CAPEX/E	1.842	1.850	1.846	1.828	4.202	2.177	0.684
	[1.61]	[1.62]	[1.62]	[1.60]	[0.92]	[1.39]	[0.32]
RD/E	2.430	2.423	2.452	2.442	9.850**	4.740	0.551
	[0.89]	[0.89]	[0.90]	[0.90]	[2.03]	[0.75]	[0.15]
RDD	0.740*	0.747*	0.747*	0.747*	0.959	-0.049	1.906***
	[1.75]	[1.76]	[1.76]	[1.76]	[1.54]	[-0.07]	[2.75]
VOL	-0.375	-0.376	-0.377	-0.379	0.229	-1.014	-0.097
	[-1.29]	[-1.29]	[-1.29]	[-1.29]	[1.32]	[-1.12]	[-0.72]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	24,837	24,837	24,837	24,837	903	10,416	13,376
Adjusted R^2	0.440	0.440	0.440	0.439	0.864	0.427	0.416

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

F. China

Table 11: Determinants of Market Assets-to-Assets Ratio (MA/A): China

	Full Sample				1992–2002 / 2003–2013 / 2014–2024		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
DIVD	0.346***				0.049***	0.216*	0.323***
	[3.91]				[3.46]	[1.87]	[3.76]
DIV/A		7.729***					
		[5.59]					
PAYOUT/A			7.696***				
			[5.60]				
DIV6D				0.358**			
				[2.38]			
ASSETS	-2.088***	-2.060***	-2.060***	-2.108***	-0.274***	-3.644***	-1.975***
	[-7.51]	[-7.55]	[-7.55]	[-7.29]	[-3.80]	[-5.65]	[-5.86]
NI/A	-0.945	-0.917	-0.917	-0.806	-0.524**	0.644	-1.199
	[-1.22]	[-1.20]	[-1.20]	[-1.06]	[-2.14]	[0.53]	[-1.52]
DEBT/A	2.419***	2.425***	2.425***	2.383***	1.774***	2.575	1.806
	[2.86]	[2.86]	[2.86]	[2.83]	[5.06]	[1.59]	[1.52]
CASH/A	2.555***	2.513***	2.514***	2.725***	0.127	4.247**	2.938***
	[3.83]	[3.68]	[3.68]	[3.84]	[1.25]	[2.46]	[5.25]
PPE/A	-1.110**	-1.157**	-1.157**	-1.120**	-0.098	-0.628	-1.367*
	[-2.35]	[-2.43]	[-2.43]	[-2.35]	[-0.53]	[-0.61]	[-1.78]
CAPEX/A	2.804***	2.921***	2.921***	2.971***	0.027	3.012***	4.637***
	[3.92]	[4.01]	[4.01]	[4.07]	[0.32]	[3.11]	[3.18]
RD/A	13.485**	13.292**	13.293**	13.368**	2.932***	-17.424*	11.705
	[2.56]	[2.52]	[2.52]	[2.54]	[4.44]	[-1.76]	[1.50]
RDD	0.136	0.111	0.111	0.107	0.019	-0.205	0.252
	[1.06]	[0.85]	[0.85]	[0.82]	[0.70]	[-0.84]	[1.48]
VOL	0.045*	0.047*	0.047*	0.046*	0.009	-0.039	0.157***
	[1.84]	[1.93]	[1.93]	[1.89]	[1.49]	[-0.48]	[10.32]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	62,947	62,947	62,947	62,947	3,154	20,449	39,238
Adjusted R^2	0.394	0.394	0.394	0.394	0.729	0.491	0.522

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 12: Determinants of Market Equity-to-Equity Ratio (ME/E): China

	Full Sample				**1992–2002** / **2003–2013** / **2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
DIVD	0.644***				0.105	0.842***	0.740***
	[6.10]				[0.56]	[3.64]	[7.43]
DIV/E		9.273***					
		[6.36]					
PAYOUT/A			15.038***				
			[6.41]				
DIV6D				0.545***			
				[2.71]			
ASSETS	-3.663***	-3.627***	-3.607***	-3.683***	-2.199**	-4.439***	-3.364***
	[-11.91]	[-11.87]	[-11.80]	[-11.52]	[-2.20]	[-7.73]	[-9.38]
NI/E	0.062	0.064	0.072	0.104	4.106	2.642***	-1.374**
	[0.13]	[0.13]	[0.15]	[0.21]	[1.47]	[3.23]	[-2.54]
DEBT/E	1.150***	1.149***	1.150***	1.142***	0.912*	1.346***	1.008***
	[4.65]	[4.65]	[4.65]	[4.62]	[1.88]	[2.84]	[3.53]
CASH/E	6.062***	6.044***	6.049***	6.141***	2.443	7.809***	5.030***
	[7.06]	[7.02]	[7.02]	[7.11]	[0.89]	[6.10]	[6.35]
PPE/E	1.494***	1.486***	1.484***	1.479***	2.782	2.255***	0.967*
	[3.46]	[3.44]	[3.44]	[3.43]	[1.02]	[3.10]	[1.84]
CAPEX/E	2.653***	2.676***	2.715***	2.702***	4.938	1.624	4.187**
	[2.58]	[2.60]	[2.64]	[2.63]	[1.09]	[1.13]	[2.52]
RD/E	16.939***	16.777***	16.848***	16.757***	5.279	-43.246***	22.068***
	[3.59]	[3.55]	[3.56]	[3.54]	[1.14]	[-5.61]	[4.25]
RDD	1.122***	1.071***	1.080***	1.062***	1.465	0.257	1.214***
	[4.00]	[3.82]	[3.86]	[3.76]	[1.19]	[0.57]	[3.24]
VOL	0.117	0.123	0.121	0.118	0.114*	0.098	0.235***
	[0.95]	[1.00]	[0.98]	[0.96]	[1.75]	[0.67]	[3.40]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	62,947	62,947	62,947	62,947	3,154	20,449	39,238
Adjusted R^2	0.450	0.450	0.450	0.450	0.407	0.426	0.618

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

G. Other

Table 13: Determinants of Market Assets-to-Assets Ratio (MA/A): Other

	Full Sample				**1992–2002** / **2003–2013** / **2014–2024**		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
DIVD	0.443***				0.687*	0.456***	0.426**
	[3.43]				[1.96]	[2.82]	[2.36]
DIV/A		9.094***					
		[4.10]					
PAYOUT/A			8.586***				
			[3.97]				
DIV6D				0.534***			
				[3.30]			
ASSETS	-2.346***	-2.323***	-2.324***	-2.360***	-4.405***	-3.395***	-2.487***
	[-11.94]	[-11.87]	[-11.87]	[-12.02]	[-4.99]	[-9.36]	[-6.47]
NI/A	-5.234***	-5.264***	-5.260***	-5.175***	-6.155**	-4.072***	-3.951***
	[-8.75]	[-8.79]	[-8.79]	[-8.73]	[-2.50]	[-4.79]	[-5.82]
DEBT/A	3.060***	3.075***	3.072***	3.058***	-4.475*	5.121***	2.170***
	[4.95]	[4.96]	[4.96]	[4.95]	[-1.95]	[3.97]	[2.81]
CASH/A	2.907***	2.869***	2.873***	2.957***	3.941	1.693	2.845***
	[3.68]	[3.63]	[3.63]	[3.75]	[0.79]	[1.10]	[3.46]
PPE/A	-1.803***	-1.791***	-1.792***	-1.810***	-0.372	-1.071	-2.562**
	[-2.91]	[-2.89]	[-2.89]	[-2.92]	[-0.22]	[-0.99]	[-2.56]
CAPEX/A	5.235***	5.251***	5.247***	5.308***	3.571	3.414	5.713***
	[3.55]	[3.57]	[3.56]	[3.61]	[0.76]	[1.55]	[2.69]
RD/A	13.753*	13.759*	13.736*	13.738*	-16.105	38.410*	-2.624
	[1.67]	[1.67]	[1.67]	[1.67]	[-1.31]	[1.88]	[-0.33]
RDD	0.043	0.040	0.040	0.058	-1.193	-0.112	0.213
	[0.13]	[0.12]	[0.12]	[0.18]	[-1.40]	[-0.19]	[0.52]
VOL	0.010	0.006	0.006	0.009	0.122	0.312***	-0.141*
	[0.16]	[0.09]	[0.09]	[0.13]	[0.75]	[2.62]	[-1.90]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	59,765	59,765	59,765	59,765	4,267	20,824	34,140
Adjusted R^2	0.452	0.453	0.453	0.453	0.471	0.376	0.645

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 14: Determinants of Market Equity-to-Equity Ratio (ME/E): Other

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
DIVD	0.061				0.535	0.155	0.307
	[0.31]				[0.97]	[0.61]	[1.21]
DIV/E		6.193***					
		[2.65]					
PAYOUT/A			9.355***				
			[2.59]				
DIV6D				0.315			
				[1.20]			
ASSETS	-2.031***	-2.033***	-2.029***	-2.047***	-4.243***	-2.584***	-1.386***
	[-10.08]	[-10.12]	[-10.09]	[-10.20]	[-4.04]	[-6.99]	[-4.36]
NI/E	-2.829***	-2.869***	-2.847***	-2.828***	-5.880***	-3.375***	-1.638***
	[-7.95]	[-8.06]	[-8.02]	[-7.98]	[-5.10]	[-5.75]	[-4.29]
DEBT/E	0.629***	0.626***	0.630***	0.629***	1.138	0.447	0.878***
	[3.52]	[3.51]	[3.53]	[3.52]	[1.42]	[1.34]	[4.53]
CASH/E	5.553***	5.504***	5.525***	5.553***	13.381***	7.266***	4.241***
	[9.08]	[8.98]	[9.02]	[9.10]	[3.77]	[6.18]	[6.80]
PPE/E	0.895**	0.900**	0.899**	0.897**	0.061	1.579***	0.531
	[2.50]	[2.51]	[2.51]	[2.51]	[0.04]	[2.85]	[1.43]
CAPEX/E	3.327**	3.271**	3.315**	3.322**	-0.374	2.427	3.901***
	[2.48]	[2.44]	[2.47]	[2.48]	[-0.11]	[1.08]	[2.69]
RD/E	20.160***	20.112***	20.219***	20.170***	-41.220***	36.271**	10.117
	[2.91]	[2.91]	[2.92]	[2.91]	[-2.77]	[2.43]	[1.56]
RDD	-0.444	-0.437	-0.434	-0.430	-5.296**	-0.068	-0.251
	[-0.95]	[-0.94]	[-0.94]	[-0.93]	[-2.05]	[-0.08]	[-0.45]
VOL	0.156	0.157	0.160	0.159	0.290	0.609***	-0.064
	[1.47]	[1.48]	[1.50]	[1.49]	[0.74]	[2.66]	[-0.46]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	59,765	59,765	59,765	59,765	4,267	20,824	34,140
Adjusted R^2	0.448	0.448	0.448	0.448	0.502	0.403	0.616

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Appendix C. Panel Regression Results for Repurchases by Region

A. Europe

Table 15: Determinants of MA/A: Repurchasing Firms in Europe

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
REPD	-0.028				-0.057	-0.283	0.438
	[-0.23]				[-0.73]	[-1.40]	[1.32]
REP/A		-7.960					
		[-0.51]					
PAYOUTD			0.652***				
			[9.92]				
REP6D				-0.236			
				[-1.01]			
ASSETS	-2.062***	-2.062***	-2.081***	-2.768***	-2.814***	-2.390***	-3.589***
	[-15.44]	[-15.44]	[-15.54]	[-3.07]	[-9.10]	[-10.24]	[-12.89]
NI/A	-3.747***	-3.746***	-3.793***	-2.765**	-4.970***	-2.474***	-1.505***
	[-10.42]	[-10.42]	[-10.54]	[-2.06]	[-5.74]	[-4.62]	[-2.89]
DEBT/A	5.102***	5.102***	5.161***	3.389	4.835***	3.707***	7.218***
	[8.71]	[8.71]	[8.79]	[0.68]	[3.52]	[4.06]	[8.11]
CASH/A	2.873***	2.873***	2.849***	0.166	3.041**	2.933***	1.727**
	[5.59]	[5.59]	[5.55]	[0.09]	[2.19]	[3.35]	[2.55]
PPE/A	-1.427***	-1.426***	-1.421***	-2.217	-2.590**	-0.976*	-2.883***
	[-3.45]	[-3.45]	[-3.45]	[-0.84]	[-2.52]	[-1.83]	[-3.46]
CAPEX/A	2.194**	2.195**	2.052**	-1.900	-0.842	3.746***	1.867
	[2.51]	[2.51]	[2.35]	[-0.38]	[-0.62]	[2.73]	[1.46]
RD/A	-6.899***	-6.899***	-6.940***	0.964	-2.100	-4.742	-8.913***
	[-3.95]	[-3.95]	[-3.98]	[0.11]	[-0.70]	[-1.53]	[-3.95]
RDD	-0.244**	-0.243**	-0.231**	0.237	-0.357	0.203	-0.490***
	[-2.23]	[-2.23]	[-2.11]	[0.66]	[-1.06]	[1.43]	[-3.31]
VOL	-0.021	-0.021	-0.016	-0.037	0.031	0.041	-0.141***
	[-1.20]	[-1.20]	[-0.91]	[-0.52]	[1.41]	[1.42]	[-4.92]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	176,558	176,558	176,558	12,129	41,212	67,380	66,778
Adjusted R^2	0.475	0.475	0.476	0.671	0.710	0.430	0.603

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 16: Determinants of ME/E: Repurchasing Firms in Europe

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
REPD	-0.142				0.098	-0.569	-0.181
	[-0.78]				[0.56]	[-1.40]	[-0.27]
REP/E		4.853					
		[0.45]					
PAYOUTD			0.757***				
			[8.31]				
REP6D				-0.309			
				[-0.86]			
ASSETS	-1.108***	-1.108***	-1.136***	-1.238	-2.001***	-1.210***	-1.713***
	[-9.61]	[-9.61]	[-9.85]	[-1.45]	[-6.33]	[-5.21]	[-8.14]
NI/E	-2.300***	-2.300***	-2.314***	-2.641***	-3.762***	-1.741***	-1.829***
	[-12.63]	[-12.63]	[-12.71]	[-3.65]	[-7.61]	[-6.51]	[-6.93]
DEBT/E	0.643***	0.643***	0.646***	0.137	0.325*	0.530***	1.166***
	[6.57]	[6.57]	[6.61]	[0.27]	[1.70]	[4.57]	[6.20]
CASH/E	5.439***	5.439***	5.428***	3.028***	3.682***	6.445***	5.969***
	[17.69]	[17.69]	[17.66]	[2.89]	[5.13]	[12.22]	[12.33]
PPE/E	0.063	0.063	0.071	0.609	1.202***	-0.053	-0.631**
	[0.38]	[0.38]	[0.43]	[0.68]	[3.53]	[-0.24]	[-1.99]
CAPEX/E	4.392***	4.389***	4.357***	3.719	4.138***	4.802***	4.859***
	[7.54]	[7.54]	[7.48]	[1.38]	[4.47]	[5.24]	[4.16]
RD/E	4.599***	4.600***	4.620***	7.983	5.074*	6.278***	2.668
	[3.70]	[3.70]	[3.72]	[1.59]	[1.70]	[2.98]	[1.52]
RDD	0.469***	0.468***	0.486***	0.868	0.047	1.162***	0.539**
	[2.84]	[2.84]	[2.95]	[0.99]	[0.09]	[4.86]	[2.38]
VOL	-0.020	-0.020	-0.013	-0.106	0.066	0.048	-0.150***
	[-0.79]	[-0.82]	[-0.54]	[-1.05]	[1.53]	[1.10]	[-3.37]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	176,558	176,558	176,558	12,129	41,212	67,380	66,778
Adjusted R^2	0.438	0.438	0.438	0.510	0.575	0.389	0.559

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

B. Asia Pacific

Table 17: Determinants of MA/A: Repurchasing Firms in Asia Pacific

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
REPD	0.032				0.144	-0.140	0.336**
	[0.32]				[0.73]	[-0.80]	[2.53]
REP/A		15.220					
		[0.78]					
PAYOUTD			0.472***				
			[7.51]				
REP6D				0.964***			
				[3.80]			
ASSETS	-2.460***	-2.460***	-2.482***	-3.860***	-2.608***	-3.528***	-3.805***
	[-24.23]	[-24.23]	[-24.20]	[-5.77]	[-7.10]	[-18.25]	[-22.14]
NI/A	-4.559***	-4.559***	-4.600***	-0.705	-5.175***	-3.002***	-2.604***
	[-15.72]	[-15.72]	[-15.84]	[-0.68]	[-5.85]	[-6.48]	[-7.37]
DEBT/A	4.866***	4.866***	4.922***	1.736	0.342	5.620***	5.258***
	[13.60]	[13.60]	[13.68]	[1.45]	[0.53]	[7.71]	[12.06]
CASH/A	2.239***	2.238***	2.187***	3.353*	3.276**	0.523	3.393***
	[6.21]	[6.21]	[6.09]	[1.89]	[2.56]	[0.83]	[6.61]
PPE/A	-3.018***	-3.018***	-2.965***	-0.528	-0.578	-2.919***	-3.455***
	[-8.13]	[-8.13]	[-8.01]	[-0.59]	[-0.71]	[-5.31]	[-6.24]
CAPEX/A	2.374***	2.374***	2.165***	3.524***	1.899*	1.897**	5.491***
	[4.05]	[4.05]	[3.71]	[3.01]	[1.68]	[2.13]	[7.03]
RD/A	-6.603***	-6.602***	-6.685***	-1.853	-1.537	-5.189	-9.120***
	[-2.84]	[-2.84]	[-2.88]	[-0.20]	[-0.15]	[-1.32]	[-3.35]
RDD	-0.382***	-0.382***	-0.329***	-0.125	0.223*	0.043	-0.039
	[-4.73]	[-4.73]	[-4.24]	[-0.43]	[1.66]	[0.33]	[-0.32]
VOL	-0.043*	-0.043*	-0.040	-0.123	0.024	-0.138***	0.040
	[-1.68]	[-1.68]	[-1.52]	[-1.19]	[0.99]	[-2.60]	[1.15]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	410,230	410,230	410,230	27,668	50,630	150,166	206,597
Adjusted R^2	0.513	0.513	0.513	0.565	0.714	0.378	0.770

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 18: Determinants of ME/E: Repurchasing Firms in Asia Pacific

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
REPD	0.071				-0.209	0.204	0.322
	[0.40]				[-0.97]	[0.57]	[1.11]
REP/E		11.409					
		[0.97]					
PAYOUTD			0.164**				
			[2.09]				
REP6D				1.536***			
				[4.17]			
ASSETS	-1.387***	-1.387***	-1.395***	-3.711***	-2.124***	-2.187***	-1.514***
	[-14.70]	[-14.70]	[-14.64]	[-7.00]	[-6.30]	[-11.96]	[-11.00]
NI/E	-2.267***	-2.267***	-2.271***	-0.376	-2.715***	-1.804***	-1.469***
	[-15.74]	[-15.75]	[-15.75]	[-0.60]	[-7.63]	[-7.67]	[-7.91]
DEBT/E	0.390***	0.390***	0.391***	-0.397	-0.036	0.253**	0.830***
	[5.26]	[5.26]	[5.27]	[-1.11]	[-0.24]	[2.14]	[7.28]
CASH/E	4.818***	4.818***	4.816***	8.015***	1.788***	5.553***	6.505***
	[18.37]	[18.37]	[18.37]	[6.81]	[2.99]	[12.53]	[18.72]
PPE/E	0.083	0.083	0.088	2.165***	-0.221	0.740***	0.135
	[0.65]	[0.65]	[0.69]	[3.58]	[-1.00]	[3.56]	[0.64]
CAPEX/E	3.589***	3.589***	3.569***	6.247***	2.927***	3.114***	4.318***
	[10.03]	[10.03]	[9.99]	[3.99]	[4.44]	[5.99]	[7.45]
RD/E	5.886***	5.888***	5.906***	6.504	-3.801	2.134	8.593***
	[3.98]	[3.98]	[3.99]	[0.87]	[-1.21]	[0.83]	[4.25]
RDD	-0.003	-0.003	0.017	-0.090	0.232*	0.165	0.717***
	[-0.03]	[-0.03]	[0.17]	[-0.18]	[1.67]	[0.93]	[4.07]
VOL	-0.012	-0.012	-0.010	0.259*	-0.011	-0.067	0.036
	[-0.30]	[-0.30]	[-0.26]	[1.68]	[-0.36]	[-1.01]	[0.81]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	410,230	410,230	410,230	27,668	50,630	150,166	206,597
Adjusted R^2	0.458	0.458	0.458	0.420	0.592	0.342	0.715

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

C. South America

Table 19: Determinants of MA/A: Repurchasing Firms in South America

	Full Sample				1992–2002 / 2003–2013 / 2014–2024		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
REPD	5.487				0.021	5.004	0.000
	[1.63]				[0.01]	[0.76]	[.]
REP/A		686.036					
		[1.35]					
PAYOUTD			-4.044***				
			[-3.81]				
REP6D				2.935			
				[0.77]			
ASSETS	-1.343	-1.348	-1.256	4.070	-9.401***	-5.119***	-3.473***
	[-1.46]	[-1.46]	[-1.37]	[0.79]	[-3.14]	[-2.61]	[-3.38]
NI/A	-6.068**	-6.067**	-5.608**	24.584	6.473	-3.321	-5.240*
	[-2.20]	[-2.20]	[-2.01]	[0.78]	[0.81]	[-1.07]	[-1.90]
DEBT/A	-5.544**	-5.544**	-5.822**	-16.356	8.834	-4.971	-3.970**
	[-1.98]	[-1.98]	[-2.08]	[-1.43]	[0.85]	[-1.33]	[-2.16]
CASH/A	-5.881	-5.889	-5.571	9.266	13.286	-21.725***	-10.815
	[-0.65]	[-0.65]	[-0.62]	[0.41]	[1.57]	[-2.81]	[-1.28]
PPE/A	-5.797	-5.761	-6.458	-28.876	-10.296*	-7.994	-7.500*
	[-1.00]	[-0.99]	[-1.11]	[-1.35]	[-1.74]	[-1.01]	[-1.81]
CAPEX/A	-0.765	-0.745	0.304	48.071	-12.497	8.307	2.392
	[-0.09]	[-0.09]	[0.04]	[0.95]	[-1.35]	[0.74]	[0.45]
RD/A	39.603	39.885	37.610	319.762	1028.921**	-52.569	-19.123
	[0.59]	[0.59]	[0.54]	[0.69]	[2.39]	[-0.55]	[-1.58]
RDD	0.496	0.521	0.206	-1.620	3.084*	-3.792	-0.186
	[0.21]	[0.22]	[0.09]	[-0.44]	[1.67]	[-1.23]	[-0.73]
VOL	-0.714***	-0.716***	-0.730***	-0.068	0.311	-1.045***	-0.011
	[-3.27]	[-3.28]	[-3.35]	[-0.05]	[0.69]	[-3.32]	[-0.12]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	15,577	15,577	15,577	592	2,245	6,396	6,870
Adjusted R^2	0.544	0.544	0.545	0.355	0.845	0.521	0.901

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 20: Determinants of ME/E: Repurchasing Firms in South America

	Full Sample				**1992–2002** / **2003–2013** / **2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
REPD	11.403*				2.428	6.090	0.000
	[1.88]				[0.61]	[0.72]	[.]
REP/E		488.014					
		[1.40]					
PAYOUTD			-5.321***				
			[-3.48]				
REP6D				3.168			
				[0.73]			
ASSETS	-0.730	-0.751	-0.592	2.022	-10.451***	-5.743**	-1.942**
	[-0.63]	[-0.65]	[-0.51]	[0.34]	[-2.94]	[-2.20]	[-2.09]
NI/E	-2.478**	-2.478**	-2.351**	8.021	-2.255	-0.558	-2.276**
	[-2.56]	[-2.56]	[-2.43]	[1.39]	[-1.01]	[-0.26]	[-2.39]
DEBT/E	-0.849*	-0.843*	-0.853*	-0.120	1.862**	-1.149	0.434
	[-1.77]	[-1.76]	[-1.77]	[-0.11]	[2.06]	[-1.60]	[0.67]
CASH/E	3.766	3.737	3.876	0.602	12.538**	-1.372	2.098
	[1.32]	[1.31]	[1.35]	[0.07]	[2.42]	[-0.33]	[1.16]
PPE/E	4.277***	4.294***	4.152***	-7.104**	-0.457	7.444***	0.618
	[3.69]	[3.70]	[3.57]	[-1.98]	[-0.45]	[4.02]	[0.62]
CAPEX/E	2.782	2.745	3.102	51.938**	-4.613	2.484	3.178
	[0.75]	[0.74]	[0.83]	[2.01]	[-0.90]	[0.43]	[0.90]
RD/E	43.451	43.266	41.907	398.573	323.942**	37.034	29.016
	[0.82]	[0.82]	[0.79]	[1.40]	[2.42]	[0.47]	[0.60]
RDD	1.666	1.685	1.256	-1.319	2.897	-3.286	0.467
	[0.50]	[0.51]	[0.38]	[-0.25]	[1.48]	[-0.73]	[0.76]
VOL	-1.028***	-1.034***	-1.050***	0.314	-0.192	-1.072**	-0.027
	[-3.41]	[-3.42]	[-3.49]	[0.17]	[-0.36]	[-2.38]	[-0.24]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	15,577	15,577	15,577	592	2,245	6,396	6,870
Adjusted R^2	0.531	0.531	0.532	0.384	0.846	0.477	0.916

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

D. Africa

Table 21: Determinants of MA/A: Repurchasing Firms in Africa

	Full Sample				1992–2002 / 2003–2013 / 2014–2024		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
REPD	0.111				-0.137	0.164	-0.752
	[0.48]				[-1.31]	[0.49]	[-1.47]
REP/A		-8.679					
		[-0.22]					
PAYOUTD			0.458***				
			[2.78]				
REP6D				0.031			
				[0.82]			
ASSETS	-2.695***	-2.694***	-2.713***	-0.365	-1.127***	-4.486***	-3.092*
	[-5.49]	[-5.49]	[-5.50]	[-1.35]	[-2.71]	[-5.25]	[-1.95]
NI/A	-6.005***	-6.006***	-6.051***	-1.305***	0.090	-5.887*	-1.448
	[-2.83]	[-2.83]	[-2.85]	[-4.64]	[0.04]	[-1.79]	[-0.43]
DEBT/A	7.243***	7.244***	7.251***	1.167***	5.902	9.284***	4.706
	[2.90]	[2.90]	[2.91]	[6.12]	[1.36]	[2.69]	[1.55]
CASH/A	1.469	1.469	1.382	-0.272	0.092	-3.800**	5.847
	[0.77]	[0.77]	[0.73]	[-0.72]	[0.12]	[-2.12]	[1.35]
PPE/A	-2.636**	-2.634**	-2.612**	-0.216	-0.399	-3.930**	-5.544**
	[-2.36]	[-2.36]	[-2.35]	[-0.57]	[-0.60]	[-2.04]	[-2.54]
CAPEX/A	2.071*	2.074*	1.967	1.091	-0.685	3.216*	-0.259
	[1.70]	[1.70]	[1.62]	[1.38]	[-0.57]	[1.75]	[-0.06]
RD/A	-0.445	-0.350	-0.629	10.462**	-3.115	-4.336	12.890
	[-0.04]	[-0.03]	[-0.05]	[2.19]	[-0.45]	[-0.28]	[0.64]
RDD	-0.406	-0.404	-0.410	0.091	-0.122	-1.185	-0.350
	[-0.75]	[-0.74]	[-0.75]	[0.91]	[-0.96]	[-1.00]	[-1.11]
VOL	0.068	0.067	0.073	-0.104	0.238**	-0.023	-0.087
	[0.51]	[0.51]	[0.55]	[-1.07]	[2.52]	[-0.10]	[-1.17]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,825	11,825	11,825	303	2,210	4,852	4,702
Adjusted R^2	0.380	0.380	0.380	0.731	0.775	0.463	0.541

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 22: Determinants of ME/E: Repurchasing Firms in Africa

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
REPD	-0.830				0.328	-1.002	-0.412
	[-1.62]				[0.88]	[-1.09]	[-0.81]
REP/E		-68.236*					
		[-1.93]					
PAYOUTD			0.078				
			[0.41]				
REP6D				-0.092			
				[-0.72]			
ASSETS	-1.469***	-1.470***	-1.477***	-1.174***	-1.929**	-2.712***	-0.495
	[-4.53]	[-4.53]	[-4.56]	[-2.74]	[-2.41]	[-3.21]	[-1.34]
NI/E	-2.140**	-2.140**	-2.143**	-0.258	-1.920**	-2.701*	-0.282
	[-2.35]	[-2.35]	[-2.35]	[-0.70]	[-2.40]	[-1.83]	[-0.23]
DEBT/E	0.874**	0.876**	0.874**	-0.081	0.408	1.374**	0.784
	[2.37]	[2.37]	[2.37]	[-0.23]	[0.98]	[2.27]	[1.62]
CASH/E	6.477***	6.469***	6.473***	-0.739**	5.134**	6.860**	6.296***
	[3.73]	[3.73]	[3.72]	[-2.00]	[2.00]	[2.18]	[2.77]
PPE/E	0.498	0.499	0.499	2.087	2.983*	0.318	-0.304
	[0.71]	[0.71]	[0.71]	[1.52]	[1.89]	[0.27]	[-0.66]
CAPEX/E	0.320	0.320	0.314	0.509	-8.215*	2.148	6.074**
	[0.15]	[0.15]	[0.15]	[0.19]	[-1.76]	[0.60]	[2.45]
RD/E	2.536	2.743	2.252	-12.084	-3.066	22.285	-13.554
	[0.23]	[0.24]	[0.20]	[-0.76]	[-0.49]	[0.77]	[-0.50]
RDD	-0.181	-0.197	-0.197	-0.640	-1.111**	-0.761	-0.137
	[-0.26]	[-0.29]	[-0.29]	[-1.51]	[-2.24]	[-0.48]	[-0.27]
VOL	0.621***	0.622***	0.625***	-0.006	0.354	1.067**	-0.076
	[3.57]	[3.57]	[3.59]	[-0.03]	[1.09]	[2.51]	[-0.88]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	11,825	11,825	11,825	303	2,210	4,852	4,702
Adjusted R^2	0.379	0.379	0.379	0.568	0.668	0.439	0.447

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

E. Middle East

Table 23: Determinants of MA/A: Repurchasing Firms in the Middle East

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
REPD	0.707				0.135	-0.273	2.561***
	[1.18]				[0.43]	[-0.29]	[2.99]
REP/A		79.838					
		[0.97]					
PAYOUTD			0.398***				
			[5.36]				
REP6D				-2.746			
				[-1.13]			
ASSETS	-2.470***	-2.470***	-2.472***	0.906	-1.436	-3.352***	-3.739***
	[-6.28]	[-6.28]	[-6.29]	[0.35]	[-1.51]	[-4.16]	[-5.35]
NI/A	-1.840**	-1.840**	-1.888**	12.003	-0.362	0.019	-0.383
	[-2.33]	[-2.33]	[-2.38]	[0.46]	[-0.43]	[0.01]	[-0.42]
DEBT/A	6.395***	6.394***	6.441***	-17.192	-1.150	5.679***	8.014***
	[5.49]	[5.49]	[5.52]	[-1.32]	[-0.43]	[2.77]	[4.70]
CASH/A	1.664*	1.672*	1.639*	-7.794	0.455	1.281	1.920
	[1.84]	[1.85]	[1.81]	[-1.03]	[0.26]	[0.93]	[1.22]
PPE/A	-2.678***	-2.678***	-2.655***	-83.271	0.921	-3.044**	-3.150*
	[-4.16]	[-4.16]	[-4.15]	[-1.27]	[0.28]	[-2.34]	[-1.82]
CAPEX/A	5.168**	5.167**	5.130**	-100.540	-7.212	5.544*	5.956*
	[2.36]	[2.36]	[2.35]	[-1.33]	[-0.78]	[1.87]	[1.78]
RD/A	-8.114**	-8.178**	-8.230**	30.064	-3.620	4.384	-14.723***
	[-2.15]	[-2.17]	[-2.18]	[0.53]	[-0.48]	[0.40]	[-3.26]
RDD	-0.095	-0.099	-0.103	0.082	0.162	-0.726	-0.267
	[-0.30]	[-0.31]	[-0.33]	[0.03]	[0.34]	[-1.36]	[-0.49]
VOL	-0.308	-0.309	-0.301	-9.684	-0.260	-0.779	0.038
	[-1.49]	[-1.49]	[-1.46]	[-1.39]	[-0.80]	[-1.13]	[0.37]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	24,837	24,837	24,837	126	903	10,416	13,376
Adjusted R^2	0.462	0.462	0.463	0.620	0.822	0.448	0.525

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 24: Determinants of ME/E: Repurchasing Firms in the Middle East

	Full Sample				**1992–2002 / 2003–2013 / 2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
REPD	0.860				0.465	0.460	3.233***
	[0.91]				[0.74]	[0.51]	[2.82]
REP/E		17.573					
		[0.46]					
PAYOUTD			0.462***				
			[5.27]				
REP6D				-4.828			
				[-1.12]			
ASSETS	-0.296**	-0.295**	-0.302**	-0.709	-0.703	-0.700**	-0.101
	[-2.00]	[-2.00]	[-2.05]	[-0.16]	[-0.89]	[-2.05]	[-0.34]
NI/E	-2.788***	-2.789***	-2.806***	-5.200	0.821	-1.504**	-3.553***
	[-6.43]	[-6.43]	[-6.46]	[-0.41]	[0.53]	[-2.30]	[-6.88]
DEBT/E	0.175	0.175	0.177	4.511	0.998***	0.124	0.360
	[1.20]	[1.20]	[1.21]	[0.75]	[2.99]	[0.84]	[1.07]
CASH/E	3.788***	3.789***	3.766***	-3.182	1.014	3.955***	3.784***
	[5.16]	[5.16]	[5.13]	[-0.80]	[1.04]	[3.11]	[3.87]
PPE/E	0.711**	0.710**	0.712**	-4.684	-0.966**	0.652*	0.610
	[2.31]	[2.31]	[2.32]	[-0.72]	[-2.12]	[1.92]	[0.93]
CAPEX/E	1.834	1.833	1.841	-10.693	4.429	2.170	0.696
	[1.61]	[1.61]	[1.61]	[-0.57]	[0.98]	[1.38]	[0.33]
RD/E	2.458	2.429	2.428	19.185	10.327**	4.733	0.746
	[0.90]	[0.89]	[0.89]	[0.40]	[2.16]	[0.75]	[0.20]
RDD	0.747*	0.743*	0.740*	-0.078	1.276**	-0.047	1.931***
	[1.76]	[1.75]	[1.75]	[-0.02]	[2.06]	[-0.07]	[2.78]
VOL	-0.383	-0.385	-0.375	-14.223	0.284	-1.024	-0.094
	[-1.32]	[-1.32]	[-1.29]	[-1.48]	[1.62]	[-1.13]	[-0.70]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	24,837	24,837	24,837	126	903	10,416	13,376
Adjusted R^2	0.439	0.439	0.440	0.630	0.863	0.427	0.416

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

F. Other

Table 25: Determinants of MA/A: Repurchasing Firms in Other Countries

	Full Sample				1992–2002 / 2003–2013 / 2014–2024		
Dependent variable	(1) MA/A	(2) MA/A	(3) MA/A	(4) MA/A	(5) MA/A	(6) MA/A	(7) MA/A
REPD	-0.095				-0.046	-0.048	0.170
	[-0.37]				[-0.15]	[-0.08]	[0.43]
REP/A		-28.250					
		[-0.61]					
PAYOUTD			0.423***				
			[3.29]				
REP6D				1.625			
				[1.09]			
ASSETS	-2.328***	-2.328***	-2.346***	-10.109***	-4.354***	-3.380***	-2.479***
	[-11.89]	[-11.89]	[-11.94]	[-4.84]	[-4.99]	[-9.34]	[-6.46]
NI/A	-5.177***	-5.177***	-5.230***	-3.118	-6.079**	-4.023***	-3.912***
	[-8.73]	[-8.73]	[-8.74]	[-0.72]	[-2.48]	[-4.74]	[-5.79]
DEBT/A	3.034***	3.034***	3.059***	6.043	-4.559**	5.099***	2.160***
	[4.91]	[4.91]	[4.95]	[1.27]	[-1.97]	[3.96]	[2.79]
CASH/A	2.980***	2.981***	2.910***	-5.870	3.943	1.754	2.896***
	[3.77]	[3.77]	[3.69]	[-1.06]	[0.79]	[1.14]	[3.52]
PPE/A	-1.805***	-1.805***	-1.802***	6.174	-0.460	-1.076	-2.583**
	[-2.91]	[-2.91]	[-2.91]	[1.45]	[-0.27]	[-0.99]	[-2.58]
CAPEX/A	5.405***	5.408***	5.236***	-10.046	3.762	3.640*	5.766***
	[3.68]	[3.68]	[3.55]	[-1.31]	[0.80]	[1.65]	[2.72]
RD/A	13.719*	13.709*	13.739*	-30.774*	-15.811	38.346*	-2.678
	[1.67]	[1.67]	[1.67]	[-1.81]	[-1.30]	[1.88]	[-0.34]
RDD	0.032	0.032	0.043	-0.856	-1.196	-0.136	0.217
	[0.10]	[0.10]	[0.13]	[-0.98]	[-1.40]	[-0.23]	[0.53]
VOL	0.002	0.002	0.010	0.777	0.131	0.304**	-0.144*
	[0.04]	[0.04]	[0.16]	[1.00]	[0.81]	[2.55]	[-1.93]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	59,765	59,765	59,765	1,942	4,267	20,824	34,140
Adjusted R^2	0.452	0.452	0.452	0.461	0.471	0.376	0.645

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 26: Determinants of ME/E: Repurchasing Firms in Other Countries

	Full Sample				**1992–2002** / **2003–2013** / **2014–2024**		
Dependent variable	(1) ME/E	(2) ME/E	(3) ME/E	(4) ME/E	(5) ME/E	(6) ME/E	(7) ME/E
REPD	-0.273				-1.043*	0.272	-0.051
	[-0.46]				[-1.80]	[0.25]	[-0.05]
REP/E		10.245					
		[0.24]					
PAYOUTD			0.012				
			[0.06]				
REP6D				1.775			
				[0.95]			
ASSETS	-2.027***	-2.028***	-2.029***	-1.786	-4.171***	-2.578***	-1.378***
	[-10.08]	[-10.08]	[-10.06]	[-0.68]	[-4.04]	[-6.99]	[-4.34]
NI/E	-2.827***	-2.827***	-2.828***	-1.236	-5.854***	-3.370***	-1.630***
	[-7.98]	[-7.98]	[-7.95]	[-0.76]	[-5.11]	[-5.76]	[-4.28]
DEBT/E	0.629***	0.628***	0.629***	3.041**	1.141	0.447	0.878***
	[3.52]	[3.52]	[3.52]	[2.11]	[1.43]	[1.33]	[4.53]
CASH/E	5.555***	5.556***	5.555***	8.546**	13.399***	7.270***	4.251***
	[9.09]	[9.09]	[9.08]	[2.33]	[3.78]	[6.18]	[6.82]
PPE/E	0.894**	0.894**	0.894**	-1.463	0.059	1.577***	0.528
	[2.50]	[2.50]	[2.50]	[-0.72]	[0.04]	[2.85]	[1.42]
CAPEX/E	3.333**	3.329**	3.330**	-2.064	-0.255	2.447	3.903***
	[2.49]	[2.48]	[2.48]	[-0.25]	[-0.07]	[1.09]	[2.69]
RD/E	20.153***	20.151***	20.153***	-54.029	-40.639***	36.273**	10.075
	[2.91]	[2.91]	[2.91]	[-1.22]	[-2.75]	[2.43]	[1.55]
RDD	-0.446	-0.445	-0.445	-0.988	-5.308**	-0.077	-0.248
	[-0.96]	[-0.96]	[-0.96]	[-0.41]	[-2.06]	[-0.09]	[-0.44]
VOL	0.155	0.155	0.155	1.653	0.296	0.606***	-0.066
	[1.46]	[1.46]	[1.46]	[1.28]	[0.75]	[2.65]	[-0.48]
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	59,765	59,765	59,765	1,942	4,267	20,824	34,140
Adjusted R^2	0.448	0.448	0.448	0.438	0.502	0.403	0.616

t-Statistics based on standard errors robust to clustering at the firm and year levels are reported in brackets.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$