Growth opportunities, information asymmetry, and dividend payout: Evidence from mandatory IFRS adoption[1]

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Abstract

We study how the relationship between a firm's growth opportunities and its dividend policies shifts in response to a reduction in information asymmetry between investors and firms. Existing literature suggests a negative relationship between growth opportunities and dividend payouts in the presence of information asymmetry. Using the mandatory adoption of IFRS (International Financial Reporting Standards) as an exogenous shock to the information environment of a firm, we document that the negative relationship between growth opportunities and dividend payout strengthens. This suggests IFRS adoption improves capital allocation by shifting dividend demand towards low-growth firms and reducing dividend demand from high-growth firms.

1. Introduction

A plethora of work has gone into studying the determinants of a firm's dividend decision since Miller & Modigliani (1961) proposed their dividend irrelevance theory. Findings from this literature highlight the relationship between growth opportunities of firms and dividend payouts (see, for example, DeAngelo et al., 2004; Fama & French, 2001; Jensen, 1986) and the role of a firm's information environment in shaping this relationship (Allen & Michaely, 2003; Rozeff, 1982; Smith & Watts, 1992). In this paper, we examine whether an exogenous improvement in a firm's information environment, facilitated by the adoption of International Financial Reporting Standards (IFRS) accounting standards, influences the relationship between growth opportunities and payouts. This becomes a particularly relevant question given an increasing demand from regulators, practitioners, and auditors alike for an improved information disclosure by firms (KPMG, 2011; SEC, 1998, 2013).

The observed relationship between growth opportunities and dividend payout is a result of the tradeoff between investors' demand for dividends (Baker & Wurgler, 2004; Shefrin & Statman, 1984) and the availability of cash with managers to be distributed as dividends (Jensen, 1986; Myers & Majluf, 1984). Investors assess future potential growth opportunities of firms based on the available information and demand higher dividends from firms that do not offer high growth opportunities whereas they are willing to give up dividends if they are optimistic about a firm's growth opportunities (Baker & Wurgler, 2004). Thus, based on investors' demand, firms with higher growth opportunities (high-growth firms hereafter) pay lower dividends, and firms with fewer growth opportunities (low-growth firms hereafter) pay higher dividends. However, since investors' demand is conditional on the quality of available information, this channel is less likely to influence dividend policies under high information asymmetry.

Once information asymmetry reduces, investors have access to higher quality information which equips them to assess the future earning potential of firms' proposed investments with higher precision. In other words, investors are better informed about the high future potential of investment opportunities available to high-growth firms and the lack of future growth opportunities for low-growth firms. Thus, based on an improved assessment after a reduction in information asymmetry, investors are likely to further reduce dividend demands from high-growth firms, whereas they could further increase demand for dividends from low-growth firms. This argument is consistent with investors reacting positively to dividend cuts initiated by firms when these firms have high growth potential (Ghosh & Woolridge, 1988), and find it optimal to wait for dividends when they assess that future capital appreciation prospects are higher (Gugler, 2003; La Porta et al., 2000). In addition, investors value income in the form of dividends more highly than income in the form of unrealized capital gain generated by corporate cash retention (Baker & Wurgler, 2004; DeAngelo et al., 2008; Shefrin & Statman, 1984). Taken together, these arguments suggest that high-growth firms reduce dividend payout whereas low-growth firms increase dividend payout following a reduction in information asymmetry.

The influence of another key determinant of dividend payout, i.e., availability of cash to be distributed as dividends, is likely to influence dividend payout in the opposite direction when information asymmetry reduces. In a state of high information asymmetry, the cost of external financing is high (Rozeff, 1982), and therefore pecking order theory predicts that high-growth firms retain internal cash to invest in growth opportunities and consequently pay lower dividends (Myers and Majluf, 1984).

Conversely, agency theory predicts that low-growth firms pay higher dividends to reduce the agency cost of free cash flows (Jensen, 1986)[2]. Since both these theories exert influence on dividend payout under high information asymmetry, a reduction in information asymmetry should weaken their effects.

Lower information asymmetry eases the access to external capital, reducing the need for high-growth firms to retain cash and allowing them to increase dividend payout. At the same time, lower information asymmetry also mitigates the agency cost of free cash flow (Hail, Tahoun, and Wang, 2014), thereby reducing the need to pay dividends for low-growth firms, allowing them to reduce dividends payout. In sum, high-growth firms could increase dividend payout and low-growth firms could reduce dividend payout following a reduction in information asymmetry.

Since the effect of reduction in information asymmetry on the relation between growth opportunities and the payout is not clear *ex-ante*, we examine this question empirically. Following prior literature (see De George et al., 2016 for a comprehensive review), we use the mandatory adoption of IFRS as an exogenous shock that mitigates the information asymmetry concerns. Exploiting this research setting, we construct a matched sample of firms headquartered in countries that mandated the adoption of IFRS[3] (henceforth, treatment firms) and firms that are headquartered in non-IFRS countries (henceforth, control firms), spanning the period 2001-2017 for which we are able to obtain reliable data.

Using the market-to-book ratio as a proxy for growth opportunities, our difference-in-difference-in-difference (DIDID) analysis reveals that mandatory IFRS

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[2] We expect pecking order theory to be more relevant for high-growth firms and agency theory to be more relevant for low-growth firms. We explain this in more detail in the next section.

[3] We exclude voluntary IFRS adopters and restrict our sample to only those firms which have adopted IFRS accounting standard on or after the year of IFRS mandate in the country

adoption leads to an increase in the propensity of dividend payout from low growth firms and a decrease in the same from high growth firms. These changes are economically significant, and amount to an increase in the propensity to pay dividends by approximately 11 percentage points for low-growth firms, and to a decrease in the propensity to pay dividends by approximately 18 percentage points for high-growth firms, when compared to control firms. We also test the consistency of these results using payout ratios, and we find similar results.

Furthermore, we expect our results to be more pronounced for firms experiencing a more significant reduction in information asymmetry. Using analyst forecast errors as a measure of information asymmetry (Byard et al., 2011; Jiao et al., 2012), we find that changes in payout policies are more prominent for the firms that have a greater reduction in absolute analyst forecast errors. This is consistent with our argument that the precision of investors' assessment of firms' future earning potential influences their demand for dividends. We also document that, equipped with more information, investors demand more dividends from low-growth firms with higher residual cash, measured as free cash flow, vis-à-vis those with relatively lower residual cash.

We subject our main findings to several robustness tests. Our main results are robust to: (1) firm-level adoption of IFRS instead of country-level adoption, (2) alternative winsorization levels of data, (3) the sample consisting of only those firms that do not experience a change in their growth opportunities following IFRS adoption, and (4) alternative proxies for growth opportunities such as asset growth and growth in capital expenditures. To address the concern that our results might be driven by clustered adoption of IFRS in 2005, we test the impact of IFRS on dividends separately for countries adopting IFRS in 2005 and other years. Both these results remain consistent with our main hypothesis.

We make multiple contributions to the existing literature in Accounting and Corporate Finance. First, to the best of our knowledge, we are the first to document the effect of change in information asymmetry on the relationship between firms' growth opportunities and their dividend policies. While most of the literature documents the individual effects of growth and information asymmetry on dividend policies (Rozeff, 1982; Jensen, 1986; Fama & French, 2001; etc.), we demonstrate that a reduction in information asymmetry doesn't shift the payout equilibrium for all firms in the same direction; this shift is rather a function of firms' growth opportunities.

Second, we contribute to the literature on the positive effects of changes in accounting regulations, such as improvement in investment efficiency following IFRS adoption (as documented by Biddle et al., 2016; Schleicher et al., 2010, etc.). We add to this literature by documenting that IFRS adoption shifts the dividend demand towards firms with fewer growth opportunities whereas reduces the dividend demand from growing firms. This suggests IFRS adoption improves capital allocation by channelizing dividend demand towards low-growth firms, which tend to be cash-rich, and reducing dividend demand from high-growth firms allowing these firms to use the cash to exploit available growth opportunities.

Third, we add to the recent IFRS literature by distinguishing the impact of a reduction in information asymmetry facilitated by IFRS adoption from simultaneous improvement in the information environment caused by other regulatory reforms in the European Union (EU). Along with IFRS, the EU countries implemented various regulatory changes recommended by the Lamfalussy Report[4] aimed at the improvement of the efficacy of financial services. Therefore, it is not obvious whether the documented effects in the literature are a response to IFRS adoption or overall change in regulations (Christensen et al. 2013). Recent studies in IFRS mitigate these concerns by expanding the sample to countries that adopted IFRS in years other than 2005 (for example, Xiao Li et al., 2020). Along similar lines, we complement the findings of Hail, Tahoun, and Wang (2014) and show that the observed changes in payout policy of firms can be attributed to the adoption of IFRS, and not to the concurrent enforcement changes in the EU.

Finally, we add to the literature on investors' influence on firms' dividend policies. Our findings suggest that an improved information environment allows investors to make a more judicious choice when they demand dividends from firms based on their growth opportunities.

2.0 Literature Review and Hypotheses Development

2.1 Growth opportunities and dividends - the investor demand explanation

Prior literature not only documents investors' preference for dividends but also captures the influence of shareholders' demand for dividends on firms' dividend policies. For instance, while Shefrin and Statman (1984) propose that investors have a static preference for dividends, Harris et al. (2015) document that a few equity mutual funds cater to investors' dividend preference by trading in-and-out of dividend-paying stocks. La Porta et al. (2000) document the influence of shareholders' demand and find in their cross-country analyses that firms payout dividends under pressure from minority

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[4] European Commission: Regulatory process in financial services

shareholders. Crane et al., (2016) show that high institutional ownership in firms results in these firms' paying more dividends. Further, Polk and Sapienza (2009) document that managers meet investors' demand for dividends in order to increase share prices in the short-run.

Prior literature also provides strong evidence of the influence of growth opportunities on investors' demand for dividends. Baker and Wurgler (2004) document that investors' demand for dividends is a function of their assessment of the underlying firm's future growth potential. In other words, investors demand higher dividends from firms that have lower growth opportunities whereas they are inclined to let go of dividends when the underlying firm exhibits potential for future growth. In the case of low-growth firms, investors value cash inflow in the form of dividends more than the inflow in the form of unrealized capital gains created by corporate cash retention (Baker and Wurgler, 2004; DeAngelo et al., 2008; Shefrin and Statman, 1984). On the other hand, if shareholders are optimistic about the firm's growth potential and are certain that dividend cuts are growth motivated, the market responds favorably to these dividend cuts (Ghosh and Woolridge, 1988). Similarly, shareholders find it optimal to wait for dividends when determining that prospects for capital appreciation being high (Gugler, 2003; La Porta et al., 2000), which is particularly relevant for high-growth firms.

Taken together, these studies suggest that investors demand dividends based on their assessment of a firm's growth potential, leading to a negative relationship between growth opportunities and dividend payout. However, when information asymmetry is high, investors' assessment of a firm's earnings potential from a growth opportunity is likely to be less precise, i.e., the assessment of growth opportunities by investors is conditional on the quality of available information.

2.2 *Growth opportunities and dividends - the agency cost and pecking order explanation*

The negative relationship between growth opportunities and dividend payout could also be explained by a combination of agency theory and pecking order theory (Jensen, 1986; Myers and Majluf, 1984; Fama and French 2001, DeAngelo et al. 2004, etc.). Agency theory posits that managers have incentives to over-retain cash to fund private benefit projects or otherwise benefit themselves at the expense of shareholders (Jensen and Meckling 1976; La Porta et al., 2000; Stulz, 1990). On the other hand, pecking order theory (Myers and Majluf, 1984) emphasizes the importance of firms' holding on to internal capital in the presence of information asymmetry because information asymmetry increases the transaction cost of external finance (Rozeff, 1994).

In determining a firm's payout policy, these theories rely upon the inherent differences between low-growth and high-growth firms. Unlike high-growth firms, low-growth firms tend to be cash-rich (DeAngelo et al., 2008; Jensen, 1986) and have fewer positive net-present-value (NPV) projects available in comparison to high-growth firms. Because of the higher cash at the disposal of managers combined with the lack of ample investment options, low-growth firms have higher agency cost of free cash flow (FCF) and a lower reliance on external capital (Jensen, 1986). To mitigate the agency cost of FCF, low-growth firms pay the excess cash as dividends to shareholders (Allen &

Michaely, 2003). Thus, agency theory predicts that, in the presence of information asymmetry, low-growth firms have high dividend payout[5].

On the other hand, high-growth firms are in constant need of capital to meet their investment requirements. External capital is expensive in the presence of information asymmetry (Rozeff, 1984), and high-growth firms tend to retain cash and consequently pay a lower dividend. Consequently, in the presence of information asymmetry, pecking order theory predicts low dividend payout for high-growth firms[6].

2.3 Hypotheses development

The objective of this study is to examine whether an exogenous improvement in a firm's information environment influences the relationship between growth opportunities and payouts. On the one hand, the investor demand explanation suggests that an improved information environment provides investors an access to higher quality information allowing them to assess the future earning potential of firms' proposed investments with higher precision. As a result of the improved assessment, investors are likely to be more confident of the high future potential of investment opportunities available to high-growth firms and the lack of future growth opportunities for low-growth firms. Therefore, following the mandatory adoption of IFRS, investors are likely to further reduce dividend demands from high-growth firms, whereas they could further increase demand for dividends from low-growth firms. These arguments lead to the following hypothesis:

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[5] Low-growth firms do not rely significantly on external capital (DeAngelo et al., 2008; Jensen, 1986), pecking order theory is less relevant for these firms.

[6] Unlike low-growth firms, high-growth firms do not have excess cash at the disposal of managers (DeAngelo et al., 2008; Jensen, 1986). Consequently, high-growth firms have lower levels of agency concerns in comparison to low-growth firms, and therefore agency theory is less relevant in determining the payout policy of high-growth firms.

Hypothesis 1: Firms with high (low) growth opportunities are less (more) likely to pay dividends following the mandatory adoption of IFRS.

On the other hand, following an improvement in the information environment enabled by IFRS adoption, the cost of capital reduces (Li, 2010; Biddle et al., 2016). Owing to this, high-growth firms have a lower need to hold on to internal cash. Consequently, pecking order theory predicts that after the adoption of IFRS accounting standards, the likelihood of high growth firms' paying dividends increases.

In case of low-growth firms, following an improvement in public information, managers need not convey their commitment to avoid overinvestment via expensive dividends (Hail, Tahoun, and Wang, 2014). Therefore, as information asymmetry between firms and investors reduces, investors are less likely to be concerned about agency problems arising from the FCF channel. Thus, in case of low-growth firms, agency theory predicts that the need to pay dividends reduces following an improvement in the information environment. This discussion paves way for the following hypothesis.

Hypothesis 2: Firms with high (low) growth opportunities are more (less) likely to pay dividends following the mandatory adoption of IFRS.

To test these predictions, we use the mandatory adoption of IFRS as an exogenous shock to a firm's information environment. Prior literature (see De George et al., 2016 for a comprehensive review) documents that the mandatory adoption of IFRS reduces the information asymmetry between a firm and its investors. Therefore, we examine the effect of IFRS adoption on firms' propensity of paying dividends, as well as their payout ratios[7].

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[7] We find that, in general, new firms are added to the sample almost every year and these new entrants are more likely to be non-dividend-paying companies. This sample attribute could mechanically induce a

3.0 Data and hypotheses tests

3.1 Basic empirical framework

We examine the effect of exogenous information shock on dividend policy using a difference-in-difference-in-difference (DIDID) technique. Countries subject to the IFRS mandate form the treatment sample, and the countries that did not mandate IFRS during our sample period form the control sample. The model is shown below:

$$E(\Pr(DIV\_PAID_{it})) = \alpha_0 + \alpha_1 POST \times IFRS \times Q1 + \alpha_2 POST \times IFRS + \alpha_3 POST \times Q1 + \alpha_4 IFRS \times Q1 + \alpha_5 Q1 \sum_{k=6}^{n} \alpha_k \boldsymbol{Controls} + Industry\ FE + Year\ FE + Country\ FE \quad (1)$$

In equation (1), the response variable is DIV_PAID, which is an indicator variable that takes 1 when a firm pays dividend in year *t*, and 0 otherwise. IFRS is an indicator variable that equals 1 for firms in the treatment group, and 0 otherwise. Similarly, POST equals 1 for years after a country mandates IFRS adoption, and zero before the mandate. We define POST for the control firms based on their match in the treatment group. Q1 is an indicator variable that takes a value of 1 for firms with the market to book ratio in the bottom-most quartile, and a value of 0 for firms in the topmost quartile of the market to book ratio in a given year. Thus, Q1 is equal to 1 for low-growth firms and is equal to 0 for high-growth firms. The coefficient $\alpha_1$captures the DIDID estimate. In other words, it estimates the changes in the average propensity of dividend payout after the adoption of IFRS between the treatment and control firms, for low growth and high growth firms. Thus, $\alpha_1 + \alpha_2$ denotes the change in propensity to pay dividends for low-growth firms, while α_2 denotes the change in propensity to pay

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lower likelihood of paying dividends, especially for the sample of high growth firms. Therefore, it is imperative that we test our estimates not only for the likelihood of paying dividends but also for payout levels, which we examine using the dividend payout ratio.

dividends for high-growth firms. In equation (1), we do not report the main effects of POST and IFRS since we include the year and country fixed effects that completely absorb the main effects of these two indicator variables.

$\boldsymbol{Controls}$ is a vector of known determinants of the payout policy of a firm. Consistent with the sticky dividends argument of Lintner (1956), we control for prior period's dividend behavior by including a lagged dividend payment indicator variable, indicated by DIV_PAID_{t-1}. *LTA* is the log of total assets of a firm, used as a proxy for the firm size, and we expect a positive sign on its coefficient because larger firms tend to pay higher dividends (Redding, 1997). *LEV* is the financial leverage. It indicates the levels of debt relative to equity; thus, firms with higher leverage can have higher interest payment obligations and therefore would pay lower dividends. We, therefore, expect a negative sign on its coefficient. *ROA*, return on assets, is a measure of firm profitability. Firms with higher profitability are likely to pay higher dividends. We, therefore, expect a positive sign on its coefficient.

We also include *RET*, a measure for annual stock return, to proxy for the firm's stock market performance; we, therefore, expect a positive sign on its coefficient. *REP* is an indicator variable that controls share repurchases, an alternative payout mechanism. *NEG_EARN* is an indicator variable equal to 1 in the case of a firm reporting a negative operating profit, measured as earning before interest and taxes (EBIT), in a given year. This coefficient is expected to be negative. *UNCERT* captures the volatility of cash flows for a firm. Prior literature suggests that because institutional owners are external monitors, they can pressure firms to pay more dividends to mitigate agency costs (Crane, Michenaud and, Weston 2016). Further, ownership structure dominated by a few institutional investors with large positions improves monitoring ability (Admati et al., 1994; Shleifer & Vishny, 1986). To control for these two factors, we include *INSTI_OWN_PERC* which is the percentage of a firm's stock held by institutions such as mutual funds and *INSTI_CONC* which is the ownership concentration ratio measured by the Herfindahl-Hirschman index (Ferreira, Miguel, and Pedro Matos, 2008). FCF is the free cash flow available to a firm. DIVIDEND_TAX_RATE is the withholding tax rate paid by a firm for distributing dividends. Variable measurements are described in Table 1.

[Table 1 about here]

3.2 Sample description

We obtain firm-level information spanning 45 countries from Compustat Global and match it with ownership data from Factset. Our data begins from 2001, which is two years before the earliest IFRS adopter in our sample and ends in 2017 due to the non-availability of Factset data for the period after 2017. For the cross-sectional test related to analyst forecast errors, we combine the data with analyst forecast data from I/B/E/S. To avoid endogeneity concerns arising from firms voluntarily adopting IFRS, we restrict our sample to mandatory IFRS adopters, i.e., firms that adopted IFRS only after the mandate in their respective countries.

Our treatment sample comprises data from 40 countries that mandated IFRS during our sample period. The earliest adopter in our sample is Singapore with a mandate issued in 2003. Several countries (24 in our sample) mandated IFRS in 2005, including countries from Europe. Canada is the only country from the North American continent to adopt IFRS (in 2011). Colombia is the last country in the sample to mandate IFRS adoption (in 2015).

Our control sample consists of data from 5 countries that did not mandate IFRS adoption until 2017[8] when our sample period ends. To create the control sample, we follow prior literature and use matching between treatment and control firms (Barth et al., 2012; De George et al., 2016). Specifically, we match firms in the treatment sample with those in the control sample based on industry (48-industry classification as per Fama & French (1997)), adoption year, and size, where size is calculated as the natural log of total assets, averaged over five years prior to the adoption of IFRS (Xiao Li et al., 2020). The matching process is based on the nearest-neighbor method without replacement with a caliper of 0.01. For our primary analysis, we only retain firms that belong to the top and bottom quartiles of the market-to-book ratio, which is the proxy for growth opportunities. This leaves us with a sample of 124,954 firm-year observations, with 63,380 observations in the treatment sample, and 61,574 observations in the matched control sample.

3.3 Descriptive statistics

Table 2 Panel A presents the country-level distribution of the sample. Countries that adopted IFRS in 2005 represent approximately 48% of the treatment sample and European countries that adopted IFRS in 2005 form approximately 28% of the sample. Thus, our treatment sample comprises several non-2005 IFRS adopters. This alleviates one of the primary concerns documented in prior IFRS literature related to attributing economic benefits to IFRS adoption in 2005. For example, Christensen et al. (2013) highlight that most benefits ascribed to IFRS adoption are confounded by concurrent enforcement changes in several European nations. We believe our sample overcomes

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[8] Malaysia mandated adoption of IFRS at the end of 2017. Since our sample ends in 2017, we consider Malaysia as a part of the control sample.

this issue since more than 50% of observations in our treatment sample belong to non-2005 IFRS adoption. The control sample is dominated by Japan and the USA, which is consistent with prior literature (DeFond et al., 2015; Xi Li & Yang, 2016; Xiao Li et al., 2020).

[Table 2 Panel A about here]

Since our main analysis focuses on the dividend payment behavior of low-growth and high-growth firms, we present the distribution of dividend-paying firms for low-growth and high-growth firms in both the treatment and control groups in Table 2, Panel B. For parsimony, we restrict the period in this table to five years on either side of adoption. The proportion of low-growth firms that paid dividends in the treatment group before the adoption of IFRS was approximately 41%, and this increased to 53% after the adoption of IFRS. In contrast, the proportion of dividend-paying high-growth firms reduced to 24% after the adoption of IFRS in the treatment group from 35% in the pre-IFRS adoption period. At the same time, the control sample does not see a similar change in these parameters.

[Table 2 Panel B about here]

The summary statistics of all variables in the final sample have been reported in Table 3. We winsorize all continuous variables at 1% and 99% levels. The mean of *DIV_PAID*, is 0.374, suggesting that approximately 37% of firms pay dividend in our sample, whereas the payout ratio has a mean of 0.156. The average profitability of firms, captured by ROA, is -0.086, and the mean leverage is 0.32, both consistent with prior literature on IFRS (Li et al., 2020).

[Table 3 about here]

3.4 Relationship between Growth Opportunities and Dividend Payout

We begin the test of our hypotheses by first examining the parallel trend of dividend propensity over the years for low growth firms (Figure 1) and high growth firms (Figure 2), compared to the control set of firms. The trend in both these figures suggests that before the adoption of IFRS, dividend propensity followed a similar pattern between IFRS and non-IFRS countries. However, post the adoption of IFRS, low-growth firms move away from the pre-IFRS trend and gradually increase the likelihood of dividend payment, while high growth firms reduce their likelihood of dividend payment.

[Figure 1 near here]

[Figure 2 near here]

To formally study the differential effect of IFRS adoption on firms' propensity to pay dividends, we run a DIDID model as described in equation (1). As discussed earlier, in equation (1), the three-way interaction of POST, IFRS, and Q1 allows us to estimate the changes in the propensity of paying dividends for low growth and high growth firms in the same regression. The sum of coefficients α_1 and α_2 captures the change in the propensity of paying dividends for low-growth firms post the adoption of IFRS compared to non-IFRS firms, while the coefficient α_2 on the two-way interaction of POST and IFRS captures the changes in the propensity of paying dividends for high-growth firms post the adoption of IFRS, again compared to non-IFRS firms. The results of this analysis are documented in column (1) of Table 4[9].

The coefficient α_1 is 0.2894 and α_2 is -0.1808, both statistically significant at 1%. The sum $(\alpha_1 + \alpha_2)$ is 0.1086, also statistically significant at 1%, and suggests that

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[9] All the results from the logit model report the marginal effect on propensity of paying dividends.

low-growth firms are more likely to pay dividends following the adoption of IFRS by approximately 11 percentage points. The coefficient α_2 of -0.1808 suggests that high-growth firms are less likely to pay dividends following the adoption of IFRS by approximately 18 percentage points. We find consistent support for hypothesis 1 from our results in Table 4. In sum, we find that the adoption of IFRS results in reduced dividends from high-growth firms whereas it results in increased dividend payouts from low-growth firms.

To further corroborate our findings, we extend our analysis to payout ratios. If the predictions of hypothesis 1 are true, we should observe a similar pattern for payout ratios. Therefore, we use OLS regression to re-estimate equation (1) by replacing the binary response variable with *Payout*, which is the payout ratio of a firm. The results from this analysis are presented in column (2) of Table 4. The sum $(\alpha_2 + \alpha_2)$ is 0.0804, statistically significant at 1%, suggesting that low-growth firms increase their payouts by approximately 8 percentage points after the adoption of IFRS, while the value -0.0679 for α_2 suggests that high-growth firms reduce their payouts by approximately 7 percentage points. In other words, payout ratio analysis provides further support to hypothesis 1.

[Table 4 near here]

4.0 Additional tests

4.1 Extent of Reduction in Information Asymmetry

Our hypotheses rely on a reduction in information asymmetry as a consequence of IFRS adoption. Therefore, it is fair to expect that the impact of IFRS adoption would be stronger in the cross-section of firms where reduction in information asymmetry is more significant. In other words, we expect low-growth (high-growth) firms to increase (reduce) payouts to a greater extent in the subsample where reduction in information asymmetry in the cross-section of firms is higher. To capture the reduction in information asymmetry, we examine changes in analyst forecast errors post the adoption of IFRS. Analysts play the role of information intermediaries and disseminate useful information to market participants (Piotroski & Roulstone, 2005). This role gains further significance when the information environment of a firm is not rich and the demand for analyst-generated information increases (Lehavy, Li and, Merkley 2011). In sum, prior literature suggests that investors rely on analyst-generated information to gain useful insights into a firm. Therefore, when analyst forecast errors are smaller, better information is available to investors.

IFRS adoption leads to better information generated by analysts, empirically captured by lower analyst forecast errors (Byard et al., 2011; Hodgdon et al., 2008; Jiao et al., 2012), and improved analysts' performance in predicting target prices (Bilinski, Lyssimachou, and Walker 2012). Thus, in the cross-section of firms that adopt IFRS, firms that see lower forecast errors post the adoption of IFRS are likely to have a bigger reduction in information asymmetry as a result of IFRS adoption. Taken together, we propose that the effects documented in hypothesis 1 should be stronger for firms that have lower levels of absolute analyst forecast errors in the cross-section.

We capture forecast properties using the following measure of absolute analyst forecast error (AFE):

$$AFE = \frac{|\ Actual\ earnins\ per\ share - forecasted\ earnings\ per\ share|}{Actual\ earnins\ per\ share}$$

Forecasted earnings per share is the first consensus analyst forecast for the quarter following the year *t* after the issuance of an annual report. Actual earnings per share is the actual earnings for that quarter. We compute the average absolute forecast error for each firm in the period before IFRS adoption, as well as the average absolute forecast error after the adoption of IFRS. We then classify firms into two categories: (1) firms with a reduction in the average absolute forecast error from the pre-IFRS period to the post-IFRS period, and (2) firms with an increase in the average absolute forecast error during the same period.

In the model, we split the IFRS indicator into two indicator variables: QF1, and QF2. QF1 is an indicator variable equal to 1 for firms in the treatment sample that have changed in AFE below the median value, and zero otherwise. Similarly, QF2 is an indicator variable that equals 1 for firms in the treatment sample that have changed in AFE above the median value and zero otherwise. Both the indicators QF1 and QF2 are zero for non-IFRS firms. We then use the following model:

$$\Pr(DIV\_PAID_t) = \alpha_0 + \alpha_1 POST \times QF1 \times Q1 + \alpha_2 POST \times QF1 + \alpha_3 POST \times QF2 \times Q1 + \alpha_4 POST \times QF2 + \sum_{k=6}^{n} \alpha_k \boldsymbol{Controls} + Industry\ FE + Year\ FE + Country\ FE \quad (2)$$

Thus, in equation (2), we examine the moderating effect of AFE on the changes in the propensity to pay dividends for low-growth and high-growth firms after the adoption of IFRS compared to the set of non-IFRS firms.

The coefficient $\alpha_1 + \alpha_2$ represents the changes in dividend propensity for low-growth firms between low forecast-error treatment firms and the entire control sample. The coefficient α_2 represents the changes in dividend propensity for high-growth firms between low forecast-error treatment firms and the entire control sample. Similarly, $\alpha_3 + \alpha_4$ and α_4 represent the changes in dividend propensity for low-growth and high-growth firms, respectively, with high forecast errors. If information asymmetry reduction drives our main finding, low-growth firms that see a greater reduction in forecast errors are likely to increase payouts in comparison to those firms that see a lower reduction in forecast errors. Thus, we expect $\alpha_1 + \alpha_2$ to be significantly higher than $\alpha_3 + \alpha_4$, and α_2 to be significantly more negative than α_4.

The results for this model are presented in Table 5. Column (1) reports the result for the changes in dividend propensity, while column (2) reports the result for payout ratio. The difference between $\alpha_1 + \alpha_2$ and $\alpha_3 + \alpha_4$ is 0.1183 (0.0621) in column 1 (column 2), and statistically significant, suggesting that when compared to control set of firms, the likelihood of paying dividends (payout ratios) for low-growth firms in the IFRS sample increases by approximately 12 percentage points (6 percentage points) more compared to firms with high forecast errors.

[Table 5 near here]

The difference between α_2 and α_4 is -0.0499 (-0.0325) in column 1 (column 2), and statistically significant, suggesting that when compared to control set of firms, the likelihood of paying dividends (payout ratios) for high-growth firms in IFRS sample reduces by approximately 5 percentage points (3 percentage points) more compared to firms with high forecast errors. Overall, our evidence suggests that the effect of IFRS adoption on the relationship between firms' growth opportunities and their payout policy is stronger for firms that experience a greater reduction in analyst forecast errors. This result provides confidence that our main results are primarily driven by a change in information asymmetry.

4.2 Extent of Residual Cash

The second cross-sectional test examines the role of residual cash with a firm in shaping the relationship between growth opportunities and payouts following the adoption of IFRS. We use residual cash, or the free cash flow (FCF), to capture a firm's ability to pay dividends, *ceteris paribus*. Firms with higher levels of residual cash, such as low-growth firms, are likely to pay higher dividends. On the other hand, high-growth firms expect to invest in growth opportunities regularly and would use any cash left at the end of a period for investment purpose(s) in subsequent periods. Thus, residual cash is unlikely to influence the ability of dividend payment for high-growth firms.

We extend this line of argument to further examine our primary analyses. Our main finding suggests that after the adoption of IFRS, low-growth firms have a higher propensity to pay dividends. This is because following the adoption of IFRS, investors can better estimate the lack of growth potential in the case of low-growth firms and demand the surplus or residual cash as dividends. If this line of reasoning is true, then our main finding for low growth firms should be stronger for firms with higher residual cash. In other words, after IFRS adoption, investors would expect low-growth firms with higher levels of residual cash to increase the dividend payouts to a greater extent. We test this prediction using the model outlined below:

$$\Pr\left(DIV_{PAID_{it}} \middle| Q1\right) = \alpha_0 + \alpha_1 POST \times IFRS \times HighFCF + \alpha_2 POST \times IFRS + \alpha_3 POST \times HighFCF + \alpha_4 IFRS \times HighFCF + \alpha_5 HighFCF + \sum_{k=6}^{n} \alpha_k \boldsymbol{Controls} + Industry\ FE + Year\ FE + Country\ FE \quad (3)$$

In equation (3), *HighFCF* is an indicator variable that takes a value of 1 for firms with FCF in the topmost quartile, and zero for firms with FCF in the bottom-most quartile. The coefficient $\alpha_1$captures the differential dividend payment behavior of firms with high FCF against those with low FCF within the subsample of low-growth firms (Q1=1), after the adoption of IFRS. In the subsample of low growth firms, we expect α_1 to be positive and significant, which would suggest that low-growth firms with high FCF increase their dividend payments to a greater extent than the low-growth firms with low FCF. Table 6 presents the result from this analysis.

[Table 6 near here]

Column (1) of Table 6 presents the results corresponding to equation (3) for low-growth firms (i.e., Q1 = 1). The coefficient α_1 is positive and significant, suggesting that low-growth firms with higher residual cash are more likely to increase dividends post the adoption of IFRS, in comparison to low-growth firms with low residual cash. This finding further corroborates that investors are unwilling to leave surplus cash with managers following the adoption of IFRS because investors possibly have better avenues of investing this cash than the managers of low-growth firms[10].

We also conduct the same analysis for high-growth firms by using equation (3) and conditioning the dependent variable on Q1=0. The results are presented in Table 6 column (2). The coefficient α_1 is statistically insignificant, suggesting that the reduction in the propensity to pay dividends is not different between high-FCF high-growth firms and low-FCF high-growth firms. This is consistent with the expectation that residual cash has little significance for high-growth firms in the context of payout decisions.

4.3 Changes in growth opportunities

Our main findings suggest that IFRS adoption allows investors to estimate the earnings potential of growth opportunities with greater precision, and investors demand dividends from firms based on the more precise estimate. An alternative explanation could be that IFRS adoption, through a reduction in the cost of capital, increases growth prospects of high-growth firms by allowing them to invest in a higher number of positive NPV projects. Stein (2003) suggests that reduced information asymmetry

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[10] This finding could appear to support the agency theory of free cash flows (Jensen, 1986) owing to investors' unwillingness to leave surplus cash with managers of low-growth firms. Since IFRS results in improved information environment, it mitigates agency problem arising from FCF (Hail et al, 2014). Therefore, this channel predicts a negative sign on coefficient α_1. We, however, find the coefficient α_1 (Column 1, Table 3) to be positive, implying that low-growth firms with high FCF are more likely to pay dividends *after the adoption of IFRS*. Thus, we reject the agency theory explanation of this cross-sectional test, and interpret the result as investors' increased demand for dividends instead of leaving the cash idle with low-growth firms.

between managers and outsiders – facilitated by better accounting standards and more timely disclosure – increases the availability of external capital to positive-NPV projects.

This increase in investment prospects could render dividend payments less attractive for high-growth firms, leading to a lower payout after the adoption of IFRS. However, this channel is unlikely to explain the primary finding of an increase in payout post the adoption of IFRS in the case of low-growth firms. Nonetheless, we examine this channel empirically in this section. We begin by analyzing the movement of firms across growth quartiles after the adoption of IFRS. If IFRS increases growth opportunities for firms, one would expect an increase in the probability of firms to be labelled as high-growth after the adoption of IFRS. To model the movement of firms, we use the regression equation below:

$$\Pr(Q1_t) = \alpha_0 + \alpha_1 POST \times IFRS + \alpha_2 Q1_{t-1} + \sum_{k=7}^{n} \alpha_k \boldsymbol{Controls} + Industry\ FE + Year\ FE + Country\ FE \qquad (4)$$

The model predicts the likelihood of a firm being classified in a given growth quartile in the year *t*, controlling for its growth quartile in the year *t-1*. We include the interaction of POST and IFRS to capture the incremental effect of the IFRS adoption event on this likelihood. Using this model, we create the transition matrix shown in Table 7.

[Table 7 near here]

Table 7 suggests that the probability of a low growth firm in year *t* moving to a high growth quartile in year *t+1* is 0.6475 in the pre-IFRS period. However, this probability increases to 0.7525 after the adoption of IFRS. This is an increase of approximately 10.5 percentage points, and statistically significant, suggesting that firms are more likely to be labelled as high-growth after the adoption of IFRS. Similarly, the probability of a high growth firm in year *t* moving to a low growth quartile in year *t+1* increases by approximately 7.6 percentage points, again statistically significant. Thus, the movement from high-growth to low-growth also increases significantly after the adoption of IFRS. In sum, this result does not provide a clear rejection of the alternative explanation for high-growth firms reducing dividends after the adoption of IFRS.

To address the alternative explanation more directly, we restrict the sample to only those firms that do not change their growth quartiles after the adoption of IFRS. In other words, the restricted sample consists of only those firms that do not experience a change in their growth opportunities post the adoption of IFRS. We re-examine our primary finding by using this classification of growth opportunities in equation (1). This ensures that any change in growth opportunities caused by IFRS adoption does not confound our analyses. The result from this analysis is presented in Table 8.

[Table 8 near here]

Column (1) of Table 8 documents that the likelihood of dividend payment by a low-growth firm increases by 13 percentage points and reduces for high-growth firms by 12 percentage points post the adoption of IFRS. Column (2) presents similar findings for payout ratios. These findings are consistent with our results reported in Table 4. Based on this, we infer that changes in growth opportunities arising out of IFRS adoption are unlikely to explain our main finding.

5.0 Robustness tests

5.1 The year "2005"

A large number of countries mandated IFRS adoption in the year 2005 – in our sample, 48% of the treatment countries adopt IFRS in 2005 – and not surprisingly, most of the studies that examine consequences of IFRS adoption focus on the year 2005 as the benchmark year for a difference-in-difference analysis. The concern with these studies, as highlighted by Christensen et al. (2013), is that most of the countries that adopted IFRS in 2005 belonged to the EU and EU countries also experienced a concurrent change in country-level enforcement levels of accounting standards in 2005.

Thus, it becomes difficult to separate the impact of IFRS adoption from that of changes in enforcement levels. Recent studies (see, for example, Li et al. (2020)) on IFRS do not suffer from this issue because several other countries adopted IFRS after 2005 which allows for a cleaner identification of the impact of IFRS adoption. Our sample also has staggered adoption of IFRS, with 16 countries in the treatment sample that adopted IFRS in years other than 2005. Therefore, our main findings are unlikely to be confounded by the effect of the year 2005 documented by Christensen et al. (2013). Nonetheless, to isolate the impact of IFRS adoption, we restrict our treatment sample to only those countries that did not adopt IFRS in 2005 and estimate equation (1) on this restricted sample. The results from this analysis are presented in Table 9, columns (1) and (2).

[Table 9 near here]

Column (1) of Table 9 shows that the likelihood of dividend payment propensity by low-growth firms increases by 13 percentage points and reduces for high-growth firms by 10 percentage points post the adoption of IFRS. Column (2) presents similar findings for payout ratios. These findings are consistent with our main results reported in Table 4 and suggest that the observed changes in dividend payment behavior are a result of IFRS adoption and are not driven by confounding events of the year 2005.

Furthermore, we also examine the impact of IFRS adoption on dividend policies separately for those countries that adopt IFRS in 2005. The results are presented in columns (3) and (4) of Table 9, and they show that the findings for these countries are consistent with our main findings, as well as with the findings for non-2005 IFRS adopters.

5.2 Alternative proxies for growth opportunities

Our main test uses the market-to-book ratio of a firm as a proxy for its growth opportunities. This ratio is a market-based measure of a firm's growth opportunities. To further test the credibility of our results, we use two accounting-based measures of growth opportunities: asset growth rate and the ratio of capital expenditure to total assets. Titman and Wessels (1988), Chen (2004), and Norvaišienė and Stankevičienė (2015) among others, use asset growth rate as a proxy for growth opportunities for a firm. Similarly, Bhaduri (2002) and Titman and Wessels (1988) among others have used capital expenditure to total assets as a proxy for growth opportunities. We present the results for these two measures in Table 10.

[Table 10 near here]

In Table 10 the dependent variable in columns (1) and (3) is the propensity to pay dividends, while in columns (2) and (4) is the payout ratio. Columns (1) and (2) have growth proxy as asset growth rate, measured as the change in total assets of a firm, scaled by assets at the end of the previous year. We use the same model as shown in equation (1). The coefficient of interest is $\alpha_1 + \alpha_2$ for low-growth firms and α_2 for high-growth firms, as described in equation (1). We find that the coefficient on $\alpha_1 + \alpha_2$ is 0.0733 (0.0486) in column 1 (column 2) and is significant at 1% (1%). The coefficient on α_2 is -0.0712 (-0.0491) in column 1 (column 2) and is significant at 1% (1%).

In columns (3) and (4) of Table 10, the proxy for growth opportunities is capital expenditure to total assets ratio. We find that the coefficient $(\alpha_1 + \alpha_2)$ is 0.0623

(0.0395) in column 1 (column 2) and is significant at 5% (1%). The coefficient α_2 is -0.0629 (-0.0384) in column 1 (column 2) and is significant at 1% (1%). This suggests that our main findings for both dividend propensity and payout ratio continue to hold when we use alternative measures for growth opportunities.

5.3 Median-split, firm-level adoption, winsorization, and timing of information shock

In the next set of robustness tests, we test the sensitivity of our results to alternative specifications. We begin by expanding the definition of high-growth and low-growth firms. In our main findings, high-growth firms are defined as firms in the topmost quartile of market-to-book ratio (*MTB)*, and low-growth firms are defined as those in the lowest quartile of *MTB*. In this robustness test, we use the median value of *MTB* to separate high-growth firms from low growth firms, and re-estimate equation (1). The results from this test are presented in Table 11, columns (1) and (2). The results suggest that the propensity to pay dividends increases for low-growth firms by 13.4 percentage points, and reduces for high-growth firms by 18.5 percentage points. These results are consistent for payout ratios, as seen in column (2).

[Table 11 near here]

Next, we replace country-level adoption of IFRS with firm-level adoption. We use the variable *acctstd* in Compustat Global to identify whether a firm follows IFRS or not, and re-estimate equation (1). The *IFRS* variable in equation (1) is defined at the firm level for this test. Columns (3) and (4) of Table 11 present the result from this analysis. The results in both the columns are consistent with our main findings, suggesting that our results are not sensitive to the level of adoption of IFRS.

We next examine the sensitivity of our result to winsorization methods used. We re-estimate equation (1) on unwinsorized data as well as on winsorization done at 5% and 95% (instead of 1% and 99% in our main findings). Columns (5) through (8) of Table 11 present the results for this analysis. Our main findings continue to hold for these different variations of winsorization, confirming that our findings are not sensitive to the choice of winsorization methods.

In the final tabulated robustness test, we replace the single information shock event with four sub-periods and include indicator variables for three of them. We estimate the following model:

$$\Pr(DIV\_PAID_t) = \alpha_0 + \alpha_1 IND1 \times IFRS \times Q1 + \alpha_2 IND1 \times Q1 + \alpha_3 IND2 \times IFRS \times Q1 + \alpha_4 IND2 \times Q1 + \alpha_5 IND3 \times IFRS \times Q1 + \alpha_6 IND3 \times Q1 + \sum_{k=7}^{n} \alpha_k \boldsymbol{Controls} + Industry\ FE + Year\ FE + Country\ FE \quad (5)$$

Assuming the event occurs at *t=0*, the first indicator variable (IND1) equals 1 for the periods *t-2* and *t-1*. Previous years serve as the base period. The second indicator variable (IND2) equals 1 for *t=0* and *t=1*, and the third indicator variable (IND3) equals 1 for all years after *t=1*. If the change in dividend payment behavior is related to the exogenous information shock, then α_1 should be statistically insignificant; α_2, however, might or might not be statistically significant depending upon how fast the information shock influences the information environment.

Although we cannot predict the significance of α_2 ex-ante, we predict α_3 to be significantly positive because the reduction in information asymmetry is likely to be in play from the second year onwards, following the IFRS adoption. The results are reported in columns (9) and (10) in Table 11. We find that the three-way interaction term involving IND1 is insignificant in both columns (9) and (10), suggesting that there was no change in the payout propensity before the information shock. As expected, we find a significant change in the propensity as well as the payout of dividends in the year of the shock, combined with the year after, as suggested by the three-way interaction term involving IND2. Finally, the interaction terms involving IND3 are significant and higher in magnitude vis-à-vis those of IND2. The coefficient of three-way interaction with IND3 is positive, suggesting low growth firms continue to increase payouts post the adoption of IFRS. All the two-way interaction terms involving IND1, IND2, and IND3 follow the same pattern as the three-way interaction terms, suggesting that high growth firms do not reduce their payouts before the adoption but start doing that in the year of adoption, continuing to do so in subsequent periods.

We also conduct two robustness tests, not tabulated for sake of brevity. First, we re-estimate equation (1) on a non-matched sample to examine the sensitivity of our results to the propensity score matching technique that we use. Second, we restrict our analysis to only three years on either side of IFRS adoption, instead of using the entire sample period. This test mitigates the concern that other confounding events drive our results. In both the tests, our main findings continue to hold.

6.0 Conclusion

Information asymmetry between managers and investors plays a key role in determining the negative relation between a firm's growth opportunities and its dividend payouts (e.g., DeAngelo et al., 2004; Fama & French, 2001; Jensen, 1986), i.e., high-growth firms pay lower dividends and low-growth firms pay higher dividends. An improved information environment is expected to enhance investors' assessment of the real potential of a firm's growth opportunities. Thus, investors would be more willing to sacrifice dividends from high-growth firms in lieu of significant capital appreciation in the future. Whereas, they would increase their dividend demand from low-growth firms after an improved information environment confirms their prior belief of limited capital appreciation prospects and the fact that capital is likely to be lying idle with these firms.

To test these predictions, we use mandatory adoption of IFRS as an exogenous information shock. Researchers document an improved information environment and hence increased transparency between managers and shareholders following IFRS adoption (De George et al., 2016). We primarily divide firms into two groups depending upon whether their growth opportunities, measured as market-to-book ratio, are in the topmost or bottom-most quartile. Firms are labeled high-growth and low-growth if they are, respectively, in the topmost and bottom-most quartile of the market-to-book ratio.

We find that an improved information environment results in investors demanding higher dividends from low-growth firms, whereas demanding lower dividends from high-growth firms. In other words, we find that a reduction in information asymmetry strengthens the negative relation between a firm's growth opportunities and its dividends. Our study makes several contributions to the literature. First, we demonstrate that a reduction in information asymmetry does not shift the payout equilibrium for all firms in the same direction; this shift is a function of firms' growth opportunities. Second, our findings suggest that IFRS adoption improves capital allocation by channelizing dividend demand towards low-growth firms, which tend to be cash-rich, and reducing dividend demand from high-growth firms allowing these firms to use the cash to exploit available growth opportunities. Third, we distinguish the impact of the reduction in information asymmetry facilitated by IFRS adoption from simultaneous improvement in the information environment caused by other regulatory reforms in the EU. Finally, our findings suggest that an improved information environment allows investors to make a more judicious choice when they demand dividends from firms based on their growth opportunities.

It is pertinent to note that our results be interpreted with a caveat. The difference-in-difference method relies on a random allocation of observations to treatment and control groups. If this randomization is perfect, the concern of endogeneity would be largely absent, and we could claim a strong causal link between growth opportunities and payout policies. However, there could be at least two reasons because of which endogeneity might be a concern. First, unobserved institutional factors in the cross-country setting might induce bias in our estimates. Inasmuch as these influences are time-invariant, we control for them by including country fixed effects. Second, while we attempt to isolate the effect of IFRS by excluding the firms that change their accounting standards to IFRS before the year of mandate, it is possible that correlated omitted variables are driving the results. We, therefore, acknowledge that our claim to causality is limited by these factors.

Nonetheless, these findings, we believe, have important implications for the debate on the homogenization of accounting standards across the globe and for countries that are considering adopting IFRS going forward. We document that following reduced information asymmetry, investors demand lower (higher) dividends from high-growth (low-growth) firms, suggesting a better capital allocation amongst firms.

References

Admati, A.R., Pfleiderer, P. and Zechner, J., 1994. Large shareholder activism, risk sharing, and financial market equilibrium. *journal of Political Economy*, *102*(6), 1097-1130.

Admati, A. R., Pfleiderer, P., & Zechner, J. (1994). Large Shareholder Activism, Risk Sharing, and Financial Market Equilibrium. *Journal of Political Economy*, *102*(6), 1097–1130.

Allen, F., & Michaely, R. (2003). Chapter 7—Payout Policy. In G. M. Constantinides, M. Harris, & R. M. Stulz (Eds.), *Handbook of the Economics of Finance* (Vol. 1, pp. 337–429). Elsevier.

Baker, M., & Wurgler, J. (2004). A Catering Theory of Dividends. *The Journal of Finance*, *59*(3), 1125–1165.

Barth, M. E., Landsman, W. R., & Lang, M. H. (2008). International Accounting Standards and Accounting Quality. *Journal of Accounting Research*, *46*(3), 467–498.

Barth, M. E., Landsman, W. R., Lang, M., & Williams, C. (2012). Are IFRS-based and US GAAP-based accounting amounts comparable? *Journal of Accounting and Economics*, *54*(1), 68–93.

Bhaduri, S. N. (2002). Determinants of corporate borrowing: Some evidence from the Indian corporate structure. *Journal of Economics and Finance*, *26*(2), 200–215.

Bilinski, P., Lyssimachou, D., & Walker, M. (2012). Target Price Accuracy: International Evidence. *The Accounting Review*, *88*(3), 825–851.

Byard, D., Li, Y., & Yu, Y. (2011). The Effect of Mandatory IFRS Adoption on Financial Analysts' Information Environment. *Journal of Accounting Research*, *49*(1), 69–96. JSTOR.

Chen, J. J. (2004). Determinants of capital structure of Chinese-listed companies. *Journal of Business Research*, *57*(12), 1341–1351.

Christensen, H. B., Hail, L., & Leuz, C. (2013a). Mandatory IFRS Reporting and Changes in Enforcement. *Journal of Accounting and Economics, 56*(2–3, Supplement 1), 147–177.

Christensen, H. B., Hail, L., & Leuz, C. (2013b). Mandatory IFRS reporting and changes in enforcement. *Journal of Accounting and Economics*, *56*(2, Supplement 1), 147–177.

Crane, A. D., Michenaud, S., & Weston, J. P. (2016). The Effect of Institutional Ownership on Payout Policy: Evidence from Index Thresholds. *The Review of Financial Studies*, *29*(6), 1377–1408.

De George, E. T., Li, X., & Shivakumar, L. (2016). A review of the IFRS adoption literature. *Review of Accounting Studies*, *21*(3), 898–1004.

DeAngelo, H., DeAngelo, L., & Skinner, D. J. (2004). Are dividends disappearing? Dividend concentration and the consolidation of earnings. *Journal of Financial Economics*, *72*(3), 425–456.

DeAngelo, H., DeAngelo, L., & Skinner, D. J. (2008). Corporate Payout Policy. *Foundations and Trends in Finance*, *3*(2–3).

DeFond, M. L., Hung, M., Li, S., & Li, Y. (2015). Does Mandatory IFRS Adoption Affect Crash Risk? *The Accounting Review*, *90*(1), 265–299.

Fama, E. F., & French, K. R. (1997). Industry costs of equity. *Journal of Financial Economics*, *43*(2), 153–193.

Fama, E. F., & French, K. R. (2001). Disappearing dividends: Changing firm characteristics or lower propensity to pay? *Journal of Financial Economics*, *60*(1), 3–43.

Ferreira, M. A., & Matos, P. (2008). The colors of investors' money: The role of institutional investors around the world. *Journal of Financial Economics*, *88*(3), 499–533.

Ghosh, C., & Woolridge, J. R. (1988). An Analysis of Shareholder Reaction to Dividend Cuts and Omissions. *Journal of Financial Research*, *11*(4), 281–294.

Gugler, K. (2003). Corporate governance, dividend payout policy, and the interrelation between dividends, R&D, and capital investment. *Journal of Banking & Finance*, *27*(7), 1297–1321.

Harris, L. E., Hartzmark, S. M., & Solomon, D. H. (2015). Juicing the dividend yield: Mutual funds and the demand for dividends. *Journal of Financial Economics*, *116*(3), 433–451.

Hodgdon, C., Tondkar, R. H., Harless, D. W., & Adhikari, A. (2008). Compliance with IFRS disclosure requirements and individual analysts' forecast errors. *Journal of International Accounting, Auditing and Taxation*, *17*(1), 1–13.

Horton, J., Serafeim, G., & Serafeim, I. (2013). Does Mandatory IFRS Adoption Improve the Information Environment?*. *Contemporary Accounting Research*, *30*(1), 388–423.

Jensen, M. C. (1986). Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *The American Economic Review*, *76*(2), 323–329.

Jiao, T., Koning, M., Mertens, G., & Roosenboom, P. (2012). Mandatory IFRS adoption and its impact on analysts' forecasts. *International Review of Financial Analysis*, *21*, 56–63.

KPMG. (2011). *Disclosure overload and complexity: Hidden in plain sight*. http://www.kpmg.com/US/en/IssuesAndInsights/ArticlesPublications/Documents/disclosure-overload-complexity.pdf

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Agency Problems and Dividend Policies around the World. *The Journal of Finance*, *55*(1), 1–33.

Lehavy, R., Li, F., & Merkley, K. (2011). The Effect of Annual Report Readability on Analyst Following and the Properties of Their Earnings Forecasts. *The Accounting Review*, *86*(3), 1087–1115.

Li, Xi, & Yang, H. I. (2016). Mandatory Financial Reporting and Voluntary Disclosure: The Effect of Mandatory IFRS Adoption on Management Forecasts. *The Accounting Review*, *91*(3), 933–953.

Li, Xiao, Ng, J., & Saffar, W. (2020). Financial Reporting and Trade Credit: Evidence from Mandatory IFRS Adoption. *Contemporary Accounting Research*

Lintner, J. (1956). Distribution of Incomes of Corporations Among Dividends, Retained Earnings, and Taxes. *The American Economic Review*, *46*(2), 97–113.

Miller, M. H., & Modigliani, F. (1961). Dividend Policy, Growth, and the Valuation of Shares. *The Journal of Business*, *34*, 411–411.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, *13*(2), 187–221.

Norvaišienė, R., & Stankevičienė, J. (2015). The Interaction of Internal Determinants and Decisions on Capital Structure at the Baltic Listed Companies. *Engineering Economics*, *52*(2).

Piotroski, J. D., & Roulstone, D. T. (2005). Do insider trades reflect both contrarian beliefs and superior knowledge about future cash flow realizations? *Journal of Accounting and Economics*, *39*(1), 55–81.

Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (2000). Agency Problems and Dividend Policies around the World. *The Journal of Finance*, *55*(1), 1–33.

Redding, L. S. (1997). Firm Size and Dividend Payouts. *Journal of Financial Intermediation*, *6*(3), 224–248.

Rozeff, M. S. (1982). Growth, Beta and Agency Costs as Determinants of Dividend Payout Ratios. *Journal of Financial Research*, *5*(3), 249–259.

SEC. (1998). *SEC.gov | A Plain English Handbook: How to Create Clear SEC Disclosure Documents*.

SEC. (2013). *Report on Review of Disclosure Requirements in Regulation S-K*. 106.

Shefrin, H. M., & Statman, M. (1984). Explaining investor preference for cash dividends. *Journal of Financial Economics*, *13*(2), 253–282.

Shleifer, A., & Vishny, R. W. (1986). Large Shareholders and Corporate Control. *Journal of Political Economy*, *94*(3, Part 1), 461–488.

Smith, C. W., & Watts, R. L. (1992). The investment opportunity set and corporate financing, dividend, and compensation policies. *Journal of Financial Economics*, *32*(3), 263–292.

Stein, J. C. (2003). *AGENCY, INFORMATION AND CORPORATE INVESTMENT*. 55.

Stulz, RenéM. (1990). Managerial discretion and optimal financing policies. *Journal of Financial Economics*, *26*(1), 3–27.

Titman, S., & Wessels, R. (1988). The Determinants of Capital Structure Choice. *The Journal of Finance*, *43*(1), 1–19. JSTOR.

Figures

Figure 1: Trend of Propensity of Dividend Payment for Low Growth Firms

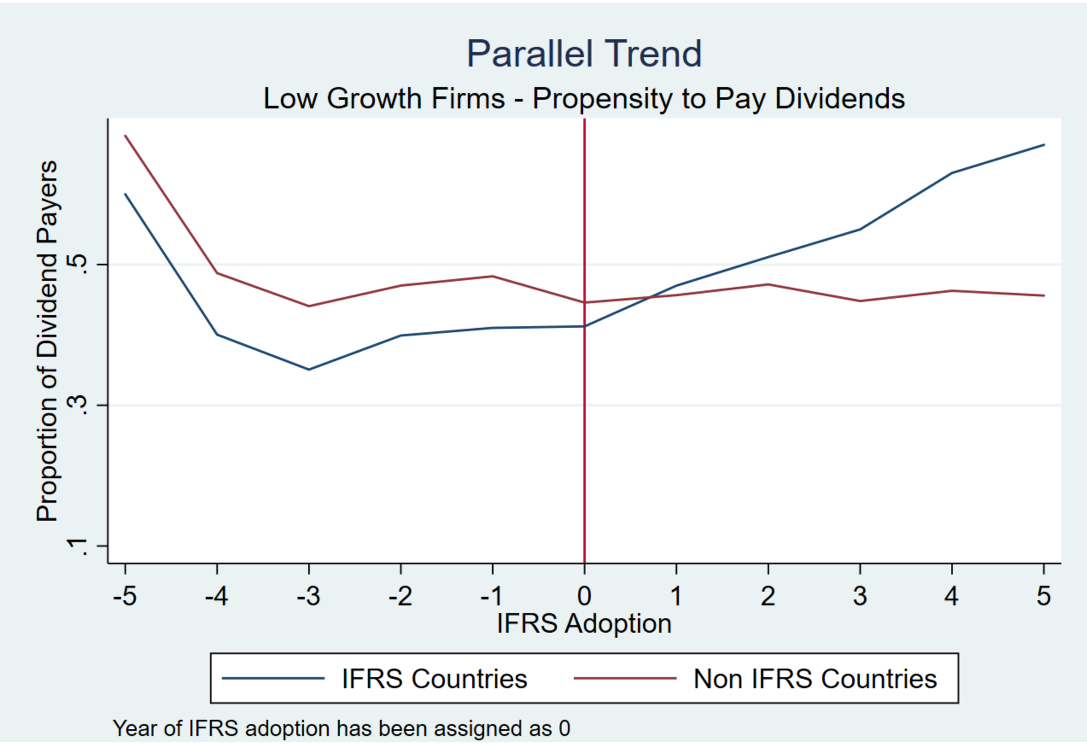
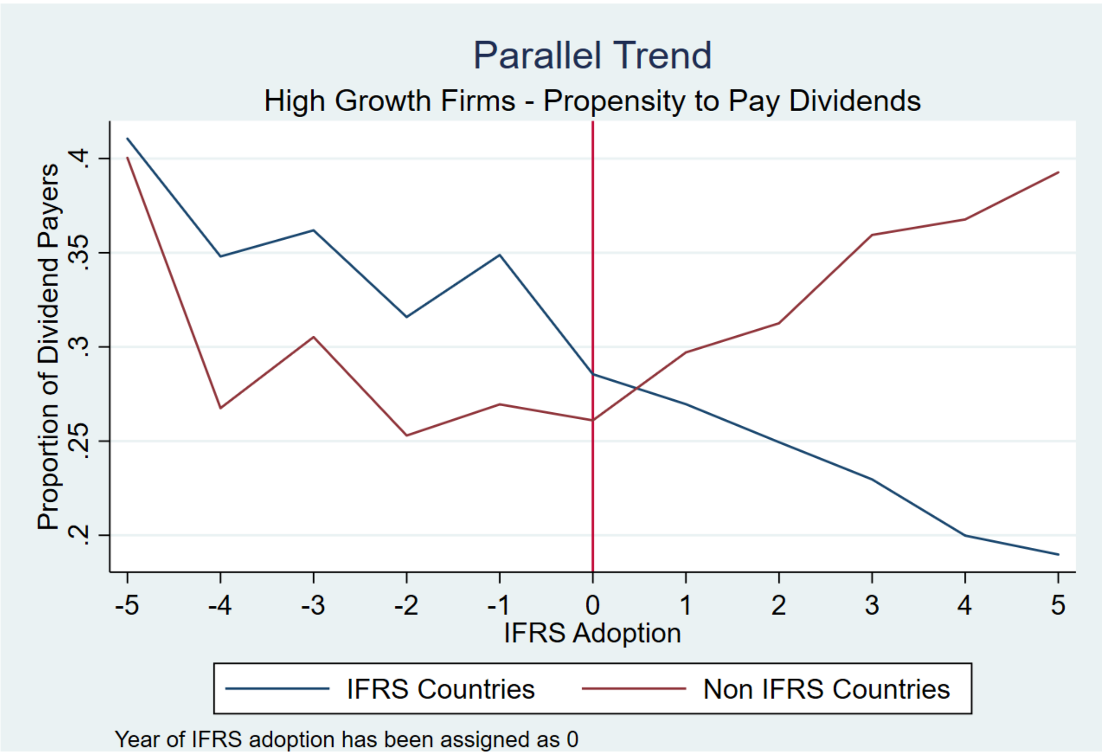


Figure 2: Trend of Propensity of Dividend Payment for High Growth Firms



Tables

Table 1. Variables and Descriptive Statistics

Variable	Notation	Measurement
Dividend Payment Indicator	DIV_PAID	DIV_PAID is 1 if *dvc* > 0, 0 otherwise, where *dvc* is cash dividends in Compustat
Dividend Payout Ratio	Payout	*dvc* / *ib*, where *ib* is earnings before extraordinary items in Compustat
Growth Quartile Indicator	Q1	Q1 is an indicator variable that takes a value of 1 for firms with market-to-book ratio in the bottom-most quartile, and zero for firms in the top quartile of market-to-book ratio in a given year
Market-To-Book Ratio	MTB	Market value of equity (*prcc_f* * *cshoi*) scaled by book value of equity (*ceq*), where *prcc_f* is the stock price, and *cshoi* is the number of shares outstanding in Compustat
Firm Size	LTA	ln(*at*), where *at* is total assets in Compustat
Leverage	LEV	Debt-to-Equity ratio measured as total debt (*dltt*+*dlc*) scaled by total asset (*at*), where *dltt* is long-term debt, and *dlc* is the debt in current liabilities in Compustat
Return on Assets	ROA	Income before taxes (*ib*) scaled by total assets (*at*)
Annual Return	RET	$(prcc\_f_t / prcc\_f_{t-1}) - 1$
Stock Repurchase Indicator	REP	REP is 1 if *prstkc* > 0, 0 otherwise, where *prstkc* is the purchase of equity in Compustat
Loss Indicator	NEG_EARN	NEG_EARN is 1 if *ib* < 0, 0 otherwise
Cash Flow Uncertainty	UNCERT	Standard deviation of cash flow (*oancf* scaled by total assets *at)* over *t-4* to *t-1*, where *oancf* is the cash flow from operations in Compustat
Institutional Holding	INSTI_OWN_PERC	FactSet Variable *IO* (Ferreira, Miguel, and Pedro Matos, 2008)
Institutional Ownership Concentration	INSTI_CONC	Factset Variable *HERF* (Ferreira & Matos, 2008)
Free Cash Flow	FCF	Cash flow from Operations (*oancf*) – (capital expenditure (*capx*) + R&D expenses (*xrd*)), scaled by total assets
Dividend Tax Rate	DIVIDEND TAX RATE	Withholding tax rate for dividends in each country in the sample
Analyst Forecast Error	AFE	Absolute value of the difference between the first forecast after issuance of annual report and the actual earnings for the quarter, scaled by the actual earnings
Low AFE Change	QF1	QF1 is an indicator variable that takes 1 for firms in treatment sample that have changed in AFE below the median value, and zero otherwise. It takes zero for non-IFRS firms
High AFE Change	QF2	QF2 is an indicator variable that takes 1 for firms in treatment sample that have changed in AFE above the median value and zero otherwise. It takes zero for non-IFRS firms
Asset Growth	Asset Growth	Ratio of change in *at* over prior year's *at*
Capex Growth	Capex Growth	Ratio of change in *capx* over prior year's *capx*

Table 2. Sample distribution

Panel A: Sample Composition by Country

IFRS Countries	**Frequency**	**Percent**	**IFRS Adoption Year**
Argentina	345	0.54	2012
Australia	5,453	8.60	2005
Austria	158	0.25	2005
Belgium	284	0.45	2005
Brazil	1,067	1.68	2010
Canada	5,814	9.17	2011
Chile	793	1.25	2009
China	10,890	17.18	2007
Colombia	112	0.18	2015
Czech Republic	62	0.10	2005
Denmark	579	0.91	2005
Finland	496	0.78	2005
France	2,122	3.35	2005
Germany	2,218	3.50	2005
Greece	1,026	1.62	2005
Hong Kong	5,313	8.38	2005
Hungary	42	0.07	2005
Ireland	182	0.29	2005
Israel	847	1.34	2008
Italy	776	1.22	2005
Korea (South)	3,860	6.09	2011
Luxembourg	44	0.07	2005
Mexico	302	0.48	2012
Netherlands	491	0.77	2005
New Zealand	402	0.63	2007
Norway	632	1.00	2005
Pakistan	847	1.34	2009
Peru	353	0.56	2012
Philippines	856	1.35	2005
Poland	547	0.86	2005
Portugal	273	0.43	2005
Russian Federation	522	0.82	2012
Singapore	2,236	3.53	2003
South Africa	1,122	1.77	2005
Spain	36	0.06	2005
Sweden	1,139	1.80	2005
Switzerland	741	1.17	2005
Taiwan	4,009	6.33	2013
Turkey	725	1.14	2008
United Kingdom	5,664	8.94	2005
Total	**63,380**	**100.00**	

Non IFRS Countries	**Frequency**	**Percent**
Indonesia	2,092	3.40
Japan	17,290	28.08
Malaysia	5,649	9.17
Sri Lanka	715	1.16
United States	35,828	58.19
Total	**61,574**	**100.00**

Table 2. Sample distribution

Panel B: Dividend payment behavior: Low-Growth firms and High-Growth firms[11]

	LOW-GROWTH FIRMS						HIGH-GROWTH FIRMS					
	IFRS Countries			non-IFRS Countries			IFRS Countries			non-IFRS Countries		
time	***firms***	***dividend payers***	***% dividend payers***	***firms***	***dividend payers***	***% dividend payers***	***firms***	***dividend payers***	***% dividend payers***	***firms***	***dividend payers***	***% dividend payers***
t-5	625	375	60.00%	877	599	68.30%	962	395	41.06%	512	205	40.04%
t-4	1,064	426	40.04%	1,882	918	48.78%	1,678	584	34.80%	1,600	428	26.75%
t-3	1,460	512	35.07%	1,987	876	44.09%	1,528	553	36.19%	1,602	489	30.52%
t-2	1,884	752	39.92%	2,106	990	47.01%	1,738	549	31.59%	2,028	513	25.30%
t-1	1,956	802	41.00%	2,363	1,142	48.33%	2,219	774	34.88%	2,282	615	26.95%
total	**6,989**	**2,867**	**41.02%**	**9,215**	**4,525**	**49.10%**	**8,125**	**2,855**	**35.14%**	**8,024**	**2,250**	**28.04%**
t=0	2,116	872	41.21%	2,839	1,266	44.59%	3,096	884	28.55%	2,678	699	26.10%
t+1	2,017	948	47.00%	2,620	1,196	45.65%	2,808	757	26.96%	2,346	697	29.71%
t+2	2,019	1,031	51.06%	2,565	1,210	47.17%	2,586	645	24.94%	1,990	622	31.26%
t+3	2,144	1,179	54.99%	2,343	1,050	44.81%	2,434	559	22.97%	1,978	711	35.95%
t+4	1,898	1,196	63.01%	2,200	1,018	46.27%	2,227	445	19.98%	1,678	617	36.77%
t+5	1,664	1,115	67.01%	1,779	811	45.59%	1,918	364	18.98%	1,416	556	39.27%
total	**11,858**	**6,341**	**53.47%**	**14,346**	**6,551**	**45.66%**	**15,069**	**3,654**	**24.25%**	**12,086**	**3,902**	**32.29%**

This table presents the sample distribution of IFRS and non-IFRS firms. Panel A provides a distribution of sample firms by country between 2001 and 2017. Panel B presents the distribution of dividend paying firms across growth quartiles in IFRS and non-IFRS countries for five years before, and five years after the adoption.

[11] For brevity, in this table we only show distribution from *t-5* to *t+5*

Table 3: Descriptive statistics

VARIABLES	N	Mean	Sd	P25	Median	P75
DIV_PAID_t	124,954	0.374	0.484			
MTB_t	124,954	2.992	3.967	0.417	0.997	4.278
LTA_t	124,954	6.677	3.278	4.307	6.653	8.973
LEV_t	124,954	0.318	0.630	0.032	0.189	0.370
ROA_t	124,954	-0.086	0.321	-0.066	0.015	0.061
RET_t	124,954	0.298	1.335	-0.283	0.008	0.373
REP_t	124,954	0.258	0.437			
NEG_EARN_t	124,954	0.376	0.484			
$UNCERT_t$	124,954	0.183	0.574	0.028	0.052	0.105
DIV_PAID_{t-1}	124,954	0.378	0.485			
$Payout_t$	124,954	0.156	0.347	0.000	0.081	0.213
$INSTI\_OWN\_PERC_t$	124,954	0.180	0.263	0.011	0.065	0.215
$INSTI\_CONC_t$	124,954	0.471	0.346	0.140	0.429	0.808
FCF_t	124,954	0.020	0.321	-0.099	0.023	0.141
DIVIDEND TAX $RATE_t$(%)	124,954	25.053	8.509	20.000	29.405	30.000

This table presents the descriptive statistics of key regression variables. The sample comprises 124,954 firm-year observations from 45 countries between 2001 and 2017. The variable definitions are provided in Table 1. All continuous variables are winsorized at 1% and 99% levels.

Table 4. DIDID analysis of payout policies for low-growth vs high-growth firms

	DIV_PAID_t (1)	*$Payout_t$* (2)
(1) POST * Q1 * IFRS	0.2894***	0.1483***
	(0.042)	(0.015)
(2) POST * IFRS	-0.1808***	-0.0679***
	(0.037)	(0.015)
(1) + (2)	**0.1086*** **	**0.0804*** **
	(0.034)	**(0.012)**
Other Interactions		
Q1 * IFRS	0.0012	-0.0178
	(0.033)	(0.012)
POST * Q1	0.0325*	-0.0096
	(0.018)	(0.008)
Q1	-0.0020	-0.0123
	(0.022)	(0.009)
Control Variables		
LTA_t	0.0503***	0.0043***
	(0.003)	(0.001)
LEV_t	-0.1059***	0.0001
	(0.016)	(0.002)
ROA_t	0.2946***	0.0961***
	(0.028)	(0.009)
RET_t	-0.0277***	-0.0071***
	(0.006)	(0.001)
REP_t	0.0413***	0.0037
	(0.007)	(0.004)
NEG_EARN_t	-0.2240***	-0.1945***
	(0.011)	(0.013)
$UNCERT_t$	-0.0986***	-0.0110***
	(0.026)	(0.002)
DIV_PAID_{t-1} (or $Payout_{t-1}$)	0.4517***	0.2607***
	(0.025)	(0.011)
$INSTI\_OWN\_PERC_t$	-0.0985***	-0.0974***
	(0.018)	(0.010)
$INSTI\_CONC_t$	-0.0940***	-0.0178***
	(0.014)	(0.006)
FCF_t	0.0686***	0.0048
	(0.012)	(0.003)
DIVIDEND TAX $RATE_t$	-0.0000	0.0031**
	(0.004)	(0.001)
Observations	124,954	124,954
Country-, Industry-, Year fixed Effects	YES	YES
Pseudo R-squared	0.558	
R-squared		0.265

This table presents the baseline estimates of the impact of mandatory IFRS adoption on the relationship between firms' growth opportunities and their payout policies. Column (1) reports the results based on logit estimation, whereas column (2) reports the results based on OLS estimation. *DIV_PAID_t* is the dependent variable in column (1), and is defined as an indicator variable equal to 1 if the firm pays dividend in year t, and 0 otherwise; *$Payout_t$* is the dependent variable in column (2) and is defined as the firm's dividend payout ratio in year t; *Q1* is an indicator variable that takes a value of 1 for firms with market-to-book ratio in the bottom-most quartile, and 0 for firms in the topmost quartile of market-to-book ratio in year t. The variable definitions are provided in Table 1. All continuous variables are winsorized at 1% and 99% levels. Standard errors, reported in parentheses, are corrected for heteroskedasticity, and are clustered at country-year level. ***, **, and * correspond to 1%, 5%, and 10% significance levels, respectively.

Table 5. DIDID analysis of analyst forecast error and payout policies

	(1) *DIV_PAID_t*	(2) *$Payout_t$*
(1) POST * QF1*Q1	0.2030***	0.1230***
	(0.018)	(0.018)
(2) POST * QF1	-0.0979***	-0.0709***
	(0.020)	(0.018)
(3) POST * QF2*Q1	0.0348	0.0284
	(0.027)	(0.021)
(4) POST * QF2	-0.0480***	-0.0383***
	(0.017)	(0.013)
(1) + (2) – [(3) + (4)]	**0.1183*** **	**0.0621*** **
	(0.021)	**(0.021)**
(2) – (4)	**-0.0499** **	**-0.0325** **
	(0.017)	**(0.016)**
Other Interactions	**YES**	**YES**
Control Variables	**YES**	**YES**
Observations	48,613	48,613
Country-, Industry-, Year fixed Effects	YES	YES
Pseudo R-squared	0.534	
R-squared		0.338

This table presents the estimates of the moderating effect of analyst forecast errors on the baseline model. Column (1) reports the results based on logit estimation, whereas column (2) reports the results based on OLS estimation. *DIV_PAID_t* is the dependent variable in column (1) and is defined as an indicator variable equal to 1 if the firm pays dividend in the year t, and 0 otherwise; *$Payout_t$* is the dependent variable in column (2) and is defined as the firm's dividend payout ratio in year t; *Q1* is an indicator variable that takes a value of 1 for firms with market-to-book ratio in the bottom-most quartile, and 0 for firms in the topmost quartile of market-to-book ratio in year t; *QF1* is an indicator variable equal to 1 for firms in the treatment sample that have changed in absolute analyst forecast error (AFE) below the median value, and 0 otherwise; *QF2* is an indicator variable that equals 1 for firms in the treatment sample that have changed in AFE above the median value, and 0 otherwise; *QF1* and *QF2* are 0 for non-IFRS firms. Control variables include *LTA*, *LEV*, *ROA*, *RET*, *REP*, *NEG_EARN*, *UNCERT*, *DIV_PAID_{t-1}*, *INSTI_OWN_PERC*, *INSTI_CONC*, *FCF*, and *DIVIDEND TAX RATE(%)*. The variable definitions are provided in Table 1. All continuous variables are winsorized at 1% and 99% levels. Standard errors, reported in parentheses, are corrected for heteroskedasticity, and are clustered at country-year level. ***, **, and * correspond to 1%, 5%, and 10% significance levels, respectively.

Table 6. Role of residual cash

	Low Growth Firms	***High Growth Firms***
	DIV_PAID_t	*DIV_PAID_t*
	(1)	(2)
(1) POST * IFRS * HighFCF	**0.0471****	**-0.0406**
	(0.021)	**(0.032)**
(2) POST * IFRS	0.0950***	-0.0916***
	(0.017)	(0.032)
Other Interactions	**YES**	**YES**
Control Variables	**YES**	**YES**
Observations	31,243	31,219
Country-, Industry-, Year fixed Effects	YES	YES
Pseudo R-squared	0.203	0.638

This table presents the estimates of the moderating effect of firm's residual cash on the baseline model. Columns (1) and (2) report the results based on logit estimation. *DIV_PAID_t* is the dependent variable in columns (1) and (2) and is defined as an indicator variable equal to 1 if the firm pays dividend in the year t, and 0 otherwise. *HighFCF* is an indicator variable that takes a value of 1 for firms with free cash flow (FCF) in the topmost quartile, and 0 for firms with FCF in the bottom-most quartile. Control variables include *LTA, LEV, ROA, RET, REP, NEG_EARN, UNCERT*, *DIV_PAID_{t-1}*, *INSTI_OWN_PERC*, *INSTI_CONC*, *FCF*, and *DIVIDEND TAX RATE(%)*. The variable definitions are provided in Table 1. All continuous variables are winsorized at 1% and 99% levels. Standard errors, reported in parentheses, are corrected for heteroskedasticity, and are clustered at country-year level. ***, **, and * correspond to 1%, 5%, and 10% significance levels, respectively.

Table 7. Transition Matrix

	Before IFRS Adoption		**After IFRS Adoption**	
	Low Growth$_{t+1}$	High Growth$_{t+1}$	Low Growth	High Growth
Low Growth$_t$		0.6475$^{(1)}$		0.7525$^{(2)}$
High Growth$_t$	0.6681$^{3)}$		0.7441$^{(4)}$	

(2) – (1) = 0.1050*** (t stat = 19.50)
(4) – (3) = 0.0760*** (t stat = 22.66)

This table presents the probabilities of the movement of firms across growth quartiles before and after the adoption of IFRS. *Low Growth* are the firms with market-to-book ratio (*MTB*) in the bottom-most quartile in year t; *High Growth* are the firms with *MTB* in the topmost quartile in year t. ***, **, and * correspond to 1%, 5%, and 10% significance levels, respectively.

Table 8. Growth restricted to before the adoption of IFRS

	DIV_PAID_t (1)	$Payout_t$ (2)
(1) POST * Q1 * IFRS	0.2499***	0.1667***
	(0.024)	(0.017)
(2) POST * IFRS	-0.1227***	-0.0755***
	(0.019)	(0.017)
(1) + (2)	**0.1272*** **	**0.0912*** **
	(0.020)	**(0.013)**
Other Interactions	**YES**	**YES**
Control Variables	**YES**	**YES**
Observations	95,964	95,964
Country-, Industry-, Year fixed Effects	YES	YES
Pseudo R-squared	0.594	
R-squared		0.259

This table presents the estimates of the baseline model after restricting the sample to only those firms that do not change their growth quartiles after the adoption of IFRS. Column (1) reports the results based on logit estimation, whereas column (2) reports the results based on OLS estimation. DIV_PAID_t is the dependent variable in column (1) and is defined as an indicator variable equal to 1 if the firm pays dividend in the year t, and 0 otherwise; $Payout_t$ is the dependent variable in column (2) and is defined as the firm's dividend payout ratio in year t; *Q1* is an indicator variable that takes a value of 1 for firms with market-to-book ratio in the bottom-most quartile, and 0 for firms in the topmost quartile of market-to-book ratio in year t. Control variables include *LTA*, *LEV*, *ROA*, *RET*, *REP*, *NEG_EARN*, *UNCERT*, DIV_PAID_{t-1}, *INSTI_OWN_PERC*, *INSTI_CONC*, *FCF*, and *DIVIDEND TAX RATE(%)*. The variable definitions are provided in Table 1. All continuous variables are winsorized at 1% and 99% levels. Standard errors, reported in parentheses, are corrected for heteroskedasticity, and are clustered at country-year level. ***, **, and * correspond to 1%, 5%, and 10% significance levels, respectively.

Table 9. The EU effect

	Non-2005 adopters		Only 2005 Adopters	
	DIV_PAID$_t$ (1)	*Payout$_t$* (2)	*DIV_PAID$_t$* (3)	*Payout$_t$* (4)
(1) POST * Q1 * IFRS	0.2286***	0.1468***	0.2506***	0.1950***
	(0.027)	(0.018)	(0.027)	(0.022)
(2) POST * IFRS	-0.1020***	-0.0362**	-0.1914***	-0.1693***
	(0.021)	(0.017)	(0.025)	(0.021)
(1) + (2)	**0.1266*** **	**0.1105*** **	**0.0592*** **	**0.0257** **
	(0.021)	**(0.015)**	**(0.017)**	**(0.011)**
Other Interactions	**YES**	**YES**	**YES**	**YES**
Control Variables	**YES**	**YES**	**YES**	**YES**
Observations	77,198	77,198	47,756	47,756
Country-, Industry-, Year fixed Effects	YES	YES	YES	YES
Pseudo R-squared	0.614		0.602	
R-squared		0.259		0.281

This table presents the baseline estimates after partitioning the sample into sub-samples of countries that adopted IFRS in years other than 2005 and those countries that adopted IFRS in 2005. Columns (1) and (3) report the results based on logit estimation, whereas columns (2) and (4) report the results based on OLS estimation. *DIV_PAID$_t$* is the dependent variable in columns (1) and (3) and is defined as an indicator variable equal to 1 if the firm pays dividend in the year t, and 0 otherwise; *Payout$_t$* is the dependent variable in columns (2) and (4) and is defined as the firm's dividend payout ratio in year t; *Q1* is an indicator variable that takes a value of 1 for firms with market-to-book ratio in the bottom-most quartile, and 0 for firms in the topmost quartile of market-to-book ratio in year t. Control variables include *LTA*, *LEV*, *ROA*, *RET*, *REP*, *NEG_EARN*, *UNCERT*, *DIV_PAID$_{t-1}$*, *INSTI_OWN_PERC*, *INSTI_CONC*, *FCF*, and *DIVIDEND TAX RATE(%)*. The variable definitions are provided in Table 1. All continuous variables are winsorized at 1% and 99% levels. Standard errors, reported in parentheses, are corrected for heteroskedasticity, and are clustered at country-year level. ***, **, and * correspond to 1%, 5%, and 10% significance levels, respectively.

Table 10. Alternative growth proxies

	Asset Growth		Capex Growth	
	DIV_PAID_t (1)	*$Payout_t$* (2)	*DIV_PAID_t* (3)	*$Payout_t$* (4)
(1) POST * Q1 * IFRS	0.1445***	0.0977***	0.1252***	0.0779***
	(0.019)	(0.013)	(0.015)	(0.011)
(2) POST * IFRS	-0.0712***	-0.0491***	-0.0629***	-0.0384***
	(0.018)	(0.015)	(0.017)	(0.014)
(1) + (2)	**0.0733*** **	**0.0486*** **	**0.0623** **	**0.0395*** **
	(0.017)	**(0.012)**	**(0.017)**	**(0.012)**
Other Interactions	**YES**	**YES**	**YES**	**YES**
Control Variables	**YES**	**YES**	**YES**	**YES**
Observations	124,954	124,954	124,954	124,954
Country-, Industry-, Year fixed Effects	YES	YES	YES	YES
Pseudo R-squared	0.579		0.572	
R-squared		0.263		0.261

This table presents the estimates of the baseline model using alternative measures of growth proxies, *viz*. Asset Growth and Capex Growth. Columns (1) and (3) report the results based on logit estimation, whereas columns (2) and (4) report the results based on OLS estimation. *DIV_PAID_t* is the dependent variable in columns (1) and (3) and is defined as an indicator variable equal to 1 if the firm pays dividend in the year t, and 0 otherwise; *$Payout_t$* is the dependent variable in columns (2) and (4) and is defined as the firm's dividend payout ratio in year t. Asset Growth is defined as the ratio of change in total assets (Compustat variable *at*) over prior period total assets. Capex Growth is defined as the ratio of change in capital expenditures (Compustat variable *capx*) over prior period capital expenditures. In columns (1) and (2), *Q1* is an indicator variable that takes a value of 1 for firms with Asset Growth in the bottom-most quartile, and 0 for firms in the topmost quartile of Asset Growth in year t. In columns (3) and (4), *Q1* is an indicator variable that takes a value of 1 for firms with Capex Growth in the bottom-most quartile, and 0 for firms in the topmost quartile of Capex Growth in year t. Control variables include *LTA, LEV, ROA, RET, REP, NEG_EARN, UNCERT, DIV_PAID_{t-1}, INSTI_OWN_PERC, INSTI_CONC, FCF*, and *DIVIDEND TAX RATE(%)*. The variable definitions are provided in Table 1. All continuous variables are winsorized at 1% and 99% levels. Standard errors, reported in parentheses, are corrected for heteroskedasticity, and are clustered at country-year level. ***, **, and * correspond to 1%, 5%, and 10% significance levels, respectively.

Table 11. Other robustness checks

	Median Split		Firm-level Adoption		Unwinsorized		Winsorized at (5, 95)		Timing of Shock	
	DIV_PAID_t	*$Payout_t$*	*DIV_PAID_t*	*$Payout_t$*	*DIV_PAID_t*	*$Payout_t$*	*DIV_PAID_t*	*$Payout_t$*	*DIV_PAID_t*	*$Payout_t$*
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) POST * Q1 * IFRS	0.3195***	0.1279***	0.2246***	0.1550***	0.2275***	0.1483***	0.2197***	0.1332***		
	(0.051)	(0.012)	(0.020)	(0.014)	(0.022)	(0.015)	(0.022)	(0.012)		
(2) POST * IFRS	-0.1852***	-0.0595***	-0.1300***	-0.0812***	-0.1098***	-0.0679***	-0.1084***	-0.0539***		
	(0.048)	(0.015)	(0.016)	(0.013)	(0.018)	(0.015)	(0.018)	(0.012)		
(1) + (2)	**0.1343*** **	**0.0684*** **	**0.0946*** **	**0.0738*** **	**0.1177*** **	**0.0805*** **	**0.1113*** **	**0.0793*** **		
	(0.047)	**(0.014)**	**(0.016)**	**(0.011)**	**(0.018)**	**(0.012)**	**(0.017)**	**(0.008)**		
IND1 * IFRS * Q1									-0.0081	-0.0138
									(0.034)	(0.023)
IND1 * IFRS									0.0387	0.0293
									(0.028)	(0.021)
IND2 * IFRS * Q1									0.1085**	0.0925***
									(0.044)	(0.032)
IND2 * IFRS									-0.0073	-0.0077
									(0.036)	(0.025)
IND3 * IFRS * Q1									**0.2629*** **	**0.1769*** **
									(0.031)	**(0.024)**
IND3 * IFRS									**-0.1374*** **	**-0.1003*** **
									(0.029)	**(0.023)**
Other Interactions	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**
Control Variables	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**
Observations	249,904	249,904	124,594	124,594	124,594	124,594	124,594	124,594	124,594	124,594
Country-, Industry-, Year fixed Effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Pseudo R-squared	0.566		0.608		0.605		0.609		0.609	
R-squared		0.258		0.266		0.266		0.402		0.402

This table presents the estimates of the baseline model using various robustness checks. Columns (1), (3), (5), (7) and (9) report the results based on logit estimation, whereas columns (2), (4), (6), (8), and (10) report the results based on OLS estimation. *DIV_PAID_t* is the dependent variable in columns (1), (3), (5), (7) and (9) and is defined as an indicator variable equal to 1 if the firm pays dividend in the year t, and 0 otherwise; *$Payout_t$* is the dependent variable in columns (2), (4), (6), (8), and (10) and is defined as the firm's dividend payout ratio in year t. Control variables include *LTA*, *LEV*, *ROA*, *RET*, *REP*, *NEG_EARN*, *UNCERT*, *DIV_PAID_{t-1}*, *INSTI_OWN_PERC*, *INSTI_CONC*, *FCF*, and *DIVIDEND TAX RATE(%)*. The variable definitions are provided in Table 1. All continuous variables are winsorized at 1% and 99% levels. Standard errors, reported in parentheses, are corrected for heteroskedasticity, and are clustered at country-year level. ***, **, and * correspond to 1%, 5%, and 10% significance levels, respectively.