Do Non-Financial Factors Influence Corporate Dividend Policies? Evidence from Business Strategy

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ABSTRACT

In this paper, we examine the influence of business strategy on dividend policy. We find that firms following an innovation-oriented strategy (prospectors) pay significantly lower dividends than those following an efficiency-oriented strategy (defenders). Our cross-sectional analyses show that such association is more pronounced among firms with greater investment opportunities and superior performance. Further analysis reveals that prospectors make significantly more capital investment, consistent with prospectors paying fewer dividends to finance their investment activities. Moreover, we address potential endogeneity concerns by implementing (i) a triple-difference analysis (DiDiD) that exploits an exogenous shock that hinders innovation through curbing the supply of highly skilled employees and (ii) an instrumental variable approach. Our results are robust to a propensity-score-matched (PSM) analysis, the inclusion of individual business strategy components, and the use of alternative measures of the dependent variables. Overall, our findings highlight business strategy as an inherent and non-financial determinant of dividend policies.

Keywords: Business strategy, Dividend payout, Capital investment, Talent mobility.

JEL Classification: G30, G35, J60, L10, O34.

1. Introduction

Why have household names like Google and Netflix never paid any dividends[1], while their industry rivals such as Yahoo and HBO have always done so? Finance scholars have long been seeking to solve this puzzle and have predominantly focused on firms' financial characteristics such as profitability and growth opportunities (see the surveys of Allen & Michaely, 2003; DeAngelo, DeAngelo, & Skinner, 2008). Further studies also tried to explain such phenomenon by putting forward plausible theoretical arguments, such as the catering theory (Baker & Wurgler, 2004), the lifecycle theory (DeAngelo, DeAngelo, & Stulz, 2006), the tax advantage of institutional investors (Allen, Bernardo, & Welch, 2000), and the effect of firm risk (Hoberg & Prabhala, 2009). The aforementioned studies contribute by finding pieces of the puzzle; yet, the literature is still far from providing a comprehensive explanation (Denis & Osobov, 2008). Specifically, prior studies predominantly highlight financial determinants of dividend payout, yet little is known about the role of non-financial factors in shaping dividend policy, such as the firm's business strategy. In this paper, we endeavor to examine the significance of the firm business strategy, which captures an extensive set of financial and non-financial characteristics, in explaining dividend policy.

The organizational theory, as laid in Miles & Snow (1978, 2003) and discussed in Hambrick (1983), states that firms adopt their business strategies as consistent commitments that do not change frequently over time. All corporate decisions stem from a firm's choice of strategy, including the selection of the CEO, organizational structure, performance measurement, targeted customers, investment decisions, and payout policy (Goshen & Hamdani, 2016; Van den Steen, 2016).[2] As far as dividends are concerned in a business strategy context, Lintner (1956) presents the theoretical foundation of dividend policy in the 20th century and shows that paying out dividends is a major corporate decision that tends to persist over time. Brav, Graham, Harvey, & Michaely (2005) corroborate Lintner's theory in the 21st century and provide interview-based evidence suggesting that the majority of the financial managers in the US avoid reducing dividends, try to maintain a smooth dividend stream, and are reluctant to initiate dividends because reversing such a decision is too costly.

[1]According to Forbes (2021), many high-profile multinational corporations including Google, Facebook, and Amazon "have never paid a dividend to shareholders", despite making lucrative profits. More details can be accessed via https://www.forbes.com/sites/palashghosh/2021/04/21/despite-huge-cash-piles-facebook-amazon-google-are-unlikely-to-pay-out-dividends-anytime-soon-say-analysts/.

[2] In his formal theory of strategy, Van den Steen (2016) defines strategy as *"*the smallest set of core choices to optimally guide the other choices*"*. For example, the strategic decision of Steve Jobs to maximize the value of Apple led to retain over forty billion dollars of cash in 2010 instead of paying out dividends to shareholders since cash was going to be reinvested (mainly in research and development activities).

As such, the decision to pay dividends is more likely to be a long-term strategic decision rather than a short-term operational decision, i.e., in the core of the firm's business strategy.

In seminal research, Miles and Snow (1978) classify companies based on their business strategy. Specifically, Miles and Snow (1978) introduce three typologies of business strategy – Prospectors, Analyzers, and Defenders – that describe how a company's business strategy can differ in terms of product, risk, and uncertainty tolerance level in the market. Based on the theoretical framework of Miles and Snow (1978), defenders are defined as firms pursuing an efficiency-oriented and cost leadership strategy to compete based on price, service, or quality (Miles & Snow, 1978, 2003). Therefore, instead of proactively seeking new opportunities, defenders are cautious and conservative in their decision-making, keen to lower uncertainty and risk exposure, and are selling products with readily available substitutes (Miles & Snow, 1978, 2003). Unlike defenders, prospectors are defined as firms pursuing an innovation-orientated strategy by constantly innovating their products and aggressively exploiting new market opportunities. Moreover, prior research shows that prospectors also have levels of risk and uncertainty (Rajagopalan, 1997; Simons, 1987; Singh & Agarwal, 2002). Hence, prospectors tend to undertake by constantly investing in risky and uncertain innovation projects and selling unique and differentiated products without viable substitutes (Miles & Snow, 1978, 2003).

In light of the contrasting characteristics of prospectors and defenders, we posit that firms following distinctive business strategies tend to have different dividend policies. On the one hand, prospectors are likely to pay fewer dividends than defenders. First, prospectors require significant investments in research and development (R&D) projects and marketing campaigns to promote their unique products (Hambrick, 1983; Miles & Snow, 1978, 2003), which results in prospectors' greater needs for cash compared to defenders. Given prospectors have a constant need for financing innovation and investment opportunities, prospectors are expected to have lower dividend payouts to preserve sufficient cash holding (Fama & French, 2001; Grullon, Michaely, & Swaminathan, 2002). Second, prior literature suggests that prospectors are exposed to higher risk and uncertainty (Chen, Eshleman, & Soileau, 2017; Hambrick, 1983; Miles & Snow, 1978, 2003; Rajagopalan, 1997; Singh & Agarwal, 2002). Since prospectors proactively and continuously invest in risky and uncertain R&D projects for innovation, they are more likely to face more volatile performance and higher employee turnover, which significantly increases their operational risks (Chen et al., 2017; Rajagopalan, 1997; Singh & Agarwal, 2002). Given scholars in dividend research have shown that firms subject to higher risk tend to lower their dividend payouts (e.g., Allen & Michaely, 2003; Brav et al., 2005; DeAngelo et

al., 2008; Grullon et al., 2002; Hoberg & Prabhala, 2009; Lintner, 1956; Michaely et al., 1995), we expect that prospectors are more likely to pay fewer dividends relative to defenders.

On the other hand, it is also possible that prospectors may pay more dividends than defenders. First, given prospectors' strong need to raise a substantial and sustainable amount of capital to constantly innovate their products by investing in R&D projects and aggressively exploit new market opportunities, prospectors might have more incentives to pay more dividends to signal their positive economic prospects, thus lowering their financing costs due to less information asymmetry (Dhaliwal, Krull, Li, & Moser, 2005; Miller & Rock, 1985; Nissim & Ziv, 2001; Wooldridge, 1983). Furthermore, knowing that prospectors tend to be more risk-taking, market participants perceive prospectors as high-risk investment entities compared to defenders (e.g., Chen et al., 2017; Hambrick, 1983; Miles & Snow, 1978, 2003; Rajagopalan, 1997). Therefore, prospectors are likely to cater to investors' demand for high payoff by paying more dividends (Baker & Wurgler, 2004). Therefore, the two contentious hypotheses offer different predictions concerning the influence of business strategy on dividend payouts, and how business strategy affects corporate dividend policies is ultimately an important but under-explored empirical question.

Using a dataset of US public firms spanning the period of 1962-2019, we conduct a series of tests to examine the effect of business strategy on dividend policy. We first run multivariate regression analyses that capture the effect of business strategy on the level of dividend payout under various specifications. We find compelling evidence that prospectors pay fewer dividends compared to defenders, consistent with the hypothesis that prospectors retain cash and restrain dividends to finance investment opportunities. We then show that the significance of the effect of business strategy is more prominent among firms that have a broader investment opportunity set and superior performance. Further examination reveals that the lower propensity to pay dividends among prospectors is not only associated with significant R&D investments, but also with capital investments.

Moreover, to mitigate potential endogeneity concerns, we perform a difference-in-differences-in-differences (DiDiD) analysis and an instrumental variable (IV) test. In the DiDiD test, we exploit an exogenous shock to the mobility of highly skilled workers in the US, namely the Inevitable Disclosure Doctrine (IDD). The IDD forms a negative shock to the mobility of highly skilled (talented) employees (Callen, Fang, & Zhang, 2020; Glaeser, 2018; He, 2018; Li, Lin, & Zhang, 2018; Qiu & Wang, 2018) who are highly demanded by prospectors. Given He (2018) shows that companies tend to hoard more cash when talent competition intensifies, we expect prospectors to have more available cash on hand following IDD adoptions due to fewer R&D investments and thus pay more

dividends. In the IV test, we instrument business strategy using its five-year lagged value (Kong, Yang, Liu, & Yang, 2020; Sheng, Huang, Liu, & Yang, 2019), which is expected to be associated with the current strategy but unlikely to affect the current dividend payout level. Both endogeneity tests yield favorable results that support our main finding.

Finally, further robustness checks include (i) performing a matched sample analysis based on a propensity score matching (PSM) approach to account for potential endogeneity arising from observable characteristics (Shipman, Swanquist, & Whited, 2016), (ii) running the main analysis while controlling for the raw components of business strategy to examine whether the strategy score provides incremental information beyond its separate components, and (iii) using alternative measures of the dependent variable (i.e., dividend policy). Our results hold under all robustness tests.

Our contribution to the literature is threefold. First, we solve one piece of the dividend puzzle (Black, 1976; Fama & French, 2001) by showing that dividend policy is not only determined by financial characteristics but also shaped by an intrinsic yet unexplored non-financial factor that emerges at an early stage of the firm's lifecycle, i.e., the firm's business strategy. Therefore, by investigating the effect of business strategy on dividend payout, our study offers new insights into the underlying factors behind firms' dividend policies from a non-financial perspective. Second, our study extends an emerging line of literature on the influence of business strategies on corporate decisions (Bentley et al, 2013; Higgins et al., 2015; Lim et al., 2018; Yuan, Lu, Tian, & Yu, 2020) by revealing its impact on firms' dividend payout, which can not only influence the investment decisions by individual investors but also potentially shape the capital flows in equity markets. Third, our study also offers important implications for investors and policymakers. Crucially, given business strategy is relatively stable over the life of a company, its influence on a firm's dividend payout policies is expected to be profound and long-lasting. In light of this, investors are likely to face a potential trade-off between dividend income and capital gain when investing in the equity markets. To facilitate an informed investment decision, investors are advised to factor firms' distinctive business strategies into their investment decisions, according to their investment appetite and existing portfolio. In addition, our study is also highly relevant to policymakers. While it is necessary to protect intellectual properties, our results suggest that legislation that aims at protecting proprietary knowledge may unintentionally affect prospectors' dividend payout decisions due to the reduction in talent supply which severely undermines prospectors' innovation capacity. Hence, our findings suggest that policymakers should also consider the potential ramification for corporate innovation and the wider implications for the capital market when enhancing the legal protection of intellectual properties.

The remainder of the paper is structured as follows: Section 2 provides the literature review and hypothesis development; Section 3 describes the data sample and presents the research design; Section 4 discusses the main results, and Section 5 concludes.

2. Related Literature and Hypotheses Development

The management literature documents a variety of business strategy typologies that describe corporate behavior in the market. The business strategy typology developed by Miles and Snow (1978, 2003) is one of the well-cited business strategy theories. Specifically, the typology of Miles & Snow (1978, 2003) introduces three main types of firms: prospectors, analyzers, and defenders. At one extreme, prospectors following the innovation-oriented strategy constantly seek to exploit and identify new investment opportunities at the product and market levels through innovation processes, strive to be the leaders in their competitiveness by pioneering novel products without viable substitutes and entering new markets. Accordingly, the investment and cash flow of prospectors are oriented towards R&D and marketing activities to achieve technological flexibility and rapid growth. On the other extreme, unlike prospectors, defenders following the efficiency-oriented strategy focus on production optimization and cost efficiency by producing closely related products and services that have readily available substitutes. Analyzers comprise the middle group, which possesses the traits of both prospectors and defenders. Following prior papers (e.g., Abernethy et al., 2019; Bentley et al., 2013; Chen et al., 2017; Higgins et al., 2015; Lim et al., 2018; Yuan et al., 2020), we focus on the two extreme categories to better capture the distinctive effect of business strategy on corporate dividend policies.

In light of the growing interest in business strategy, there has been an emerging line of literature investigating the influence of business strategy using Miles and Snow's (1978, 2003) theoretical framework on accounting and finance topics (Abernethy et al., 2019; Bentley-Goode, Omer, & Twedt, 2019; Bentley et al., 2013; Chen et al., 2017; Higgins et al., 2015; Ittner, Larcker, & Rajan, 1997; Lim et al., 2018; Lin, Li, Cheng, & Lam, 2021; Navissi, Sridharan, Khedmati, Lim, & Evdokimov, 2017; Yuan et al., 2020). For example, Bentley et al. (2013) show that prospectors are more likely to experience an Accounting and Auditing Enforcement Release (AAER), lawsuit, or restatement than defenders. Also, Higgins et al. (2015) reveal that prospectors are more aggressively engaged in tax-avoidance behaviors than defenders. Moreover, Yuan et al. (2020) suggest that prospectors exhibit superior CSR performance than defenders. In addition, Lim et al. (2018) show that the annual report readability of prospectors is lower than that of defenders. Similarly, Chen et al. (2017) find that prospectors are more likely to be issued 'going concern' and 'material weakness' opinions by their

auditors. Finally, several studies also investigate the impact of business strategy on investment efficiency (Lin et al., 2021; Navissi et al., 2017). For instance, a most recent study by Lin et al. (2021) shows that business strategy can mitigate the over-investment problem among high CSR firms. Despite the emerging line of literature on business strategy, little is known on how business strategy can shape an important corporate decision, that is, dividend payouts.

Drawing from the previous literature, we formulate two competing hypotheses regarding the influence of business strategy on dividend payouts. On the one hand, prospectors following the innovation-oriented strategy may have lower dividend payouts than defenders due to their need to finance more investment opportunities and high risks. First, the innovation-oriented strategy of prospectors urges firms to pursue R&D activities more frequently and adapt constantly to meet the dynamic nature of their competing environment by persistently seeking new investment opportunities, leaving them in greater need of financing (Bentley-Goode et al., 2019; Chen et al., 2017; Hambrick, 1983; Miles & Snow, 1978, 2003). Accordingly, prospectors are incentivized to preserve more cash than defenders who focus on cost minimization and limit their product development efforts by avoiding excessive investment. As a result of prospectors' constant financing needs that are oriented toward new investment opportunities and R&D, prospectors have more incentives to reduce their dividend payouts to preserve sufficient cash holding (Fama & French, 2001; Grullon et al., 2002). Second, prior literature suggests that prospectors' innovation-oriented focus exposes them to higher risk and uncertainty (Chen et al., 2017; Hambrick, 1983; Miles & Snow, 1978, 2003; Rajagopalan, 1997; Singh & Agarwal, 2002). This is because prospectors proactively and persistently engage in risky R&D activities that produce greater outcome uncertainty, which results in significantly higher performance volatility and operational risks (Chen et al., 2017; Rajagopalan, 1997; Singh & Agarwal, 2002). Previous dividend literature has shown a negative relation between risks and dividend payouts (e.g., Allen & Michaely, 2003; Brav et al., 2005; DeAngelo et al., 2008; Grullon et al., 2002; Hoberg & Prabhala, 2009; Lintner, 1956; Michaely et al., 1995). For example, in a large sample of 384 executives, Brav et al. (2005) find that managers take risk into account when making dividend decisions, which echoes the earlier findings by Lintner (Lintner, 1956) that managers take a conservative approach when designing dividend policies. In a similar vein, Hoberg and Prabhala (2009) suggest that risk is a key determinant of the propensity for dividend payouts, and it is responsible for approximately 40% of the disappearance of dividend payouts. Therefore, given the higher risks undertaken by prospectors, we expect prospectors to adopt more conservative dividend policies and therefore pay fewer dividends relative to defenders. In contrast, defenders' strategy engages in minimal R&D and focuses more on

cost minimization, resulting in a lower need for external financing and lower risks of incurring future losses (Chen et al., 2017; Hambrick, 1983; Miles & Snow, 1978, 2003; Rajagopalan, 1997).

On the other hand, several countervailing factors would also work against finding evidence supporting the above prediction. Instead, it is also possible that prospectors may have incentives to pay more dividends than defenders. First, to implement the innovation-oriented strategy, prospectors have constant needs to raise a substantial and sustainable amount of funds to persistently innovate their products by investing in R&D projects and aggressively exploit new market opportunities. In the presence of information asymmetry between managers and investors, Miller & Rock (1985) show that managers use dividends as a signaling tool through which they convey information about the firm's performance prospects. The signaling model suggests that managers who face high asymmetric information with the public use dividends to build a favorable reputation (Miller & Rock, 1985; Nissim & Ziv, 2001). As such, when investment opportunities arise in the presence of asymmetric information, managers pay dividends to mitigate information asymmetry and lower the cost of capital (Gomes, 2000; Harakeh, Lee, & Walker, 2019; La Porta, Lopez-De-Silanes, Shleifer, & Vishny, 2000; Shleifer & Vishny, 1997). Based on the signaling theory, prospectors might be incentivized to pay more dividends to signal their positive economic prospects, thus reducing their financing costs owing to lower information asymmetry (Dhaliwal et al., 2005; Miller & Rock, 1985; Nissim & Ziv, 2001; Woolridge, 1983). Second, given prospectors embrace risks and uncertainty, market participants perceive prospectors as high-risk investment entities in comparison with defenders (Chen et al., 2017; Hambrick, 1983; Miles & Snow, 1978, 2003; Rajagopalan, 1997). Therefore, prospectors are likely to pay more dividends to cater to investors' demand for high rewards (Baker & Wurgler, 2004; Yu, Wang, Chen, & Wang, 2021).

Hence, based on the contentious predictions above, we present the following two competing hypotheses (Hypothesis 1) regarding the influence of business strategy on dividend payouts.

Hypothesis H1a: Business strategy is positively associated with dividend policy.
Hypothesis H1b: Business strategy is negatively associated with dividend policy.

As mentioned earlier, dividend policy is likely to be determined by investment opportunities and performance (Fama & French, 2001). The differences between prospectors and defenders should be exacerbated when more investment opportunities arise and when better performance is achieved (i.e., more profitability is generated). When various innovative investment opportunities are available,

prospectors are expected to pursue such investments while defenders are more likely to turn down risky opportunities. In the same sense, when firms perform well and generate significant profits, we expect prospectors to use the surplus cash flows to exploit new investment opportunities while defenders pay more dividends. Nevertheless, firms might forgo current investment opportunities as they are reluctant to cut dividends (Ramalingegowda, Wang, & Yu, 2013), or might use internally generated funds to pay dividends that signal promising economic prospects to facilitate future external financing (Miller & Rock, 1985). Accordingly, we expect the effect of business strategy on dividend policies to exhibit heterogeneity across investment opportunities (Hypothesis H2a) and profitability (Hypothesis H2b) cross-sections.

Hypothesis H2a: The association between business strategy and dividend policy varies with firms' investment opportunities.
Hypothesis H2b: The association between business strategy and dividend policy varies with firms' performance.

Finally, when available financing is limited, dividends and investments compete for available funds, and thus firms face a trade-off between pursuing investment opportunities and paying dividends. Given that, prospectors following the innovation-oriented business strategy seek to exploit and identify more new investment opportunities through substantial R&D investment (Miles & Snow, 1978, 2003), we investigate how prospectors adjust their capital investment in the presence of their evidently high R&D expenditures. On the one hand, prospectors might invest more than defenders in capital expenditures in line with their investment policies embedded in their general business strategy. On the other hand, given the limited financial resources, they might invest less in capital expenditure and divert their cash flows towards R&D investment. As such, our third hypothesis is as follows:

Hypothesis H3a: Business strategy is positively associated with investment expenditures.
Hypothesis H3b: Business strategy is negatively associated with investment expenditures.

3. Research Methodology

Before delving into the development of our empirical models, we first explain the computation of the firm's business strategy measure (*STRATEGY* hereafter) and accordingly label each firm as a

prospector, analyzer, or defender (e.g., Bentley et al., 2013; Higgins et al., 2015; Miles & Snow, 1978, 2003). The *STRATEGY* index comprises six firm characteristics, including the (i) ratio of R&D investments to sales (*RD5*), (ii) ratio of employees to sales (*EMPS5*), (iii) one-year percentage change in sales (*REV5*), (iv) ratio of SG&A expenses to sales (*SGA5*), (v) volatility in employees (*EMPV5*), and (vi) ratio of net PPE to total assets (*CAP5*). Firms following an innovation-oriented strategy (i.e., prospectors) are expected to have higher R&D investments relative to sales (*RD5*), higher growth (*REV5*), higher volatility in employees (*EMPV5*), and higher SG&A expenses relative to sales (*SGA5*). In stark contrast, firms following an efficiency-oriented strategy (i.e., defenders) have a higher ratio of employees relative to sales (*EMPS5*) and higher capital intensity (*CAP5*). Each of the variables is computed for each firm-year using the rolling average of the preceding 5 years.[3] Within each two-SIC industry-year cross-section, we rank each of the variables into quintiles and assign a score of 5 to those in the highest quintile, a score of 4 to those in the second-highest quintile, and so on to reach those in the lowest quintile which are assigned a score of 1. Consistent with prior literature (e.g., Bentley et al., 2013; Higgins et al., 2015; Miles & Snow, 1978, 2003), since defenders exhibit higher capital intensity, the ratio of net PPE to total assets is reverse-scored and we assign a score of 1(5) to the highest (lowest) quintile when constructing the *STRATEGY* index. As such, the *STRATEGY* score ranges between 6 and 30. In line with prior studies (Abernethy et al., 2019; Bentley-Goode et al., 2019; Bentley et al., 2013; Chen et al., 2017; Higgins et al., 2015; Ittner et al., 1997; Lim et al., 2018; Lin et al., 2021; Navissi et al., 2017; Yuan et al., 2020), we label firm-years with a *STRATEGY* score ranging from 6 to 12 as 'defenders', from 13 to 23 as 'analyzers', and from 24 to 30 as 'prospectors'.

3.1. Modelling dividend policy

We follow prior papers in the accounting and finance literature to empirically model the behavior of dividend policy (e.g., Denis & Osobov, 2008; Fama & French, 2001, 2002; Ramalingegowda, Wang, & Yu, 2013). According to these studies, the characteristics that mainly determine dividend payout are firm maturity, profitability, investment and growth opportunity set, cash liquidity, and financial leverage. DeAngelo et al. (2006) show that more mature firms tend to pay more dividends as they have a more stable stream of cash flows; therefore, we proxy for maturity using the natural logarithm of the firm's number of years (*FIRMAGE*) and the natural logarithm of total assets (*SIZE*). Denis & Osobov (2008) show that profitability is a key determinant of dividend

[3] To ensure the robustness of our empirical analysis, we also repeat our analysis using an alternative 3-year rolling window and find our results remain highly consistent. We thank the anonymous reviewer for suggesting this robustness test.

payments as more profitable firms can maintain their dividend payouts while retaining some cash for unfortunate events. As such, we proxy for profitability using the ratio of retained earnings to total assets (*RETAINEARN*) and return on assets (*ROA*). Fama & French (2001) show that firms with higher investment and growth opportunities tend to decrease dividends; accordingly, we control for investment opportunities using the market-to-book ratio (*MTB*) and for growth opportunities using the one-year percentage change in sales (*SALEGROWTH*). Ramalingegowda et al. (2013) show that financial liquidity facilitates dividend payments, and thus we include the ratio of cash to total assets to capture liquidity (*CASH*). Finally, Eije & Megginson (2008) document that financial leverage has a constraining effect on dividend payout; therefore, we control for financial leverage (*LEVERAGE*) using the ratio of long-term debt to total assets. In light of this discussion, Equation (1) below depicts our basic regression equation which models the effect of business strategy on dividend policy.

$$DIVPAY_{it} = \alpha_0 + \alpha_1 STRATEGY_{it} + \sum \alpha_n CONTROLS_{it} + \sum \alpha_p \text{Firm\_FE}_{it} + \sum \alpha_q \text{Industry} \times \text{Year\_FE}_{jt} + \varepsilon_{it} \quad (1)$$

The dependent variable *DIVPAY* is measured using either the ratio of dividends declared to total sales (*DIVPAY1*), the ratio of dividends declared to total assets (*DIVPAY2*), or the ratio of dividends declared to cash flow (*DIVPAY3*). As mentioned earlier, *STRATEGY* is an ordinal variable that takes values between 6 and 30. As such, the coefficient of interest α_1 captures the effect of a firm business strategy on its dividend policy. Finally, in addition to including a vector of control variables, we also include firm fixed effects and industry-by-year fixed effects to account for any unobservable time-invariant firm characteristics and time-varying industry characteristics on dividends. All variables are defined in Appendix 1.

Moreover, to assure that our results are not driven by the discrete nature of our business strategy measure, we follow prior studies (e.g., Bentley et al., 2013; Higgins et al., 2015) and replicate Equation (1) while replacing *STRATEGY* with two dummy variables that capture the effect of prospectors (*PROSPECTOR*) and defenders (*DEFENDER*) separately.

$$DIVPAY_{it} = \beta_0 + \beta_1 PROSPECTOR_{it} + \beta_2 DEFENDER_{it} + \sum \beta_n CONTROLS_{it} + \sum \beta_p \text{Firm\_FE}_{it} + \sum \beta_q \text{Industry} \times \text{Year\_FE}_{jt} + \varepsilon_{it} \quad (2)$$

All variables are defined previously and in Appendix 1. The coefficient β_1 (β_2) captures the effect of a prospector (defender) business strategy on dividend policy compared to the whole sample.

3.2. Sample and descriptive statistics

Our sampling procedure starts with all the firm-year observations from the Compustat database between 1950 and 2019. First, we remove observations relating to firms operating in financial services. Then, we drop firms that do not have enough observations to compute the business strategy composite. Finally, we delete all observations with missing data on the control variables in our baseline regression. The final dataset comprises 90,241 firm-year observations from more than 12,000 U.S., spanning the period 1962-2019.

Table 1 provides descriptive statistics for the variables used in our analyses. Panel A reports the *STRATEGY* statistics for each business strategy type. Panel B reports summary statistics for the dividend payout variables, the business strategy variables, and the control variables. The mean values of *DIVPAY1* and *DIVPAY2* are 1.379 and 1.477, respectively, indicating that firms pay around 1.4% of their sales or assets in dividends, on average. Moving to the business strategy variables, the median (mean) of *STRATEGY* is 18 (17.43), which refers to an analyzer firm. Further, consistent with prior studies (e.g., Bentley et al., 2013; Higgins et al., 2015), our dataset is dominated by analyzers who comprise around 80% of the sample, whereas prospectors (defenders) comprise one-third (two-thirds) of the remaining observations. Finally, the descriptive statistics of the control variables show that the average firm in our sample is profitable with a market valuation that exceeds its book value and a debt-to-assets ratio slightly above 20 percent.

[Insert Table 1 Here]

4. Empirical Results

4.1. Main results

We start examining the effect of business strategy on dividend policy by performing the regression analysis depicted in Equation (1), which provides our baseline results. Table 2 Columns 1-3 report the regression results of dividend payout variables *DIVPAY1*, *DIVPAY2*, and *DIVPAY3*, respectively, on the business strategy composite measure *STRATEGY* while excluding control variables. The coefficient on *STRATEGY* is consistently negative and significant at the 1% level, suggesting a negative association between firms' scores on the composite measure of business strategy and their dividend payout level. That is, the negative and significant coefficient on *STRATEGY*

indicates that the more the firm is engaged in an innovation-oriented strategy rather than an efficiency-oriented strategy, the lower is the dividend. In Table 2 Columns 4-6, we repeat the same regressions in the first three columns while introducing control variables. The coefficient on *STRATEGY* remains negative and significant throughout all regression models. In terms of control variables, we find that coefficients are largely consistent with prior literature. For example, the positive and significant coefficients on *FIRMAGE* and *SIZE* are consistent with prior findings that more mature and larger firms are more likely to pay higher dividends (DeAngelo et al., 2006). Similarly, more profitable firms tend to pay more dividends as indicated by the positive and significant coefficients on *RETAINEARN* and *ROA*, in line with the literature (e.g., Denis & Osobov, 2008). Finally, financial liquidity shows a positive association with dividends, as indicated by the positive and significant coefficient on *CASH*. On top of the firm-level control variables, we also include firm fixed effects and industry-by-year fixed effects to control for time-invariant firm-specific unobserved heterogeneity and isolate any potential time-varying effect specific to an industry in a given year, respectively.

[Insert Table 2 Here]

To ensure that our results are not driven by the discrete nature of the business strategy measure, we replace *STRATEGY* with two dummy variables to capture prospectors (*PROSPECTOR*) and defenders (*DEFENDER*) as depicted in Equation (2). Table 3 Columns 1-3 report regression results of the three dividend payout variables on prospectors, defenders, and the control variables. The coefficient on *PROSPECTOR* is negative and significant at the 1% level throughout the three columns, indicating that prospectors pay lower dividends compared to the base group, i.e., analyzers. In stark contrast, the positive and significant coefficient on *DEFENDER* throughout the three columns suggests that defenders pay higher dividends relative to analyzers. Further, to make the comparison between prospectors and defenders more direct, we drop analyzers (in Columns 4-6) and keep the dummy variable *PROSPECTOR*, which in this case takes the value 1 if the firm is a prospector and the value zero is the firm is a defender. As reported in Table 3 Columns 4-6, the coefficient on *PROSPECTOR* is negative and significant at the conventional levels throughout the three columns,[4] suggesting that the business strategy of prospectors is negatively associated with dividend payout when compared to that of defenders. The evidence presented in Table 3 corroborates the inference drawn from Table 2, suggesting that an innovation-oriented (efficiency-oriented) strategy is associated with

[4] It is expected to witness a lower statistical significance when directly comparing prospectors to defenders because of the remarkable decrease in the number of observations from 90,241 to 14,204 firm-years.

lower (higher) dividend payouts. In light of the results reported in Tables 2 and 3, we reject hypothesis H1a in favor of H1b.

[Insert Table 3 Here]

4.2. The roles of growth opportunities and performance

Moving to test hypotheses H2a and H2b in which we predict that the association between business strategy and dividend policy becomes more salient among firms with more investment opportunities and superior performance. Specifically, we proxy the firm's investment opportunity set using the market-to-book ratio (*MTB*) and growth in sales (*SALEGROWTH*). As for firm performance, we use return on assets (*ROA*) as a proxy for accounting performance and Tobin's Q as a proxy for market performance (*TOBINQ*). According to Conley, Goncalves, & Hansen (2018), the subsample analysis is a robust strategy in capturing any cross-sectional variation; therefore, we split the sample into above-median and below-median subsamples conditional on *MTB*, *SALEGROWTH*, *ROA*, and *TOBINQ*. Table 4 Columns 1-2 report the baseline regression results of Equation (1) for the high and low *MTB* subsamples, respectively. The coefficient on *STRATEGY* is negative and significant at the 1% level for both subsamples; however, the economic significance of the coefficient for the high *MTB* subsample is significantly greater than that for the low *MTB* subsample (i.e., −0.0654 vs −0.0177 respectively, with a significant difference at the 1% level). A similar pattern is found when conditioning on *SALEGROWTH* where we find that the above-median subsample yields a coefficient of −0.0434 while the below-median subsample shows a coefficient of −0.0286, with a significant difference at the 1% level. Taken together, we infer that the effect of business strategy on dividend policy exacerbates when firms face more investment opportunities. As such, we reject the null hypothesis H2a in favor of its alternative.

Moving to the variation of the association between business strategy and dividend policy with firm performance, Table 4 Columns 5-6 report the baseline results for the high and low *ROA* subsamples, respectively. The effect of business strategy is highly significant and negative for firms that report higher accounting profits as indicated by the coefficient on *STRATEGY* for the above- and below-median subsamples (−0.0674 being highly significant vs −0.0009 being insignificant, respectively). The same finding persists when using a market performance proxy, where the coefficient of *STRATEGY* is equal to −0.0674 (t-stat = −7.15) for the high *TOBINQ* subsample compared to −0.0072 (t-stat = −1.72) for the low *TOBINQ* subsample. Notably, the differences in coefficient estimates between high and low subsamples for *ROA* and *TOBINQ* are significant at the 1% level.

Therefore, the impact that the firm's business strategy has on dividend policy is significantly more salient among better-performing firms, which leads us to reject the null hypothesis H2b in favor of its alternative.

[Insert Table 4 Here]

4.3. The role of capital investment

Finally, in hypothesis H3 we examine the possibility that prospectors pay fewer dividends as they divert their stream of cash flows towards investments. Accordingly, we examine the impact that business strategy might have on investment policy while focusing on capital expenditure and excluding R&D investments because, by definition, prospectors invest significantly more in R&D activities compared to defenders (Miles & Snow, 1978). Panel A of Table 5 reports the regression results of business strategy variables on capital investment using different model specifications. Columns 1-4 of Panel A show that the coefficient on *STRATEGY* is consistently positive and significant using different combinations of year, industry-year, and state fixed effects.[5] Moreover, in Columns 5-8, we replace *STRATEGY* with the two dummy variables that identify prospectors and defenders (*PROSPECTOR* and *DEFENDER*, respectively). We find that the coefficient on *PROSPECTOR* (*DEFENDER*) is positive (negative) and significant at the 1% level throughout, suggesting that prospectors (defenders) expend more (less) on capital investments relative to the base group, that is, analyzers. Collectively, the results shown in Panel A of Table 5 lend support to the argument that prospectors make more capital investment compared to defenders, which aligns with their lower dividend payout level. Accordingly, we reject hypothesis H3b in favor of H3a.

[Insert Table 5 Here]

To further verify whether prospectors divert their stream of cash flows towards more capital investment, which results in lower dividend payouts, we follow prior literature (DeFond, Lim, & Zang, 2016; Landsman, Maydew, & Thornock, 2012; Pevzner, Xie, & Xin, 2015) and conduct a path analysis based on a structural equation model (SEM) to examine how business strategy, as a source variable, influences dividend payouts.[6] Specifically, we conduct a mediation analysis through path analysis to examine the direct impact of business strategy on dividend payouts as well as the indirect impact through capital investment as the mediating variable. Panel B of Table 5 presents the results and Figure

[5] We include state fixed effect to isolate any state-specific effects as prior studies find that state laws might affect capital expenditure (e.g., Yin, Hasan, Kobeissi, & Wang, 2017).

[6] We thank the reviewer for suggesting the mediation analysis.

1 depicts the direct and indirect paths through which business strategy lowers dividend payouts. We find that the direct path coefficient between business strategy and dividend payouts is significantly negative at the 1% level (-0.0296, $p < 0.01$), which is consistent with our main result. The path coefficient between business strategy and capital investment is significantly positive (-0.0022, $p < 0.01$), which supports our result in Panel A of Table 5. The path coefficient between capital investment and dividend payouts is significantly negative (-1.4074, $p < 0.01$), indicating that there is a trade-off between making capital investments and paying dividend payouts when firms allocate their cash flows. Overall, the results from our mediation analysis through path analysis suggest that capital investment is a plausible mechanism through which prospectors tend to pay lower dividends.

4.4. Endogeneity tests

DeAngelo & DeAngelo (2006) state that payout policy and investment policy are both relevant to firm value, yet neither is uniquely determined. To the extent that investment policy is a fundamental component of business strategy, we anticipate potential endogeneity concerns arising from reverse causality and omitted variable bias. In an attempt to address such concerns, we perform a difference-in-differences-in-differences (DiDiD) and an instrumental variable (IV) analysis.

4.4.1 Exogenous shocks to innovative talent supply

In this section, we employ the Inevitable Disclosure Doctrine (IDD) an exogenous shock to the mobility of talented workers who possess a proprietary set of skills and expertise, a key determinant of firms' innovation (e.g., Almeida & Kogut, 1999). The IDD has been adopted in different states in the US at different times and it allows employers to legally prevent former employees from joining competitors given that the company's proprietary information and trade secrets are at stake.[7] In other words, the employer can prevent an incumbent employee from working for a competitor if they prove to the court that the job cannot be done without inevitably using or disclosing the company's sensitive information. To the extent that human capital is the main driver of corporate innovation (see the survey of Breschi & Lissoni, 2001), the IDD forms a negative shock to firms' business strategy by hindering the mobility of highly skilled and talented employees, who are highly demanded by prospectors (Callen et al., 2020; Glaeser, 2018; He, 2018; Li et al., 2018; Qiu & Wang, 2018). More

[7] Callen et al. (2020) state that "A survey sponsored by PricewaterhouseCoopers, the U.S. Chamber of Commerce and the ASIS Foundation (2002) estimates that annual losses to U.S. firms from the divulgence of their trade secrets is over $50 billion", which indicates the economic significance of proprietary information and trade secrets.

importantly, studies find that, when talent competition intensifies in the market, companies tend to pile more cash (He, 2018). As such, to the extent that talent mobility is curbed upon adopting IDD, prospectors are expected to have higher financial liquidity due to the reduction in innovative investments, which is expected to increase dividend payouts. In light of the preceding discussion, we introduce Equation (3) in which we examine the exogenous effect of IDD on the association between firms' business strategy and dividend policy, where *IDD* is a dummy variable equal to one if the firm is headquartered in a state with IDD legislation in a given year, and zero otherwise. The coefficients of interest are δ_1 and δ_2, which capture the change in the effect of prospectors' and defenders' business strategy on dividends policy following the enactment of IDD, respectively. All variables are defined previously and in Appendix 1.

$$\begin{aligned} DIVPAY_{it} = {} & \delta_0 + \delta_1 PROSPECTOR_{it} \times \mathrm{IDD}_{it} + \delta_2 DEFENDER_{it} \times \mathrm{IDD}_{it} \\ & + \delta_3 PROSPECTOR_{it} + \delta_4 DEFENDER_{it} + \delta_5 \mathrm{IDD}_{it} \\ & + \sum \delta_n CONTROLS_{it} + \sum \delta_p \mathrm{Firm\_FE}_{it} + \sum \delta_q \mathrm{Industry} \times \mathrm{Year\_FE}_{jt} + \varepsilon_{it} \end{aligned} \quad (3)$$

To the extent that prospectors retain cash and restrain dividends to finance their innovation-oriented strategy, we expect this phenomenon to dissipate following the enactment of legislation that hinders innovation. Specifically, as discussed earlier, we exploit the enactment of the IDD that hinders innovation by curbing the mobility of highly skilled workers, causing an increase in cash availability (He, 2018). If the results obtained in Tables 2 and 3 are viable, we expect to find an increase in dividend payouts following the enactment of IDD among firms in general and prospectors in specific.

Table 6 Columns 1-3 report regression results that examine how prospectors and defenders amend their dividend payout levels following the enactment of IDD, as depicted in Equation (3), using the same dependent variables in previous tables (i.e., *DIVPAY1*, *DIVPAY2*, and *DIVPAY3*). In all columns of Table 6, the coefficient on *PROSPECTOR* (*DEFENDER*) is negative (positive) and highly significant, which indicates that prospectors (defenders) used to pay less (more) dividends compared to analyzers before the IDD enactment. Further, the coefficient on the interaction term *PROSPECTOR* × *IDD* is positive and significant at 1%, suggesting that the constraining effect of prospectors' strategy on dividends has diminished following the IDD. Economically, taking the results reported in Table 6 Column 1 as an example, the coefficient on *PROSPECTOR* is −0.7553 and that on *PROSPECTOR* × *IDD* is 0.6005, which indicates that the IDD enactment caused a reduction by 80% in the effect of business strategy on dividend policy. On the other hand, defenders show a similar

increase in their dividend payments around the IDD, yet by a much weaker magnitude relative to prospectors. In sum, the results reported in Table 6 corroborate our main conclusion that prospectors retain cash and pay fewer dividends compared to defenders to finance their innovation-oriented strategy.

[Insert Table 6 Here]

4.4.2 2SLS estimation using instrumental variables

To further address potential endogeneity concerns, we also employ a two-stage least squares (2SLS) analysis and instrument business strategy using its five-year lagged value (Kong et al., 2020; Sheng et al., 2019), i.e., *STRATEGY_L5*. To the extent that a business strategy is a long-term approach adopted by the firm at an early stage of its lifecycle (Snow & Hambrick, 1980), it is plausible to assume a significant correlation between the firm's past and current business strategies. In this sense, the past business strategy can only affect the current dividend policy through its association with the current business strategy. In the first stage, we regress the endogenous variable (*STRATEGY*) on the instrument (*STRATEGY_L5)* along with the control variables. Then, in the second stage, we use the fitted values from the first stage to run our baseline regression as depicted in Equation (1). Table 7 Columns 1 and 3 reports the first stage of the 2SLS procedure under different model specifications, i.e., while including the year and industry-year fixed effects, respectively. The coefficient on *STRATEGY* in both columns is positive and highly significant, suggesting a solid correlation between the business strategy and the utilized instrument. In addition, the Cragg-Donald test rejects the null hypothesis of a weak instrument at the 1% level. Table 7 Columns 2 and 4 report the second stage results of the 2SLS procedure and show that firms with an innovation-oriented strategy pay significantly less dividends compared to firms with an efficiency-oriented strategy. The results reported in Table 7 lend support to our baseline findings and show that our main inference holds when using IV regressions.

[Insert Table 7 Here]

4.5. Robustness checks

In this section, we subject our results to a set of robustness checks in which we (i) perform a PSM analysis, (ii) control for the six raw components of the business strategy composite measure, and (iii) use alternative dependent variables to capture dividend policy.

4.5.1 Propensity Score Matching Approach

Performing a PSM analysis mitigates endogeneity concerns arising from observable differences (Shipman et al., 2016). Accordingly, we match each prospector to one or more defender(s) using different specifications, i.e., with and without replacement, using calipers of 0.01 and 0.05. The propensity score is computed from a probit regression that includes observations of prospectors and defenders (excluding analyzers), in which we regress the dummy variable *PROSPECTOR* on all control variables. Table 8 Panel A reports the mean values of *DIVPAY1*, *DIVPAY2*, and *DIVPAY3* for the matched prospectors and defenders samples, where matching is performed with replacement using a 0.05 caliper. The mean values of all dependent variables are consistently lower for the prospectors' sample, with a statistically significant difference at the 1% level. In Table 8 Panel B, we use a 0.01 caliper, and the results become more economically significant. In other words, when comparing a small set of prospectors and defenders with highly similar economic and financial characteristics, the difference in their dividend payout becomes more salient. Further, in Panels C and D, we repeat the same analysis of Panels A and B while matching without replacement and find that the results remain unchanged.

[Insert Table 8 Here]

4.5.2 The inclusion of individual business strategy components

To provide further assurance that our variable of interest, *STRATEGY,* does indeed capture unique information regarding a firm's business strategy on top of information that would have been captured by the six raw components, following previous business strategy studies (Chen et al., 2017; Yuan et al., 2020), we further control for all six components (*RD5, EMPSALES5, REV5, SGA5, EMP5, and CAP5*) in our main regression model. The underlying motivation behind such analysis is that if *STRATEGY* does not offer any incremental information concerning a firm's business strategy beyond the six individual components, the significant effect of *STRATEGY* we observed in our baseline results would be subsumed after the inclusion of all six individual components. If that is the case, we would instead expect to observe all the six components to have significant explanatory power for firms' dividend payout.

Table 9 reports regression results for the dividend payout variables after including all six individual components as additional control variables[8]. Columns 1, 3, and 5 of Table 9 report regression results of *DIVPAY1*, *DIVPAY2*, and *DIVPAY3* on *STRATEGY* and its raw components along with the control variables. The coefficient on *STRATEGY* is negative and significant at the 1% level throughout Table 9, whereas the coefficients on the six raw components of the business strategy composite measure are largely indistinguishable from zero. Similarly, Columns 2, 4, and 6 of Table 9 report regression results of *DIVPAY1*, *DIVPAY2*, and *DIVPAY3* on *PROSPECTOR, DEFENDER,* the raw components of business strategy, and the control variables. The coefficient on *PROSPECTOR* (*DEFENDER*) is negative (positive) in all regressions while the coefficients on the sex raw components of business strategy stay mostly insignificant.[9]

[Insert Table 9 Here]

4.5.3 Alternative measures of dividend payouts

Finally, to test how sensitive our results are to the use of *DIVPAY1*, *DIVPAY2*, and *DIVPAY3* as dependent variables, we use alternative variables to measure dividend payouts. Specifically, we employ *DIVPAY_ALT1* which uses the market value of equity as a deflator, and *DIVPAY_ALT2* that comprises dividends in addition to share repurchases, an alternative method for corporate payout (Brav et al., 2005). Table 10 replicates the regression specifications used in Tales 2 and 3 to examine the effect of business strategy on dividend policy using the alternative dependent variables. In Table 10 Columns 1-2, we use regression Equation (1) and find a negative and significant coefficient on *STRATEGY* when using *DIVPAY_ALT1* and *DIVPAY_ALT2* as dependent variables, respectively. Then, in Table 10 Columns 3-4, we use regression Equation (2) and find a negative (positive) and significant coefficient on *PROSPECTOR* (*DEFENDER*) when using *DIVPAY_ALT1* and *DIVPAY_ALT2* as dependent variables, respectively. In Table 10 Columns 5-6, we repeat the same set of regressions (as in Columns 3-4) while dropping analyzers and find a

[8] In our untabulated analysis, we also find that our results remain statistically significant when repeating our main regression model with alternative *STRATEGY* indexes constructed by excluding one raw component each time, suggesting that our main results are not driven by a particular raw component in our original business strategy index. We thank the reviewer for suggesting this robustness test.

[9] To check for potential multicollinearity issue after the inclusion of all six raw components, we conduct a collinearity test by calculating the variance inflation factor (VIF). Overall, the mean VIF value is 1.65 and the maximum VIF is 3.06, both of which are well below the threshold value of 10 (Atif, Hossain, Alam, & Goergen, 2020; Baum, 2006; Call, Chen, & Tong, 2013; D'Mello & Toscano, 2020). Thus, VIF results suggest that our analysis does not suffer from multicollinearity. We thank the reviewer for suggesting the collinearity test.

negative and significant coefficient on *PROSPECTOR* while using the same alternative dependent variables.

[Insert Table 10 Here]

Overall, we perform a set of sensitivity checks that ensure the robustness of our results. We first find that out results are more economically significant when comparing matched groups of prospectors and defenders. Then, we show that the composite measure of business strategy provides informational content that goes beyond its raw components, emphasizing the importance of controlling for business strategy when studying dividend policy. Finally, we provide evidence that our results are insensitive to using alternative measures of dividend payout that take market capitalization and shares repurchases into account.

5. Conclusion

We show that a firm's business strategy plays a vital role in determining its dividend policy. We find that firms who follow an innovation-oriented strategy (prospectors) pay fewer dividends compared to those who follow an efficiency-oriented strategy (defenders). We also find that the effect of business strategy on dividend policy exhibits cross-sectional variation in investment opportunity set and firm performance. Moreover, our results reveal that prospectors tend to pay fewer dividends compared to defenders as they tend to spend more on investments. Further analysis shows that firms adjust their dividend policy in accordance with an exogenous shock to business strategy. We find that, following the enactment of the IDD that hinders innovation, prospectors pay more dividends due to the greater availability of cash following the decline in innovative investments. Our results are robust to implementing an IV approach, PSM analysis, controlling for the raw components of the business strategy composite measure, and the use of alternative dependent variables. Taken together, our extensive set of tests mitigates endogeneity concerns and lends confidence that our main finding relating to the role of business strategy in shaping dividend policy is not random.

We contribute to the dividend literature by showing that, in addition to financial variables, dividend policy is also shaped by an inherent non-financial factor, i.e., business strategy, thus helping to solve part of the longstanding dividend puzzle. Moreover, our study also broadens the understanding of the influence of business strategies on corporate decisions (Abernethy et al., 2019; Bentley-Goode et al., 2019; Bentley et al., 2013; Chen et al., 2017; Higgins et al., 2015; Ittner et al., 1997; Lim et al., 2018; Lin et al., 2021; Navissi et al., 2017; Yuan et al., 2020) by showing that the

impact of business strategy also extends to a crucial firm decision that has an important bearing on investors' decision-making. Specifically, given dividend is an important income for shareholders, equity investors might find our results particularly useful when choosing between a high-growth firm that pays limited dividends and a dividend-paying firm with a limited growth prospect. Therefore, it is imperative that investors take firms' business strategies into their investment decisions and adjust their investment portfolios accordingly to suit their trading strategy and risk appetite. Future research should examine how the effect of business strategy on corporate financing decisions changes under the Covid-19 pandemic, an exogenous shock that hampers firms' economic activities and access to external financing.

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Table 1. Descriptive statistics.

Panel A: Business strategy score for each type of business strategy

	FULL SAMPLE *(N = 90,241)*		**PROSPECTOR** *(N = 4,952)*		**ANALYZER** *(N = 76,037)*		**DEFENDER** *(N = 9,252)*	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
STRATEGY	17.430	18.000	25.054	25.000	17.749	18.000	10.727	11.000

Panel B: Summary statistics of variables in main model

	N	Mean	Median	Std.Dev	25th Percentile	75th Percentile
Dividend Payouts Variables						
DIVPAY1	90,241	1.379	0.555	2.402	0.000	1.784
DIVPAY2	90,241	1.477	0.815	2.093	0.000	2.208
DIVPAY3	90,241	13.101	8.454	16.348	0.000	21.153
Strategy Variables						
STRATEGY	90,241	17.43	18.000	3.817	15.000	20.000
Control Variables						
FIRMAGE	90,241	2.864	2.89	0.599	2.398	3.296
RETAINEARN	90,241	0.264	0.302	0.353	0.144	0.454
SALEGROWTH	90,241	0.146	0.106	0.236	0.026	0.212
ROA	90,241	0.063	0.049	0.062	0.026	0.083
SIZE	90,241	5.429	5.292	2.085	3.875	6.865
MTB	90,241	2.324	1.664	2.299	0.982	2.815
CASH	90,241	0.144	0.077	0.179	0.03	0.186
LEVERAGE	90,241	0.222	0.208	0.173	0.074	0.33

Notes: This table presents the descriptive statistics of the main variables. Panel A presents the mean and median of the strategy score for each subgroup by the type of business strategy. Panel B presents summary statistics for all the variables included in our baseline model. All variables are winsorized at the top and bottom percentile and are defined in the Appendix.

Table 2. Business strategy and dividend policy: Baseline regressions (H1).

	Full Sample			Full Sample		
	(1) *DIVPAY1*	(2) *DIVPAY2*	(3) *DIVPAY3*	(4) *DIVPAY1*	(5) *DIVPAY2*	(6) *DIVPAY3*
STRATEGY	-0.0675***	-0.0416***	-0.3250***	-0.0625***	-0.0365***	-0.3734***
	(-9.74)	(-7.27)	(-7.68)	(-9.42)	(-6.69)	(-8.75)
FIRMAGE				0.2275**	0.7767***	4.1953***
				(2.23)	(8.34)	(6.34)
RETAINEARN				0.5122***	0.5019***	4.8842***
				(5.80)	(6.35)	(8.96)
SALEGROWTH				-0.5179***	-0.3109***	-3.6256***
				(-14.10)	(-10.88)	(-15.66)
ROA				6.8247***	3.4973***	8.6633***
				(14.78)	(11.74)	(4.41)
SIZE				0.1966***	0.0552*	1.5696***
				(5.64)	(1.93)	(6.92)
MTB				0.0248***	0.0701***	0.0350
				(3.48)	(9.44)	(0.79)
CASH				0.3759***	0.3849***	3.4843***
				(3.10)	(4.22)	(5.27)
LEVERAGE				-0.6752***	-1.5598***	-8.5319***
				(-4.83)	(-12.07)	(-9.80)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Year FE	Yes	Yes	Yes	Yes	Yes	Yes
N	90,241	90,241	90,241	90,241	90,241	90,241
Adjusted R2	61.50%	62.80%	57.90%	63.9%	65.6%	59.8%

Notes: This table presents the baseline results from regressing dividend payout on business strategy. Columns 1-3 report the regression results without controls. Column 1 reports the results of regressing *DIVPAY1* on business strategy (*STRATEGY*). Column 2 reports results from the regression of *DIVPAY2* on business strategy. Column 3 reports the results from the regression of *DIVPAY3* on business strategy. Columns 4-6 report results from the regression of dividend policy variables on business strategy (*STRATEGY)* along with the control variables. Standard errors are clustered at firm level. All variables are winsorized at the top and bottom percentile and are defined in the Appendix.

Table 3. Business strategy and dividend policy: Prospectors versus defenders (H1).

	Full Sample			Prospectors and Defenders only		
	(1) *DIVPAY1*	(2) *DIVPAY2*	(3) *DIVPAY3*	(4) *DIVPAY1*	(5) *DIVPAY2*	(6) *DIVPAY3*
PROSPECTOR	-0.2764***	-0.1767***	-1.3765***	-1.1786**	-0.6471**	-5.7963*
	(-4.16)	(-3.76)	(-4.15)	(-2.07)	(-2.29)	(-1.93)
DEFENDER	0.2923***	0.1870***	1.8401***			
	(5.29)	(4.34)	(5.14)			
FIRMAGE	0.1784*	0.7501***	3.8807***	0.2728	0.6174***	4.0680*
	(1.75)	(8.06)	(5.83)	(1.10)	(3.82)	(1.93)
RETAINEARN	0.5290***	0.5116***	4.9856***	0.5562**	0.5878***	5.0887***
	(5.99)	(6.47)	(9.12)	(2.22)	(3.83)	(2.87)
SALEGROWTH	-0.5832***	-0.3473***	-4.0187***	-0.4096***	-0.2139***	-3.3365***
	(-15.62)	(-12.27)	(-17.36)	(-4.83)	(-2.84)	(-4.90)
ROA	6.9225***	3.5500***	9.2576***	4.3118***	2.1962***	1.6894
	(14.78)	(11.85)	(4.68)	(6.03)	(4.51)	(0.32)
SIZE	0.1520***	0.0301	1.3009***	1.5463***	0.5706*	15.2535***
	(4.55)	(1.08)	(5.91)	(2.71)	(1.83)	(3.74)
MTB	0.0240***	0.0697***	0.0305	0.0585***	0.0841***	0.1348
	(3.36)	(9.40)	(0.69)	(3.24)	(6.51)	(1.15)
CASH	0.4389***	0.4198***	3.8589***	0.7081***	0.4671***	5.2461***
	(3.65)	(4.60)	(5.86)	(2.79)	(2.59)	(3.11)
LEVERAGE	-0.6769***	-1.5601***	-8.5377***	-1.0089***	-1.6855***	-10.7734***
	(-4.84)	(-12.13)	(-9.81)	(-3.56)	(-9.11)	(-5.06)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Year FE	Yes	Yes	Yes	Yes	Yes	Yes
N	90,241	90,241	90,241	14,204	14,204	14,204
Adjusted R2	63.8%	65.5%	59.7%	78.9%	76.4%	69.2%

Notes: This table presents the results of the baseline regression model based on the types of business strategies (i.e., prospectors or defenders). Columns 1-3 report results from the regression of dividend payouts variables on prospectors (*PROSPECTOR*), defenders (*DEFENDER*), and the control variables. Columns 4-6 report regression results after removing analyzers (*ANALYZER*) from the sample. Standard errors are clustered at firm level. All variables are winsorized at the top and bottom percentile and are defined in the Appendix.

Table 4. Business strategy and dividend policy: Subsample analysis (H2).

	DIVPAY1							
	MTB		*SALEGROWTH*		*ROA*		*TOBINQ*	
	High	Low	High	Low	High	Low	High	Low
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
STRATEGY	-0.0654***	-0.0177***	-0.0434***	-0.0286***	-0.0674***	-0.0009	-0.0647***	-0.0072*
	(-7.12)	(-3.40)	(-7.75)	(-4.29)	(-7.09)	(-0.33)	(-7.15)	(-1.72)
Difference p-value	0.000***		0.008***		0.000***		0.000***	
Baseline Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	45,120	45,121	45,106	45,135	45,120	45,121	45,130	45,111
Adjusted R2	28.3%	30.3%	25.4%	34.0%	27.3%	15.3%	29.6%	28.2%

Notes: This table presents the results of the baseline regressions for subsamples based on growth opportunities (*MTB* and *SALEGROWTH*) and firm performance (*ROA* and *TOBINQ*). For each proxy variable, we define firms with above (below) the median as the high (low) group. Columns 1 and 2 report baseline regression results for high and low *MTB* subsamples. Columns 3 and 4 report baseline regression results for high and low *SALESGRWOTH* subsamples. Columns 5 and 6 report baseline regression results for high and low *ROA* subsamples. Columns 7 and 8 report baseline regression results for high and low *TOBINQ* subsamples. Standard errors are clustered at firm level. All variables are winsorized at the top and bottom percentile and are defined in the Appendix

Table 5. The role of capital investment (H3).

Panel A: The effect of business strategy on capital investment

	(1) *CAPEX*	(2) *CAPEX*	(3) *CAPEX*	(4) *CAPEX*	(5) *CAPEX*	(6) *CAPEX*	(7) *CAPEX*	(8) *CAPEX*
STRATEGY	0.0015***	0.0015***	0.0017***	0.0017***				
	(7.16)	(7.16)	(8.80)	(8.80)				
PROSPECTOR					0.0066***	0.0066***	0.0069***	0.0069***
					(3.69)	(3.69)	(4.02)	(4.02)
DEFENDER					-0.0060***	-0.0060***	-0.0068***	-0.0068***
					(-3.51)	(-3.51)	(-4.02)	(-4.02)
Control Variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	No	No	Yes	Yes	No	No
State FE	No	Yes	No	Yes	No	Yes	No	Yes
Industry × Year FE	No	No	Yes	Yes	No	No	Yes	Yes
N	74,815	74,815	74,815	74,815	74,815	74,815	74,815	74,815
Adjusted R2	54.4%	54.3%	56.6%	56.5%	54.3%	54.3%	56.5%	56.5%

Panel B: Path Analysis on capital investment

Dividend Payouts	Path = Capital Investment
Direct Path [Business Strategy, Dividend Payouts]	-0.0296***
	(-13.17)
Mediated Path	
I. [Business Strategy, Path]	0.0022***
	(24.18)
II. [Path, Dividend Payouts]	-1.4074***
	(-15.73)

Panel A presents the results from regressing capital investment on business strategy variables and other control variables over the sample period between 1962 and 2019. CAPINVEST is measured as capital expenditure (CAPX) scaled by total assets (AT). The primary variable of interest, STRATEGY, is a discrete measure that places all firms on the continuum between PROSPECTOR (STRATEGY score 24-30) at one end and DEFENDER (STRATEGY score 6-12) at the other end with ANALYZER (STRATEGY score 13-23) in the middle. Columns 5-8 show the results regressing capital investment on prospectors (PROSPECTOR), defenders (DEFENDER), and other control variables. The variable PROSPECTOR equals one if the firm is classified as a prospector, and zero otherwise. The variable DEFENDER equals one if the firm is classified as a defender, and zero otherwise. Panel B reports the path analysis of relations among business strategy, capital investment as the mediating variable, and firms' dividend payouts. The table shows a structural equation model (SEM) of the direct effect of business strategy on dividend payouts, as well as the indirect effect through capital investment. *, **, *** indicate statistical significance at the 10%, 5% and 1% levels respectively. All other variables are defined in the Appendix.

Table 6. Business strategy and dividend policy: Evidence from the Inevitable Disclosure Doctrine (IDD).

	(1) *DIVPAY1*	(2) *DIVPAY2*	(3) *DIVPAY3*
PROSPECTOR × IDD	0.6005***	0.3823***	3.5516***
	(4.88)	(4.24)	(5.03)
DEFENDER × IDD	0.2608**	0.1864**	1.6982**
	(2.47)	(2.22)	(2.58)
PROSPECTOR	-0.7553***	-0.3709***	-3.5901***
	(-6.67)	(-4.70)	(-6.02)
DEFENDER	0.2137***	0.1006	1.3049***
	(2.65)	(1.52)	(2.58)
IDD	-0.0424	-0.1684*	-1.2326
	(-0.38)	(-1.82)	(-1.39)
FIRMAGE	0.1092	0.8175***	3.9159***
	(1.60)	(15.48)	(8.92)
RETAINEARN	0.5076***	0.5048***	4.2789***
	(9.21)	(10.99)	(12.61)
SALEGROWTH	-0.5658***	-0.3404***	-3.7133***
	(-12.77)	(-10.33)	(-13.80)
ROA	5.3419***	2.7837***	6.9622***
	(17.74)	(14.90)	(4.99)
SIZE	0.1063***	-0.0677***	0.5494***
	(4.28)	(-3.64)	(3.55)
MTB	0.0217***	0.0646***	0.0450
	(3.86)	(12.24)	(1.34)
CASH	0.5139***	0.4028***	4.7316***
	(5.33)	(5.67)	(8.94)
LEVERAGE	-0.4711***	-0.8572***	-5.4170***
	(-4.03)	(-9.55)	(-8.27)
Firm FE	Yes	Yes	Yes
Industry × Year FE	Yes	Yes	Yes
N	54,506	54,506	54,506
Adjusted R2	61.8%	61.5%	57.3%

Notes: This table presents the results of the tests that exploit the adoption of the Inevitable Disclosure Doctrine (IDD) by the U.S. state courts as an exogenous shock that significantly reduces knowledge spillover and talent recruitment. The test adopts a triple-difference approach (DiDiD) to examine the influence of the IDD enactment on the association between business strategy and dividend policy. Columns 1 (2) [3] report regression results of *DIVPAY1* (*DIVPAY2*) [*DIVPAY3*] on prospectors (*PROSPECTOR*), defenders (*DEFENDER*), the DiDiD interactions, and the control variables. Standard errors are clustered at state level. All variables are winsorized at the top and bottom percentile and are defined in the Appendix.

Table 7. Business strategy and dividend policy: 2SLS estimation.

	First Stage	Second Stage	First Stage	Second Stage
	(1) *STRATEGY*	(2) *DIVPAY1*	(3) *STRATEGY*	(4) *DIVPAY1*
STRATEGY		-0.2417***		-0.2723***
		(-5.23)		(-6.13)
STRATEGE_L5	0.1983**		0.1933***	
	(17.29)		(16.76)	
Control Variables	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	No	No
Industry × Year FE	No	No	Yes	Yes
N	50,318	50,318	50,318	50,318
Adjusted R2	79.8%	67.8%	80.9%	70.9%
First-stage Cragg-Donald Test	(p-value < 0.01)		(p-value < 0.01)	

Notes: This table reports the results of 2SLS regressions. We employ 5-year-lagged business strategy as our instrumental variable. Columns 1 and 3 report results from the first-stage regression, in which we regress the endogenous variable of business strategy (*STRATEGY)* on the instrumental variable (*STRATEGY_L5*) along with the controls variables. Columns 2 and 4 report results from the second-stage regression, in which we regress dividend payout variables on the fitted values from the first-stage regression along with the control variables. The p-values of the Cragg-Donald test (the weak instrument test) are reported for the first stage. Standard errors are clustered at firm level. All variables are winsorized at the top and bottom percentile and are defined in the Appendix

Table 8. Business strategy and dividend policy: PSM approach.

Panel A: Matching with replacement (Caliper = 0.05)	Post-Match Results: *PROSPECTOR* (Treated, n = 544) vs *DEFENDER* (Control, n = 425)				
	SAMPLE	TREATED	CONTROL	DIFFERENCE	T-stat
STRATEGY	ATT	24.783	11.129	13.654	18.87***
DIVPAY1	ATT	1.029	1.750	-0.721	-4.82***
DIVPAY2	ATT	1.143	1.886	-0.743	-5.30***
DIVPAY3	ATT	1.454	2.312	-0.858	-5.75***
Panel B: Matching with replacement (Caliper = 0.01)	Post-Match Results: *PROSPECTOR* (Treated, n = 164) vs *DEFENDER* (Control, n = 152)				
	SAMPLE	TREATED	CONTROL	DIFFERENCE	T-stat
STRATEGY	ATT	24.732	11.067	13.665	9.63***
DIVPAY1	ATT	0.668	1.587	-0.919	-5.14***
DIVPAY2	ATT	0.833	1.746	-0.913	-4.73***
DIVPAY3	ATT	1.256	2.261	-1.005	-4.23***
Panel C: Matching without replacement (Caliper = 0.05)	Post-Match Results: *PROSPECTOR* (Treated, n = 431) vs *DEFENDER* (Control, n = 431)				
	SAMPLE	TREATED	CONTROL	DIFFERENCE	T-stat
STRATEGY	ATT	24.670	11.033	13.637	20.84***
DIVPAY1	ATT	0.862	1.624	-0.762	-6.06***
DIVPAY2	ATT	0.953	1.739	-0.786	-6.62***
DIVPAY3	ATT	1.293	2.190	-0.897	-6.34***
Panel D: Matching without replacement (Caliper = 0.01)	Post-Match Results: *PROSPECTOR* (Treated, n = 153) vs *DEFENDER* (Control, n = 153)				
	SAMPLE	TREATED	CONTROL	DIFFERENCE	T-stat
STRATEGY	ATT	24.706	11.059	13.647	8.91***
DIVPAY1	ATT	0.630	1.598	-0.968	-5.35***
DIVPAY2	ATT	0.777	1.724	-0.947	-5.07***
DIVPAY3	ATT	1.235	2.231	-0.996	-4.27***

Notes: This table reports post-match results. The matched sample is constructed by matching prospector firms (treatment firms) to defender firms (control firms). Specifically, we use the PSM technique to match treated firms with control firms based on all the control variables in the baseline regression. For each treated firm, we select the nearest-neighbor in the same industry (2-digit SIC) and year. Panel A (Panel B) reports results for matching with replacement using a caliper of 0.05 (0.01). Panel C (Panel D) reports results for matching without replacement using a caliper of 0.05 (0.01). Standard errors are clustered at firm level. All variables are winsorized at the top and bottom percentile and are defined in the Appendix.

Table 9. Business strategy and dividend payouts: Business strategy components.

	(1) *DIVPAY1*	(2) *DIVPAY1*	(3) *DIVPAY2*	(4) *DIVPAY2*	(5) *DIVPAY3*	(6) *DIVPAY3*
STRATEGY	-0.0600***		-0.0400***		-0.3086***	
	(-8.97)		(-6.83)		(-6.94)	
PROSPECTOR		-0.2477***		-0.1733***		-1.0331***
		(-3.77)		(-3.70)		(-3.13)
DEFENDER		0.2704***		0.1883***		1.5549***
		(4.93)		(4.31)		(4.35)
RD5	-0.0035	0.0058	-0.0066	-0.0006	0.0624	0.1083
	(-0.24)	(0.35)	(-0.27)	(-0.02)	(0.58)	(0.91)
EMPSALE5	0.1345	-0.1441	0.1822	0.0006	-1.9817	-3.3718
	(0.33)	(-0.31)	(0.26)	(0.00)	(-0.64)	(-0.99)
REV5	-0.0000	-0.0000*	0.0000	0.0000	-0.0001	-0.0001
	(-1.18)	(-1.66)	(0.67)	(0.24)	(-0.97)	(-1.34)
SGA5	0.0236**	0.0213*	-0.0019	-0.0034	0.1801***	0.1664**
	(2.38)	(1.75)	(-0.14)	(-0.22)	(2.59)	(2.19)
EMP5	0.0027	0.0023	0.0017	0.0015	0.0020	-0.0000
	(1.07)	(0.93)	(0.77)	(0.64)	(0.14)	(-0.00)
CAP5	-0.3349	-0.7210***	0.0828	-0.1681	-7.1484***	-9.1253***
	(-1.38)	(-3.01)	(0.49)	(-1.04)	(-5.24)	(-6.87)
FIRMAGE	0.2260**	0.1961*	0.7459***	0.7267***	4.1907***	4.0185***
	(2.20)	(1.91)	(8.07)	(7.85)	(6.32)	(6.03)
RETAINEARN	0.5273***	0.5482***	0.4872***	0.5009***	5.0094***	5.1155***
	(6.02)	(6.26)	(6.29)	(6.46)	(9.29)	(9.47)
SALEGROWTH	-0.5203***	-0.5828***	-0.3117***	-0.3525***	-3.7215***	-4.0394***
	(-14.08)	(-15.65)	(-10.90)	(-12.50)	(-16.09)	(-17.59)
ROA	6.8244***	6.9074***	3.4698***	3.5230***	8.4906***	8.9108***
	(14.83)	(14.84)	(11.70)	(11.81)	(4.36)	(4.54)
SIZE	1.3109***	1.0048***	0.5872***	0.3870**	10.9136***	9.3673***
	(5.87)	(4.76)	(3.25)	(2.23)	(7.35)	(6.54)
MTB	0.0240***	0.0235***	0.0704***	0.0701***	0.0300	0.0279
	(3.37)	(3.28)	(9.47)	(9.44)	(0.68)	(0.63)
CASH	0.3368***	0.3702***	0.3828***	0.4046***	2.8879***	3.0511***
	(2.70)	(2.98)	(4.19)	(4.42)	(4.33)	(4.57)
LEVERAGE	-0.6699***	-0.6480***	-1.6021***	-1.5875***	-8.3990***	-8.2822***
	(-4.83)	(-4.66)	(-12.47)	(-12.39)	(-9.67)	(-9.53)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Year FE	Yes	Yes	Yes	Yes	Yes	Yes
N	90,241	90,241	90,241	90,241	90,241	90,241
Adjusted R2	63.9%	63.8%	65.6%	65.6%	59.9%	59.9%

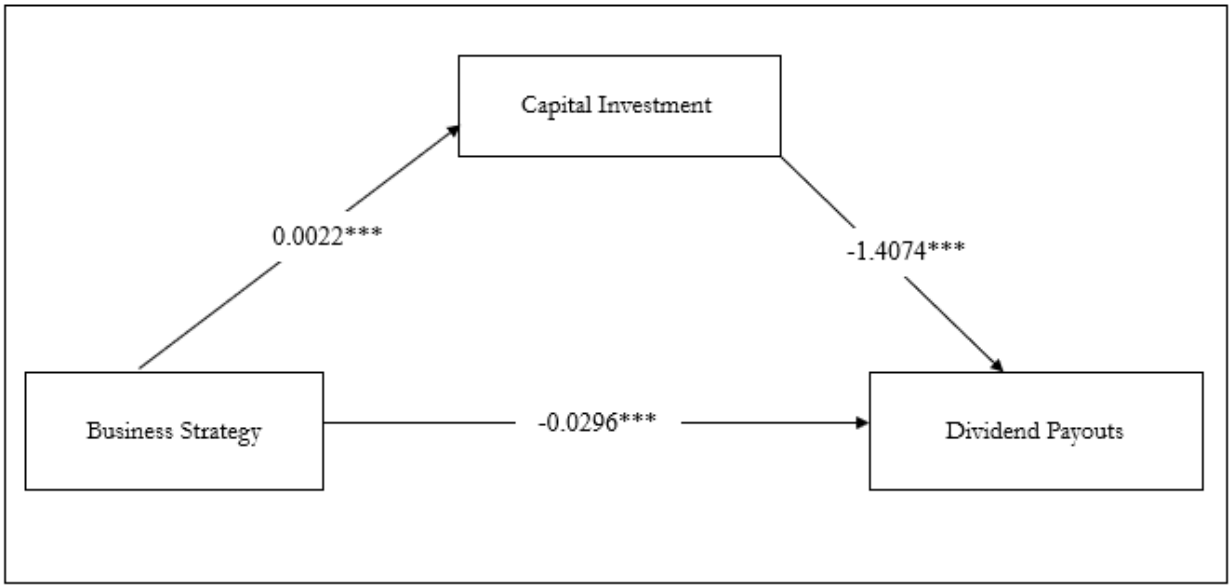
Notes: This table presents the results from regressing dividend policy on the six raw components of the business strategy variable (*STRATEGY*) and the control variables. If *STARTEGY* does not provide incremental information beyond the six components, we should find a significant relationship between each individual component and dividend policy. Columns 1 (3) [5] report results from the regression *DIVPAY1* (*DIVPAY2*) [*DIVPAY3*] on business strategy (*STRATEGY*) along with the control variables. Columns 2 (4) [6] report results from the regression of *DIVPAY1* (*DIVPAY2*) [*DIVPAY3*] on prospectors (*PROSPECTOR*), defenders (*DEFENDER*), and the control variables. Standard errors are clustered at firm level. All variables are winsorized at the top and bottom percentile and are defined in the Appendix.

Table 10. Business strategy and dividend policy: Alternative variables of dividend payouts.

	Full Sample		Full Sample		Prospectors and Defenders only	
	(1)	(2)	(3)	(4)	(5)	(6)
	DIVPAY_ALT1	*DIVPAY_ALT2*	*DIVPAY_ALT1*	*DIVPAY_ALT2*	*DIVPAY_ALT1*	*DIVPAY_ALT2*
STRATEGY	-0.0289***	-0.0014***				
	(-5.66)	(-10.87)				
PROSPECTOR			-0.0754*	-0.0061***	-0.1146**	-0.0246***
			(-1.65)	(-4.73)	(-2.24)	(-2.66)
DEFENDER			0.1856***	0.0046***		
			(4.46)	(4.78)		
FIRMAGE	0.6209***	-0.0046**	0.5954***	-0.0057***	0.2166	-0.0152***
	(8.24)	(-2.33)	(7.87)	(-2.91)	(1.32)	(-2.66)
RETAINEARN	0.5203***	0.0115***	0.5281***	0.0119***	0.4916***	-0.0001
	(8.52)	(6.31)	(8.66)	(6.49)	(3.21)	(-0.02)
SALEGROWTH	-0.2943***	-0.0170***	-0.3225***	-0.0186***	-0.2125**	-0.0166***
	(-11.26)	(-18.31)	(-12.49)	(-19.84)	(-2.50)	(-6.00)
ROA	0.6734***	0.1751***	0.7148***	0.1776***	0.3011	0.0960***
	(3.37)	(19.53)	(3.57)	(19.51)	(0.58)	(4.71)
SIZE	0.2740***	0.0088***	0.2543***	0.0078***	0.3100***	0.0131***
	(10.42)	(13.63)	(9.90)	(12.45)	(5.50)	(6.62)
MTB	-0.0615***	0.0004**	-0.0617***	0.0004**	-0.0909***	0.0004
	(-12.52)	(2.33)	(-12.54)	(2.18)	(-7.58)	(1.00)
CASH	0.1490**	0.0087***	0.1748***	0.0103***	0.2387	0.0288***
	(2.31)	(3.36)	(2.71)	(3.95)	(1.31)	(3.91)
LEVERAGE	-0.6653***	-0.0188***	-0.6637***	-0.0189***	-1.1596***	-0.0523***
	(-6.72)	(-6.50)	(-6.70)	(-6.45)	(-5.38)	(-6.33)
Firm FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry × Year FE	Yes	Yes	Yes	Yes	Yes	Yes
N	90,241	90,241	90,241	90,241	14,204	14,204
Adjusted R2	66.6%	48.1%	66.5%	47.9%	69.6%	55.3%

Notes: This table presents the results from the regression of dividend policy alternative variables (*DIVPAY_ALT1* and *DIVPAY_ALT2*) on business strategy variables and other control variables. Columns 1-2 report results from the regression of dividend policy alternative variables on business strategy (*STRATEGY)* along with the control variables. Columns 3-4 report the results regressing dividend policy alternative variables on prospectors (*PROSPECTOR*), defenders (*DEFENDER*), and the control variables. Columns 5-6 report the regression results after removing analyzers (*ANALYZER*) from the sample. Standard errors are clustered at firm level. All variables are winsorized at the top and bottom percentile and are defined in the Appendix.

Figure 1. Visual Demonstration of Path Analysis on Capital Investment



Appendix 1. Variable Definition

Variables	Descriptions (COMPUSTAT data items in parentheses)
Dividend payout variables:	
DIVPAY1	One hundred (100) times the ratio of cash dividends declared on common/ordinary shares (DVC) to total sales (SALE).
DIVPAY2	One hundred (100) times the ratio of cash dividends declared on common/ordinary shares (DVC) to total assets (AT).
DIVPAY3	One hundred (100) times the ratio of cash dividends declared on common/ordinary shares (DVC) to cash flow (IB + DP). We set DIV/CF to missing for dividend-paying firms with negative cash flow.
DIVPAY_ALT1	One hundred (100) times the ratio of cash dividends declared on common/ordinary shares (DVC) to market capitalization (PRCC_F * CSHO).
DIVPAY_ALT2	One hundred (100) times the ratio of cash dividends declared on common/ordinary shares (DVC) plus share repurchases to total sales (SALE). The repurchase amount equals the purchase of common and preferred stock (PRSTKC) minus any decrease in the value of the net number of preferred stock outstanding (PSTKRV or PSTK if PSTKRV is missing). The repurchase amount is set as 0 if missing.
Business strategy components:	
RD5	Five-year rolling average of the yearly ratio of research and development expense (XRD) to total sales (SALE).
EMPS5	Five-year rolling average of the yearly ratio of the total number of employees (EMP) to total sales (SALE).
REV5	One-year percentage change in total sales (SALE) computed over a rolling five-year period.
SGA5	Five-year rolling average of the yearly ratio of SG&A (XSGA) to total sales (SALE).
EMPV5	Standard deviation of the total number of employees (EMP) computed over a rolling prior five-year period.
CAP5	Five-year rolling average of the yearly ratio of net property, plant, and equipment (PPENT) to total assets (AT).
Business strategy variables:	
STRATEGY	Discrete score with values ranging from 6 to 30, where high (middle) [low] values indicate prospector (analyzer) [defender] firms, respectively.
DEFENDER	Dummy variable coded as 1 if STRATEGY score is between 6 and 12, and zero otherwise.
ANALYZER	Dummy variable coded as 1 if STRATEGY score is between 13 and 23, and zero otherwise.
PROSPECTOR	Dummy variable coded as 1 if STRATEGY score is between 24 and 30, and zero otherwise.
Other variables:	
FIRMAGE	Natural logarithm of the number of years since the firm first exists in the COMPUSTAT database.
RETAINEARN	Ratio of retained earnings (RE) to total assets (AT).
SALEGROWTH	One-year percentage change in sales (SALE).
ROA	Return on assets (NI / lagged (AT)).
SIZE	Natural logarithm of total assets (AT).
MTB	Market-to-book ratio (CSHO * PRCC_F / SEQ).
CASH	Cash and cash equivalents (CHE) scaled by total assets (AT).
LEVERAGE	Leverage ratio measured as the sum of debt in current liabilities and total long-term debt (DLC + DLTT) scaled by total assets (AT).
CAPINVEST	Capital expenditure (CAPX) scaled by total assets (AT).
IDD	Indicator variable coded as 1 if the firm is headquartered in a state with Inevitable Disclosure Doctrine (IDD) legislation in a given year, and zero otherwise.
TOBINSQ	Tobin's Q ((AT - SEQ + CSHO * PRCC_F)/AT).