Annual Report Readability and Corporate Payout Policy

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ABSTRACT

This study examines the relation between annual report readability and corporate payouts. Using the *BOG Index* as the primary measure of readability, we find that less readable annual reports are associated with lower payout levels. Cross-sectional analyses show that the effect of readability on payouts is stronger for firms with financial constraints, greater investment opportunities, and higher needs for external financing. Our results are robust to potential endogeneity concerns and alternative proxies for both annual report readability and corporate payouts. These results suggest that firms with poorly readable mandated disclosures are likely to mitigate the external financing constraint by reducing their payout to shareholders.

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1. Introduction

Annual reports (Form 10-Ks) are the primary channel through which corporate insiders disseminate information to various stakeholders (e.g., shareholders, creditors, analysts, government, etc.). However, the effectiveness of this communication largely depends on how easy it is to read and process this information. Several prior studies argue that less readable financial statements are associated with a poor corporate information environment.[1] From creditors' point of view, firms with complex financial statements have worse credit rating (Bonsall and Miller, 2017), and higher cost of external funds (Ertugrul, Lei, Qui, and Wan, 2017). As such, better readability of annual reports can provide a firm with financial flexibility- the ability of a firm to access financing at a low cost, potentially affecting a firm's payout policy. Although a growing body of literature provides significant insight into the role of annual report readability on various corporate decisions and outcomes, the impact of readability on a firm's payout policy is relatively unexplored. In this paper, we examine whether readability influences a firm's corporate payout policy- one of the important key components of financial flexibility.

Firms' accessibility to external financing is impaired if poorly readable annual reports obfuscate firm-specific information and increase borrowing costs. As a consequence, firms could generate funds internally by reducing dividend payout and potentially fill a precautionary need, continue business operations without any disruption, and finance profitable projects without having to forgo them. In contrast, by making the mandated disclosures more readable and having access to lower-cost borrowing, other things held constant,

[1] For example, prior studies linked 10-K readability to less persistent earnings (Li, 2008), higher earnings management (Lo, Ramos, and Rogo, 2017), greater analyst coverage dispersion (Lehavy, Li, and Merkley, 2011), and higher stock price crash (Kim, Wang, and Zhang, 2019). Moreover, given that managers have the discretion in making their firm's annual reports more readable, the SEC's plain English rule of October 1998 stresses that all consumers of firm disclosures, especially the least sophisticated investors, should be able to benefit from clear writing and ease of readability.

firms will be serving their shareholders better by increasing payout. The above arguments imply that firms face a wedge between the costs of internal and external funds.[2] Therefore, *ceteris paribus*, firms with lower readability are expected to rely more on internal funds and pay out less to their shareholders.

Our dataset contains 76,668 firm-year observations, spread over a period from 1994 to 2017, and across the range of Fama-French 12-industry classification. We use the *BOG Index* (*BOG*), developed in Bonsall IV et al. (2017), as our primary proxy for readability and provide robustness check using other measures of readability.[3] After controlling for firm characteristics (size, leverage, cash flow, tangibility, lagged dividends), profitability (return on assets and Tobin's q), and shareholder base, we show that the lack of readability (higher *BOG Index*) is associated with a decrease in both cash dividend payout and total corporate payout (dividends plus share repurchases). These findings suggest that firms respond to an increase in external financing costs associated with less readability by reducing corporate payouts and retaining a greater portion of their earnings. This substitution from external financing to internal financing will likely moderate any adverse impact of external market frictions on a firm's investment.

Next, in cross-sectional analyses, we examine whether financial constraints and investment opportunities could drive the positive relation between readability and payouts. Our predictions are- (i) if low readability reduces payout by increasing the costs of external finance, we expect the positive association between readability and payouts to be stronger for financially constrained firms, and (ii) if the positive relation between readability and payouts is driven by firms' increased reliance on internally generated funds to finance positive NPV projects, we expect this positive relation to be more pronounced for firms with high investment opportunities that are in need of external financing.

[2] This idea is similar in spirit of Kaplan and Zingales (1997), who define financial constraint as a wedge between internal and external costs of capital.

[3] *BOG Index* captures the plain English attributes mentioned explicitly in the SEC guidelines. Prior literature has used Fog Index (Gunning, 1952), file size (Loughran and McDonald, 2014a), and LM PE Index (Loughran and McDonald, 2014b) as measures of readability.

Firms are financially constrained if they have restricted access to capital markets, thereby having difficulty in raising external funds. They have a low credit rating as reflected in their bond ratings (Opler, Pinkowitz, Stulz, and Williamson, 1999), costly access to external funds (Blanco, Brennan, and Marsh, 2005), and a higher propensity to save as a precautionary measure (Keynes, 1936; Almeida, Campello, and Weisbach, 2004). Consequently, we expect the lack of readability of 10-K reports filed by financially constrained firms to be associated with a greater reduction in corporate payouts by such firms. We operationalize financial constraints by (a) classifying firms having below (above) investment-grade ratings as categorized as financially (not financially) constrained (Louis and Urcan, 2015), and (b) employing the cost of financial distress as a proxy for financially constrained firms. Our findings indicate that the lack of readability of annual reports published by financially constrained firms is associated with a more pronounced decrease in payout compared to firms that are not financially constrained.

We examine the impact of lack of readability among firms that differ in their investment opportunity set. The ability to obtain financing is more crucial for firms with profitable investment opportunities that lead to higher growth. Such firms will benefit from lower-cost loans by making their mandatory disclosures more readable. If the annual reports of such firms suffer from lack of readability, they are likely to incur a higher borrowing cost and consequently must reduce their payout to pick up the shortfall. Firms with relatively limited investment opportunities are unlikely to need as much external financing and, consequently, the readability of annual reports may not matter as much. We show that low readability of annual reports made available by firms having greater investment opportunities is associated with a more pronounced negative relation with their payouts. The negative relation is also stronger for firms that are in need of external financing (i.e., a firm is in need of external financing if its growth of total assets is greater than sustainable growth rate).

It is conceivable that some unobservable firm-level variable is correlated with readability and corporate payout. For example, Marissa Mayer, appointed as Yahoo CEO in July 2012, started her first earnings conference call with a discussion of "the vision and direction for Yahoo moving forward…Our goals

are simple: execute faster, return value to our shareholders, attract the best talent, and make Yahoo the absolute best place to work." This statement highlights that omitted variables such as managerial style is potentially correlated with clarity in disclosure to stakeholders and returning value (directly as payout policy and indirectly as higher firm valuation). To this end, we conduct a series of tests to mitigate potential endogeneity concerns and check the robustness of our findings. First, falsification tests and instrumental variable analyses suggest that omitted variable bias is not severe in our analyses. Second, the results continue to hold after controlling for firm fixed effects. Third, changes in the financial statement readability are also negatively associated with the change in payouts. Fourth, using the propensity score matching (PSM) approach, we ensure that the results are robust to endogeneity concerns related to functional form of model misspecifications (FFM). Additionally, we subject our results to robustness tests, including the nature of business complexity and its impact on readability, alternative measures of readability, and the influence of relative dividend premium. Taken together, these results consistently support our baseline findings that lack of readable annual reports is associated with lower corporate payouts.

Furthermore, we take steps to address alternative explanations of our findings. For example, in this paper, we view the complexity of financial statements as a distinct form of attribute of a firm's financial statement- a linguistic complexity that can be interpreted as how hard it is to read and process the supplied information by an outsider. However, one can argue that this readability measure could be correlated with other financial reporting attributes (e.g., accounting quality, accounting comparability, earnings persistence, earnings management, accounting conservatism, etc.). Existing literature provides empirical evidence on the impact of these variables on corporate payouts (e.g., Kim et al., 2017; Koo et al., 2017; Ramalingegowda et al., 2013; Louis and Urcan, 2013; among others). Moreover, these accounting variables could be the reasons why a firm's financial statement is less readable. Arguably, it is not clear whether our main results have captured the effects of these accounting variables on payouts. We attempt to rule out these possibilities by estimating the baseline model while controlling for these accounting variables and their interactions with

BOG. Finding an insignificant coefficient on these interaction variables along with a significant coefficient on *BOG* will ensure that the relation between readability and payouts is less likely to be influenced by these accounting variables. As expected, we find that our main results remain statistically significant, implying that the relation between readability of financial statements and payout is not due to any underlying influence of the above accounting attributes.

Our study contributes to a growing literature on the causes and consequences of the textual properties of a firm's financial statement. First, prior studies linked 10-K readability to less persistent earnings (Li, 2008), higher earnings management (Lo, Ramos, and Rogo, 2017), greater analyst coverage dispersion (Lehavy, Li, and Merkley, 2011), worse credit rating (Bonsall and Miller, 2017), higher stock price crash (Kim, Wang, and Zhang, 2019) and higher cost of debt (Ertugrul, Lei, Qui, and Wan, 2017). In this paper, we show that readability has an economic impact on an important corporate decision- corporate payout policy. Our findings suggest that firms with less readable financial statements have lower corporate payouts. Specifically, we provide evidence that annual report readability affects the tension between investment and financing policies. Second, we contribute to a growing body of literature on financial flexibility as a determinant of corporate payout policy. Financial flexibility can be defined as a firm's ability to access and restructure financing at the lowest cost (Gamba and Triantis, 2008). Hence, firms with financial flexibility are able to avoid underinvestment and financial distress in a bad state of the world. One of the key components of financial flexibility is a firm's payout policy. Consistent with these views, empirical studies show that corporate payouts are positively associated with conglomerates (Jordan et al., 2018), shareholder base (Bodnaruk and Östberg, 2013), credit supply (Bliss et al., 2015; Abreu and Gulamhussen, 2013), and financial flexibility (Kumar and Vergara-Alert, 2018; Rapp et al., 2014; Booth et al., 2019) and are negatively associated with cashflow uncertainty (Chay and Suh, 2009). Given that greater readability of financial statements reduces a firm's information risk and, thereby, cost of external finance, readability can provide a

firm with financial flexibility. We show empirically that better readability, through financial flexibility, is associated with higher payouts.

Finally, our study emphasizes the view that attempts to improve the readability of nonquantitative information in a financial statement are linked to firm value maximization. Since both academics and professionals consider corporate payouts an important factor in firm valuation model, we argue that managers can also maximize shareholder value by writing easy-to-read financial statements. Moreover, given that managers have the discretion in making their firm's annual reports more readable, the SEC's plain English rule of October 1998 stresses that all consumers of firm disclosures, especially the least sophisticated investors, should be able to benefit from clear writing and ease of readability. Our findings are crucial to understanding whether the SEC's plain English mandate of October 1998 has value relevance.

The paper is organized as follows. Section 2 discusses the existing literature and empirical prediction. Data and samples are presented in Section 3. We discuss the main findings in Section 4. Section 5 presents robustness and additional analyses. Finally, Section 6 concludes the paper.

2. Related literature and hypotheses development

2.1. Readability, information asymmetry, and costly external financing

As corporate insiders, managers of a firm enjoy information advantage over investors regarding the firm's risk and return prospects. Managers try to convey their superior firm-specific information to outside investors through 10-K reports, which are considered one of the most credible and widely used mediums. Despite that the key numbers in financial statements are disclosed before the filing dates, the remaining information (e.g., Management Discussion and Analyses (MD&A)) is of great value to investors (e.g., Jegadeesh and Wu 2013; Loughran and McDonald 2011; Brown and Tucker 2011; Feldman et al. 2010; You and Zhang 2009; Griffin 2003; among others). Particularly, managers seem to routinely disclose important supplementary information in MD&A, which can also be used by outside investors to assess how the current performance of

a firm could shape future performance. In addition, accounting rules and practices sometimes limit the disclosure of key financial factors in the financial statements. For instance, accounting rules may not allow capitalization of expenditures related to investment in research and development or expenditure on human capital development. Given the importance of such investments as the drivers of success, managers have the opportunity to convey this vital inside information in the MD&A section of 10-K report (e.g., Campbell et al. 2014; Merkley 2014; Kravet and Muslu 2013). However, the usefulness of a 10-K report for outside investors depends largely on how easy it is to read or whether the information processing costs are low.

Prior studies demonstrate a link between less readable financial statements, *aka* complex financial statement, and information processing costs for investors (Li, 2008; You and Zhang, 2009; Lehavy et al., 2011; Lee, 2012; Lawrence, 2013; Loughran and McDonald, 2014; Dyer et al., 2017; Miller, 2010; Bushee et al., 2018). Specifically, the less readable financial statement requires investors to spend more time to understand and form a meaningful interpretation of the filings. Poor readability could emanate from a variety of sources such as managerial inability to clearly communicate valuable inside information, complexity of business operations, financial reporting requirements, or managerial discretion (Dyer et al., 2017; Lo et al., 2017; Li, 2008). Whatever might be the reason, hard-to-read 10-K report can hinder the process of conveying valuable inside information to investors. Therefore, firms with less readable financial statements are associated with having greater information asymmetry.

A growing body of literature has addressed different aspects of financial statements readability. For example, complex financial statements are associated with less accurate and dispersed analyst forecasts (Lehay et al., 2011; Bozanic and Thevenot, 2015), with higher stock price crash risk (Kim et al., 2019), with less favorable ratings, greater bond rating agency disagreement, and higher cost of debt (Bonsall and Miller, 2017), and with managerial information hoarding and increased cost of external financing (Ertugrul et al., 2017). Hence, poor readability of financial statements can be a source of market friction and, therefore, a wedge between the costs of internal and external finance.

2.2. Transaction costs of financing and corporate payouts

In Modigliani and Miller (MM)'s perfect capital markets, the dividend policy should have no impact on the value of a firm. This dividend irrelevance theory argues that shareholders are indifferent between receiving dividends or investing the retained earnings in new business opportunities with the same level of risk. One of the key assumptions here is that managers and shareholders of the firm have no information asymmetries among them. However, in the presence of capital market imperfections (e.g., information frictions), shareholders become no longer indifferent, affecting their demand for dividends. *Ceteris paribus*, rational shareholders would expect the managers to minimize the transaction costs associated with raising external funds. In this context, shareholders prefer managers to retain earnings as precautionary savings to meet future liquidity shortfalls in a bad state of the world for which internal funds are inadequate to finance investment opportunities. In contrast, shareholders may demand higher dividends to minimize the agency costs of external equity. Thus, on one hand, increase in dividend payout relative to earnings lowers agency costs; on the other hand, it raises the transaction costs of external financing. Hence, the sum of these two opposing factors determines a firm's payout ratio (Rozeff, 1982). In this paper, we particularly focus our attention on transaction cost of external finance by arguing that less readable financial statements as a form of market imperfection may increase transaction cost of external financing through information asymmetry.

Costly access to external finance could be treated as an increment to the transaction cost curve. One way to moderate this upward slopping transaction cost curve is to seek for financial flexibility through reducing payouts. To better understand the dynamics of transaction cost curve on corporate payouts, we can use the optimal payout illustration of Rozeff (1982) and set a hypothetical example using two firms, A and B. Suppose both firms have identical funds for reinvestment (before payouts) but generate different level of cash flows over a three-year period (i.e., suppose firm A generates a steady cashflow of $5 each year, but firm B generates variable cashflows of $1, $7, and $6). Holding other factors constant, firm B may have to borrow

in year 1 and incur financing costs to mitigate such cashflow shortfall. Given costly external financing, regardless of firm A's optimal dividend payout, firm B will more likely pay out a lower fraction of earnings in an attempt to not only minimize the transaction cost but also lower its dependency on external financing. Consistent with this view, prior studies provide empirical evidence that corporate payouts are positively associated with conglomerates (Jordan et al., 2018), shareholder base (Bodnaruk and Östberg, 2013), credit supply (Bliss et al., 2015; Abreu and Gulamhussen, 2013), and financial flexibility (Kumar and Vergara-Alert, 2018; Rapp et al., 2014; Booth et al., 2019) and are negatively associated with cashflow uncertainty (Chay and Suh, 2009).

2.3. Testable hypothesis

In a world without market imperfections, shareholders would be indifferent in choosing between retaining earnings and receiving dividends as there is no transaction cost of external financing. As a result, the importance of financial statement readability is irrelevant. However, in the presence of information frictions, the readability of financial statements can be used to reduce the costs of those frictions. Therefore, our testable hypothesis comes from the notion that there is a negative relation between financial statement readability and the cost of external financing. If linguistic complexity is positively associated with information asymmetry (Bushee et al., 2018), stock price crash risk (Kim et al., 2019), and higher cost of external financing (Bonsall and Miller, 2017; Ertugrul et al., 2017), firms with less readable annual report may have to bypass or delay positive NPV projects or incur higher financing cost in raising money from the external sources when internal funds are insufficient. The above argument suggests that readability is negatively related to the wedge between the cost of internal and external funds. Therefore, *ceteris paribus*, firms with lower readability are expected to rely more on internal funds and pay out less to their shareholders. We state our hypothesis below:

Hypothesis: *Firms with less readable annual reports pay out less.*

Alternatively, linguistic complexity can also arise from the complexity of a firm's business transactions. Bushee et al. (2018) highlight the need for considering two latent components of financial statement complexity- obfuscation and information. Arguably, if information component dominates the obfuscation component in forming linguistic complexity, we would observe that firms with less readable financial statements pay out more.

3. Data and research design

3.1. Sample selection

We begin our data collection by obtaining dividend payouts and other non-missing financial variables used in the study from Compustat for the period 1994 through 2017. This process yields a total of 120,295 firm-year observations. After merging these observations with the *BOG Index* (*BOG*), we have a total of 87,473 firm-year observations. Next, after dropping the observations from utilities (SIC 4900 – 4999) and financial firms (SIC 6000 – 6999), our final sample contains 76,668 firm-year observations for 10,580 unique firms.

3.2. Using *BOG* as a measure of 10-K readability

In order to overcome problems related to unreadable prospectus filings, the SEC adopted the 1998 Plain English Mandate, SEC Rule 421(d). The SEC also provided a companion handbook entitled "A Plain English Handbook: How to create clear SEC disclosure documents" that provides very clear guidance on plain English writing. In the handbook, the SEC lists several distinct problems commonly encountered in regulatory filings: (1) passive voice, (2) weak or hidden verbs, (3) superfluous words, (4) legal and financial jargon, (5) numerous defined terms, (6) abstract words, (7) unnecessary details, (8) lengthy sentences, and (9) unreadable design and layout. Many studies in accounting and finance have employed the Fog Index developed in Gunning (1952) as a primary measure of financial reporting complexity or readability. The Fog Index

captures two basic attributes of readability: (a) syllables per word, and (b) words per sentence. The index indicates the number of years of formal education a reader of average intelligence would need to read the text once and understand. A higher Fog index indicates less readability.

In the context of regulatory filings, some multisyllabic words such as "Company," "Depreciation," or "Liability" are well understood by the investor community. Loughran and McDonald (2014) argue that the definition of word complexity in the Fog index results in measurement error and wrongly classifies readable documents as less readable. Loughran and McDonald (2014, p. 1644) advocate the use of file size of the 10-K as an easily calculated proxy for document readability. While both these measures are quantity-based, the SEC notes that sometimes longer sentences may be required for better clarity. Furthermore, quantity-based measures inadvertently include separate exhibits that are unrelated to the annual 10-K filing requirements. In addition, documents containing HTML, XML, PDF, and picture format file attachments can lead to further clutter that erroneously renders reports as poorly readable.

The *BOG Index*, introduced by Bonsall IV et al. (2017), captures almost all the SEC's guidelines regarding clear communication with investors. The *BOG Index* is derived from a commercial software program, StyleWriter, which captures attributes specifically mentioned in the SEC Plain English Handbook. In particular, the *BOG Index* overcomes the shortcomings related to the recognition of complex words by determining word familiarity based on a proprietary list of over 200,000 words. Thus, the *BOG Index* provides a much more comprehensive set of factors and is calculated using a pre-programmed algorithm and eliminates bias due to discretion.

3.3. Empirical model

To test our hypothesis, we use the following baseline Tobit Regression model:[4]

$$\text{PAYOUT}_{it} = \beta_0 + \beta_1 \text{BOG}_{it} + \sum_{j=2}^{17} \beta_j \, \text{CONTROLS} + \text{Ind}_i + \text{Y}_t + \varepsilon_{it} \qquad (1)$$

where PAYOUT is the cash payout (DIV) or total payout (TP). *BOG* is the *BOG Index* from Bonsall IV et al. (2017) capturing annual report readability. Higher values of *BOG* indicate low readability. CONTROLS are 16 firm-specific control variables that prior literature establish as the key determinates of corporate payout decisions – ROA, TOBINQ, INVEST, SIZE, AGE, sdROA, DEBT, CFO, TANG, RETE, TETA, CASH, SHARES, EQIS, DEBTIS, and lagged PAYOUT (Fama and French, 2002; DeAngelo et al., 2006; Becker et al., 2011; John et al., 2011; Fenn and Liang, 2001; Koo et al., 2017). The definitions and explanations of all variables are provided in Appendix A. Ind_i and Y_t refer to the Fama-French 12 industry fixed effects and year fixed effects, respectively. Firms with low payout could be operating in industries requiring complex wording (e.g., nature of business activity includes wide-spread use of jargon) in annual reports. To mitigate this possibility, we control for industry fixed effects because, in the absence of which, we may falsely claim that reduced payout results from lower readability. In the above equation, our coefficient of interest is β_1, which is expected to be negative based on our hypothesis.

We expect a positive sign on SIZE, TANG, AGE, because firms with larger size, firms with more assets in place, and older firms have more stable earnings, easier access to external finance, and pay more dividends (DeAngelo, DeAngelo, and Stulz, 2006; John et al., 2011). Firms with more DEBT have a greater financial risk and tend to pay lower dividends (Fama and French, 2002). We expect a positive sign between payout and cash flow from operations, CFO (Fenn and Liang, 2001). Prior literature show a mixed evidence

[4] As our dependent variable (PAYOUT) has a significant number of observations with the value of zero and remaining observations contain only positive values, indicating a "left-censored at zero" situation, we use a Tobit model instead of an ordinary least squares (OLS) method (Wooldridge, 2002).

on the impact of lagged payout on the payout of current period (Lintner, 1956; Brav, Graham, Harvey, and Michaely, 2005; Kim, Lee, Lie, 2017). We include SHARES as a control because external financing is costly for firms with a smaller shareholder base and consequently these firms reduce corporate payouts (Bodnaruk and Ostberg, 2013). However, greater capital market access for equity funds can also mean higher dividends. Therefore, we do not have a prediction for the sign on SHARES. Following DeAngelo et al. (2006), we include the ratio of retained earnings to common equity (RETE) and common equity to total assets (TETA) to capture the life cycle of a firm and the composition of equity financing. We expect a positive relation between RETE and PAYOUT, and similar to DeAngelo et al. (2006), we do not have an expectation on the sign on TETA. Because more profitable firms are likely to pay out more, we expect a positive relation between payout and return on assets (ROA) and a negative relation between payout and volatility of ROA, measured using the standard deviation of ROA (sdROA). Firms with more growth opportunities would tend to hold more cash and reduce their payout (Fama and French, 2002; DeAngelo et al., 2006). We measure investment opportunities with TOBINQ and INVEST and expect a negative coefficient on these two variables. Following prior research, we use EQIS and DEBTIS to control for firms' capital market incentives (Cohen and Zarowin, 2010; Zang, 2011).

[Table 1 about here]

3.4. Summary statistics

Panel A of Table 1 reports the descriptive statistics for cash dividends (DIV), total payout (TP), readability (*BOG*), and control variables in Eq. (1). The mean (median) values of both DIV and TP are 0.630 (0.000) and 2.401 (0.000), respectively. Note that both DIV and TP are scaled by total assets. A higher (lower) value of the *BOG Index* denotes poor (better) readability. The mean and median values of *BOG* are 82.787 and 83.000,

respectively.[5] The mean (median) firm in our sample has *TOBINQ* of 5.527 (1.595), *SIZE* of 5.024 (5.071), *AGE* of 2.675 (2.6396), and *DEBT* of 0.418 (0.205). These descriptive statistics of the control variables are similar to those in prior research (e.g., Koo et al., 2017). Panel B of Table 1 reports the Pearson correlations for the baseline variables in our study. The statistically significant and negative correlation between the *BOG* and payout variables (DIV and TP) supports our main hypothesis that firms with less readable annual reports have a lower payout. The statistically significant correlation between payouts (DIV and TP) and the control variables are consistent with the expected sign and confirm the need for using these controls in the regressions. Panel C of Table 1 reports the univariate statistics for the key variables in our study. High (low) readability is defined as the value of the *BOG* lower (higher) than the annual mean. The mean DIV for high (low) readability is 0.791 (0.461). The difference in means is statistically significant at the 1% level, providing initial support to our main hypothesis that firms with less readable annual reports pay out less. The differences in means between high and low readability subsample for other baseline variables are also statistically significant.

4. Main results

4.1. Effect of annual report readability on payouts

We examine both cash dividend (DIV) and total payout (TP) as dependent variables.[6] We define DIV as firm i's dividend yield over time *t*, measured as the common dividend payout (DVC), scaled by total assets. TP is defined as firm *i*'s dividend plus share repurchase at time *t* scaled by total assets. The primary variable of interest in this paper is the *BOG Index* (*BOG*), which refers to the readability of a firm's annual report (Bonsall

[5] To put this in perspective, Bonsall IV et al. (2017) find that the *BOG Index* for Wells Fargo, Kroger, and PepsiCo are 2, 14, and 19, respectively. In comparison, the *BOG Index* for Phillips, International FC Stone, and United Technologies are 89, 93, and 81, respectively. Based on the *BOG Index*, the latter three firms' annual reports are relatively less readable.

[6] While dividend payments are more frequent (usually, quarterly), share repurchases are less frequent and are motivated for other reasons (Dittmar, 2000; Jagannathan and Stephens, 2003). Additionally, shareholders pay more taxes on dividend income than on capital gains from tendering shares through a share repurchase. Regardless of these differences between these two different types of payout, we examine the relation between readability and cash payout as well as total payout (dividends plus share repurchases).

IV et al., 2017).[7] A higher *BOG Index* implies relatively poor readability of 10-K reports. If a lack of readability induces firms to reduce their payout, we expect the coefficient on *BOG* in Eq. (1) to be less than zero ($\beta_1<0$). Because our dependent variable, DIV or TP, is left-censored at 0, we estimate Eq. (1) using a Tobit regression model and present the results in Table 2.[8] We also control for year and industry fixed effects and the reported *p*-values are based on standard errors corrected for heteroskedasticity and clustered at the firm level.

[Table 2 about here]

When the dependent variable is cash payout (DIV), the coefficient on *BOG* in column (1) of Table 2 is negative and statistically significant (-0.049, $p = 0.000$). In column (2) of Table 2, when the dependent variable is Total payout (TP), the coefficient on *BOG* is also negative and statistically significant (-0.081, $p = 0.000$). Consistent with our prediction, these findings suggest that firms with more complex or less readable annual reports have lower corporate payouts (both dividend and total payouts). The coefficients on control variables for both cash dividend and total payout models are consistent with those of previous studies. Specifically, we find that dividends and total payout are negatively related to proxies for growth opportunities, leverage, the volatility of ROA, SHARES, DEBTIS, and EQIS and positively related to ROA, SIZE, AGE, CFO, TANG, and lagged dividends. Our findings are also economically meaningful. For example, the coefficient on *BOG* in column (1) implies that one unit increase in *BOG* (i.e., low readability) translates to a decline of 4.9 basis points in cash dividends for an average US firm. This reduction in dividends is equal to approximately 7.8% decrease from the mean dividend yield (i.e., 4.9/63) of our sample. The second regression in column (2) shows that a unit increase in *BOG* translates to a decline of 8.1 basis points in total payout for an average US firm or approximately 12.9% decrease from the mean dividend yield (i.e., 8.1/63) of our sample.

[7] We thank Brian Miller for making the *BOG Index* data available in his website at Kelly School of Business, Indiana University.
[8] In untabulated tests, we also employ the OLS specification and the Fama-MacBeth procedure, which assigns equal weight to each firm-year observation regardless of the number of observations in a given year. Our main findings remain unchanged.

Overall, these results are in line with our prediction that firms respond to the potential increase in external financing costs associated with less readable financial statements by increasing financial flexibility via reduction of corporate payouts and retention of a greater fraction of their earnings inside.

4.2. Cross-sectional variation

We provide evidence on the negative association between financial complexity (less readability) and payouts. The intuition behind this relation is simply that linguistic complexity is positively related to the wedge between the cost of internal and external funds, making firms with poorly readable annual reports, *ceteris paribus*, rely more on internal funds than on costly external financing and paying out less to their shareholders. To gain further insight, we examine how this negative relation differs across firms with varying levels of financial constraints, investment opportunities, and the need for external financing.

4.2.1. Financial constraints

Building on the finding in Ertugrul, Lei, Qui, and Wan (2017), the results in our baseline regression indicates that firms respond to the higher borrowing cost associated with poor readability of mandated reports by lowering their payout ratios. If the documented relation between readability and payouts is driven by costly external finance, we should observe a stronger effect when the firm is financially constrained. In other words, improved financial statement readability may attenuate a firm's financial constraints (i.e., less readability would exacerbate a firm's financial constraints). Hence, the role of low readability in reducing payouts may be more important for financially constraint firms. Financial constraints arise from frictions such as information asymmetries that make external funds more costly than internal funds, sometimes prohibitively so. In a recent paper, Buehlmaier and Whited (2018) use textual analysis to construct measures that detect financial constraints related to specific sources of funds. They find debt appears to be the most important for

financial constraints risk. We use the investment-grade bond rating and expected cost of financial distress (ECOST) as measures of financial constraints.[9]

[Table 3 about here]

A firm's outstanding bond rating is an indicator of how creditors perceive financial risk. As in Louis and Urcan (2015), we categorize firms as investment-grade if the S&P long-term issuer credit rating is BBB+ or above. We define financially constrained firms to have speculative bond ratings (NON-IG, with rating below BBB+). Additionally, we create a dummy variable with the value of one (zero) if a firm's ECOST is in the top (bottom) decile of yearly ECOST distribution. ECOST captures the expected costs of financial distress, and the detailed calculation is provided in the Appendix. We re-estimate Eq. (1) by including *BOG*×*CON*, where *CON* is a financial constraint indicating either *NON-IG* or *ECOST*. We expect the interaction term to have a negative sign. The results are reported in Table 3. In columns (1) and (3), the coefficients on *BOG*×*NON-IG* for DIV (-0.040, $p = 0.000$) and for TP (-0.051, $p = 0.000$) are both negative and statistically significant. Besides, in columns (2) and (4), the coefficients on *BOG*×*ECOST* for DIV (-0.037, $p = 0.049$) and for TP (-0.126, $p = 0.000$) are also both negative and statistically significant. Furthermore, the negative coefficients on *BOG* across the table indicate that poor readability continues to exert an independent effect on both cash dividend and total payout. Collectively, these findings suggest that the lower payout associated with poor readability is partly driven by a firm's financial constraints.

4.2.2. Investment opportunities and need for external financing

We examine the impact of lack of readability among firms that differ in their investment opportunity set. The ability to obtain financing is more crucial for firms with profitable investment opportunities that lead to higher growth. Such firms will benefit from lower-cost loans by making their mandatory disclosures more readable. If the annual reports of such firms suffer from lack of readability, they are likely to incur a higher borrowing

[9] Our results (unreported) remain unchanged if we use WW and SA index.

cost and consequently must reduce their payout to pick up the shortfall. Firms with relatively limited investment opportunities are unlikely to need as much external financing, and consequently, the readability of annual reports may not matter as much. Hence, we predict the negative relation between *BOG Index* and payout to be stronger for firms with high investment opportunities. We use TOBINQ as a proxy for a firm's investment opportunities.

[Table 4 about here]

We re-estimate Eq. (1) by including *BOG*×*INVOP*, where *INVOP* is a dummy variable with the value of one (zero) if a firm's TOBINQ is in the top (bottom) decile of yearly TOBINQ distribution.[10] In column (1) and (3) of Table 4, the coefficients on *BOG*×*INVOP* for DIV (-0.056, $p = 0.016$) and TP (-0.104, $p = 0.003$) are both negative and statistically significant. These results indicate that low readable annual reports by firms with greater investment opportunities are associated with a more pronounced reduction of payouts. Similarly, firms that are in need of external financing may find the readability of their financial statements more important and may feel the need for improving internal liquidity by reducing dividends. Thus, we expect the main findings to be stronger for firms with higher need for external financing. We implement this test by creating a variable named NEF (need for external financing), which is a dummy variable with the value of one if a firm's total asset growth is higher than the sustainable growth rate (ROE/(1-ROE)) during a year, otherwise set to zero (Bodnaruk and Östberg, 2013). We re-estimate Eq. (1) by including *BOG*×*NEF* as an interaction variable and reported the results in Table 4. In column (2) and (4), the coefficients on *BOG*×*NEF* for DIV (-0.017, $p = 0.000$) and TP (-0.052, $p = 0.000$) are both negative and statistically significant. These results suggest that the main findings between readability and payouts are stronger for firms with higher need for external financing. Overall, these findings support the notion that the decrease in corporate payouts

[10] The calculation of *INVOP* has *TOBINQ* in it. To mitigate potential multicollinearity problems, we, therefore, drop *TOBINQ* from Eq. (1) when estimating the interaction effect (*BOG*×*INVOP*).

associated with poorly readable financial statements varies across firms with varying levels of investment opportunities and the need for external financing.

5. Robustness checks and additional analyses

5.1. Omitted variables

We show that the negative relation between *BOG* and payouts (i.e., a positive relation between annual report readability and corporate payouts) is robust to a battery of control variables. Our baseline specification also includes industry and time dummies to capture the time-invariant and unobserved industry characteristics and potential time trends. The reported *p*-values are based on heteroscedasticity-robust standard errors clustered by firm. Additionally, we control for lagged dependent variable in all the regressions so that our results are useful in understanding the link between readability and payouts. However, our estimation could still suffer from correlated omitted variables and possible endogeneity problems. In this section, we attempt to address these issues further and conduct several tests: falsification tests, instrumental variable analysis, controlling for firm-fixed effects using OLS regression, change regression analysis, and propensity score matching.

5.1.1. Falsification tests

Distinguishing between the correlation and causality while examining the effect of readability on payouts is challenging. For example, there may have unobservable factors that are associated with both readability and payouts, introducing omitted variable bias. To gauge the severity of this omitted variable problem, we follow the approach of Altonji et al. (2005) and use the degree of selection on observables as a guide to the degree of selection on the unobservable.

As a first step, we include the main determinants of financial statement readability as additional controls in our baseline regression.[11] If unobservable factors are to explain the main findings, their effects on payouts would have to be significantly larger and the coefficient on *BOG* should change. However, as reported in column (1) and (4) of Table 5, the coefficients on *BOG* remain significantly negative for both *DIV* and *TP*, respectively. More importantly, the magnitude of the coefficients on *BOG* does not change in column (1) and almost similar in column (4) compared to the coefficients reported in baseline regressions in columns (1) and (2) of Table 2.

[Table 5 about here]

Next, following Christensen et al. (2016) and Ljungqvist et al. (2017), we implement a falsification test using a two-stage process. In the first stage, we regress payouts on the determinants of financial statement readability and obtain the predicted value. In the second stage, we regress the predicted value of payouts on *BOG* and other control variables used in our baseline regression (Eq. (1)). The idea here is that, if our main findings are spurious or subject to omitted variable biases, we would observe coefficients on *BOG* that are almost similar to those reported in the base regression table (Table 2). However, as column (2) and (5) of Table 5 shows, the coefficients on *BOG* are very small and statistically insignificant. Overall, these findings suggest that our results are less likely to be driven by the omitted variables or reverse causality.

5.1.2. Instrumental variable analysis (2SLS estimation)

Next, we address potential endogeneity concerns further. Specifically, we implement an instrumental variable analysis wherein we predict 10-K readability using two instrumental variables in the first stage and regress payouts on predicted readability in the second stage. We use the two instruments suggested by the literature (Ertugrul et al., 2017) such as (a) the average *BOG* within an industry during a given year, and (b)

[11] We use the most common determinants of readability suggested by Li (2008) such as incorporation state (DLW), operating complexity (NBSEG and NGSEG), financial complexity (NITEM), special item (SI), unusual corporate events (MADUM and SEODUM). Any other leftover determinants may have already been used as control variables in the main regression model. All of these variables are also defined in Appendix.

the average readability score (*BOG*) of firms located in the same area in a given year (i.e., firms that have similar first three digits of a 5-digit zip code). Reported in column (3) and (6) of Table 5, the coefficients on *BOG* for the second stage 2SLS (IV) for both DIV and TP remain negative and statistically significant. Moreover, statistically significant first stage F-statistics ($p = 0.000$) and statistically insignificant Hansen J statistic ($p = 0.5216$) for both models in columns (3) and (6) suggest that the instruments are not weakly identified, and they jointly satisfy the exclusion restrictions.

5.1.3. Firm-fixed effects and change regression

In a perfect world, the statistical inferences should be based on a regression specification wherein all the possible controls are included. However, in reality, we cannot control all variables because many of the firm-specific variables are unobserved and difficult to measure. As such, it is conceivable that some unobservable firm-level variable is correlated with both readability and corporate payout. We control for firm-fixed effects in Eq. (1) in OLS regression specification, mitigating the likely effect of firm-specific characteristics that are relatively time-invariant.[12] We report the results in column (1) and (3) in Table 6. The coefficient on *BOG* is negative for both DIV (-0.011) and TP (-0.035) and significant at the 1% level (p =0.000). These findings imply that the negative association between *BOG* and payouts is less likely to be affected by time-invariant firm-level omitted variables.

[Table 6 about here]

The results in our baseline estimation indicate a significant negative association between *BOG* and payouts. However, it could equally be possible that firms intentionally make annual reports less readable to hide unfavorable performance for which reduction in dividend was necessary. To examine this issue, we implement a change regression specification where the change in payout is estimated on the change in all

[12] Since Tobit is a nonlinear function and the likelihood estimator for firm fixed effects could be biased and inconsistent (Honoré, 1992), we use firm fixed effects with OLS.

variables used in Eq. (1). The results are reported in columns (2) and (4) of Table 6. The coefficients on ΔBOG for ΔDIV (-0.005, $p = 0.001$) and for ΔTP (-0.023, $p = 0.001$) are both negative and statistically significant. Overall, these results further our understanding of the link between the readability of annual reports and corporate payouts.

5.1.4. Propensity score matching (PSM) and weighting regression

We also ensure that we address the endogeneity related to functional form misspecification (FFM). Specifically, to rule out the possibility that systematic differences between the firms with high and low readability indeed drive the relationship between *BOG* and payouts, we use propensity score matching (PSM) technique and weighting regressions (Busso et al., 2014). The regression results are reported in Panel B of Table 6.

In columns (1) and (3), we show the regression estimates of the second-stage regression results of PSM. Specifically, in an untabulated first-stage model, we run a logit regression to capture the propensity of a firm to be included in the low readability group (*High BOG* = 1), controlling for all baseline variables from Eq. (1). Next, we apply one-to-one nearest neighbor matching for each firm with high and low readability without replacement and run the second-stage Tobit model in column (1) with cash payout (*DIV*) and in column (3) with total payout (*TP*) as the dependent variables. A negative and highly statistically significant coefficient on *High BOG* in both columns (1) and (3) is consistent with our baseline findings that low annual report readability reduces corporate payouts.

In columns (2) and (4), we apply the weighting regression technique to address the systematic differences between high and low readability firms as a robustness test in addition to the PSM technique (Busso et al., 2014; Humphery-Jenner et al., 2016). In this weighting method, we calculate the respective weights for each variable using the propensity score ($\text{Prob}(High\ BOG)$) obtained from the unreported first-stage logit model:

$$Weight = High\ BOG + \frac{(1 - High\ BOG) \times \text{Prob}(High\ BOG)}{1 + \text{Prob}(High\ BOG)} \quad (2)$$

Next, we multiply each observation with the variable's respective weight from Eq. (2) and run the regression with these weighted observations to emphasize it more (less) if it has a higher propensity to belong to High (Low) *BOG* group. A negative and statistically significant coefficient on High *BOG* in both columns (2) (cash payout (DIV)) and (4) (total payout (TP)), respectively, is consistent with the findings in PSM.

5.2. Does the *BOG-PAYOUT* relation merely reflect other accounting attributes?

Arguably, the readability of financial statements can be the consequence of a firm's purposeful accounting practices or can reflect other attributes of financial statements. We take steps to ensure that our main findings do not merely capture the relation between payouts and such accounting variables as earning management, earnings persistence, accounting quality, accounting comparability, and accounting conservatism. Specifically, on one hand, existing literature provides empirical evidence on the impact of these variables on corporate payouts (e.g., Kim et al., 2017; Koo et al., 2017; Ramalingegowda et al., 2013; Louis and Urcan, 2013; among others). On the other hand, these accounting variables could be the reasons why a firm's financial statement is less readable. Thus, it is not clear whether our main results have captured the effects of these accounting variables on payouts. We attempt to rule out these possibilities by estimating baseline model while controlling for these accounting variables and their interactions with *BOG*. Finding an insignificant coefficient on these interaction variables along with a significant coefficient on *BOG* will ensure that the relation between readability and payouts is less likely to reflect these accounting variables.

[Table 7 about here]

Prior studies suggest that firms are reluctant to cut dividends and follow a dividend payout policy that is sustainable in the long-term (Lintner, 1956). This policy is feasible if it is set based on an expected persistent level of earnings (Kormendi and Zarowin, 1996; Skinner 2008). In the event of transitory or non-persistent

earnings, falling short of the dividend threshold, firms can potentially resort to earnings management to maintain their expected payout level (Daniel, Denis, and Naveen, 2008). However, if managers do not want the scrutiny of outside investors when they experience a setback in their earnings persistence or if they engage in earnings management, they tend to obfuscate the information contained in the annual reports by making it more complicated i.e., less readable (Li, 2008; Lo, Ramos, and Rogo, 2017). Thus, a concern is that the relation between the readability of financial statement and payouts merely reflects the previously documented relation between readability and earnings persistence or earnings management. We moderate this concern by showing that the main results hold even after controlling for earnings persistence and earnings management.

Specifically, with the spirit of Banerjee et al. (2018), we estimate our baseline regression with an interaction between earnings management and readability (*BOG*×*EM*). We measure earnings management as the three-year moving sum of the residuals from the accruals model estimated using the modified Jones model (Dechow, Sloan, and Sweeney, 1995; Hutton et al., 2009). The results are reported in columns (1) and (3) of Table 7 (Panel A). The coefficients on *BOG* remain negative and statistically significant. However, the coefficients on the *BOG*×*EM* are statistically insignificant.

Next, we augment our baseline regression with an interaction between earnings persistence and readability (*BOG*×*EP*) as an additional variable. We measure earnings persistence (*EP*) as an indicator variable with the value of one if ΔROA at year t and ΔROA at year $t+1$ have the same sign, otherwise EP is set to zero (Kim et al., 2019). The results are reported in columns (2) and (4) of Table 7 (Panel A). Negative and statistically significant coefficients on *BOG* and insignificant coefficients on the *BOG*×*EP* suggest that the effect of *BOG* on payout policy is independent of the influence of earnings persistence.

Similarly, we control for the firm's financial reporting quality (Koo et al., 2017), financial statement comparability (Devos et al., 2018), accounting conservatism as interaction terms in Eq. (1) and the results are reported in Panel B of Table 7. These accounting variables are defined in the Appendix. We find that our

main variable of interest, *BOG*, remains negative and significant at the 1% level in all the regressions, but the coefficients on the interactions are all statistically insignificant across the tables. Hence, the findings support the notion that readability of financial statements has explanatory power as a determinant of payouts beyond these factors. Collectively, these results suggest that the impact of readability on payouts does not depend significantly on, or merely capture, a relation between readability and other accounting attributes.

5.3. Effect of readability on cash holdings

Our previous findings support the view that firms with less readable financial statements have higher information risk, thereby, higher cost of external financing. To mitigate this market friction, these firms tend to reduce corporate payout and retain a higher fraction of their earnings inside. One can argue that these firms should also exhibit an improved internal liquidity position- internal cash reserve could be one of them. Hence, we examine possible implications or consequences of the negative *BOG-PAYOUT* relation. Particularly, if firms with low readability reduce payouts in order to build internal funds and thus mitigate funding constraints due to costly external financing, we should find a higher cash holding for firms with low readable annual reports. We test this prediction in Table 8. Supporting our conjecture, the positive and statistically significant coefficient on *BOG* (0.002, $p = 0.000$) in column (1) suggests that cash holdings increase with the decrease in annual report readability. Overall, the increase in cash holdings by firms with less readable financial statement further support our main findings that these firms are in need of improving liquidity position via reducing payouts.

[Table 8 about here]

5.4. Market preference for dividend

Baker and Wurgler (2004) suggest a catering theory of dividend, indicating that lower dividends can be explained through a market's (less) preference for dividends model. Specifically, most of the firms have a

high likelihood of paying dividends if firms' shares are traded at a premium (Baker and Wrugler, 2004; Caliskan and Doukas, 2015). Therefore, the negative relationship between *BOG* and *DIV* could merely capture a situation of a market's preference for capital gain over dividends for the firms with low readability. Following Caliskan and Doukas (2015), we address this concern by controlling for relative dividend premium (*RDP*) in our regression. The results are reported in columns (2) and (3) in Table 8. The negative and statistically significant coefficient on *BOG* and the insignificant coefficient on *RDP* in both columns (2) and (3) for the cash payout and total payout rule out the alternative explanation that the market preference of dividends drives the negative *BOG-PAYOUT* relationship.

5.5. Alternative measures of readability and dividend

In this section, we test whether the negative *BOG-PAYOUT* relationship is specific to one measure of readability or also robust to other measures used in the extant literature. Accordingly, we use Fog, Flesch, and Kincaid index (Li, 2008) in column (1) through column (3) and number of words, 10-K file size, percentage of uncertain words, and percentage of weak modal words (Loughran and McDonald, 2011; 2014) in column (4) through column (7) in Table 9. The definitions of these variables are in Appendix A. Collectively, the statistically significant coefficients on these variables suggest that our finding of a negative relationship between low annual report readability and the corporate payout is robust to the alternative specification of annual report readability.[13]

[Table 9 about here]

In an unreported table, we also estimate baseline regression with an alternative measure of cash payout (DIV2) and total payout (TP2). The negative coefficient on *BOG* indicates that the *BOG–PAYOUT* negative relationship is not sensitive to the use of alternative proxies to measure corporate payouts.

[13] Unlike other measures, the higher values of FLESCH indicates higher readability.

6. Conclusion

Annual reports provide important information to a vast number of market participants, including analysts, creditors, shareholders, institutional, and retail investors. To level the playing field so that even the least sophisticated investor can understand such reports, the SEC passed a plain English rule in October 1998 requiring firms to make their annual reports more readable. Our testable hypothesis comes from the notion that there is a negative relation between financial statement readability and the cost of external financing. If linguistic complexity (e.g., intentional managerial obfuscation) is associated with a higher cost of external financing, firms with less readable annual reports may have to bypass or delay positive NPV projects or incur higher financing costs in raising money from the external sources when internal funds are insufficient. This reasoning suggests that readability is negatively related to the wedge between the cost of internal and external funds. Therefore, we hypothesize that, *ceteris paribus*, firms with lower readability are expected to rely more on internal funds and pay out less to their shareholders.

We find that poorly readable annual reports are associated with a statistically significant lower corporate payout. Using the *BOG Index* as a proxy for poor readability, we find that one unit increase in *BOG Index* results in approximately 7.8% decrease from the mean dividend yield of our sample. The decrease in payout is more pronounced among financially constrained firms and firms having profitable investment opportunities. Our research highlights that the understanding and interpretation of mandatory reports can influence a firm's internal financial policy.

Appendix A: Definitions of variables

Variable name	Description
A. Payouts	
DIV	Dividend on common shares (DVC) divided by total assets (AT), multiplied by 100. *Source:* Compustat.
DIV2	Dividend on common shares (DVC) divided by market value of equity (CSHO×PRCC_F), multiplied by 100. *Source:* Compustat.
TP	Total payout (DVC + PRSTKC) divided by total assets (AT), multiplied by 100. *Source:* Compustat.
TP2	Total payout (DVC + PRSTKC) divided by market value of equity (CSHO×PRCC_F), multiplied by 100. *Source:* Compustat.
B. Annual Report Readability	
BOG	*BOG Index* (*BOG*) is a readability measure, which is designed using Editor Software's StyleWriter and indicates the plain English problems in a 10-K filing such as use of jargon, passive voice, long and complex sentence, and clichés (Bonsall IV et al., 2017). *Source:* https://kelley.iu.edu/bpm/activities/bogindex.html
High BOG	A dummy variable with the value of one if *BOG* is higher than average value of *BOG* in a year, otherwise the variable is set to zero. *High BOG* indicates lower readability.
FOG	Fog index (*FOG*) (Gunning, 1952) captures readability by considering words per sentence and percent of complex words with three or more syllables (Li, 2008). Higher values suggest lower readability. *Source:* http://webuser.bus.umich.edu/feng/
FLESCH	Flesch reading ease index (*FLESCH*) is a readability measure, which evaluates texts based on 100 points. It is measured using the formula: 206.835 – (1.015 × words per sentence) – (84.6 × syllables per word) (Li, 2008). The higher value of *FLESCH* suggests higher readability. *Source:* http://webuser.bus.umich.edu/feng/
KINCAID	Kincaid index is a readability measure, which is measured using the formula: (11.8 × syllables per word) + (0.39 × words per sentence) – 15.59 and suggests the text readability equivalent to a school student at a U.S. grade level (Li, 2008). Higher values indicate lower readability. *Source:* http://webuser.bus.umich.edu/feng/
NWORD	Natural logarithm of the number of words in the 10-K filing in EDGAR (Loughran and McDonald, 2014). Higher values imply lower readability. *Source:* https://sraf.nd.edu/textual-analysis/resources/#LM_10X_Summaries
FILESIZE	Natural logarithm of 10-K file size reported in EDGAR (Loughran and McDonald, 2014). Higher values indicate lower readability. *Source:* https://sraf.nd.edu/textual-analysis/resources/#LM_10X_Summaries
UNCERT	Percentage of uncertainty indicating words in the total number of words in a 10-K filing in EDGAR (Loughran and McDonald, 2011). *Source:* https://sraf.nd.edu/textual-analysis/resources/#LM_10X_Summaries
WMODAL	Percentage of weak modals in the total number of words in a 10-K filing in EDGAR (Loughran and McDonald, 2011). *Source:* https://sraf.nd.edu/textual-analysis/resources/#LM_10X_Summaries
C. Baseline control variables	
ROA	The sum of earnings before extraordinary items (IB), interest expenses (XINT), and deferred tax from income statement (TXDI), scaled by total assets (AT). *Source:* Compustat.

TOBINQ	The ratio of the sum of market value of equity (CSHO × PRCC_F) and total assets (AT) minus book value of common equity (CEQ) to total assets (AT). *Source:* Compustat.
INVEST	The ratio of the sum of R&D expenditure (XRD), capital expenditure (CAPX), and acquisition expenditure (AQC) minus sale of PP&E (SPPE) to total assets (AT). *Source:* Compustat.
SIZE	The natural logarithm of total assets (AT). *Source:* Compustat.
AGE	Firm age calculated as the number of years (plus one) since the firm is listed in CRSP. *Source:* CRSP.
sdROA	Standard deviation of *ROA* during years t - 4 to t. *Source:* Compustat.
DEBT	The sum of long-term debt (DLTT) and debt in current liabilities (DLC), scaled by total assets (AT). *Source:* Compustat.
CFO	A ratio of cash flow from operations (OANCF) to total assets (AT). *Source:* Compustat.
TANG	A ratio of net PP&E (PPENT) to total assets (AT). *Source:* Compustat.
RETE	Retained earnings (RE), scaled by common equity (CEQ). *Source:* Compustat.
TETA	Common equity (CEQ), scaled by total assets (AT). *Source:* Compustat.
CASH	A ratio of cash and short-term investments (CHE) to total assets (AT). *Source:* Compustat.
SHARES	Natural logarithm of number of outstanding common shares (CSHO). *Source:* Compustat.
EQIS	A dummy variable with the value of one if a firm issues common or preferred stock (SSTK > 0) during the year, and otherwise zero. *Source:* Compustat.
DEBTIS	A dummy variable with the value of one if a firm issues long-term debt (DLTIS > 0) during the year, and otherwise zero. *Source:* Compustat.
D. Other variables	
Non-IG	A dummy variable with the value of one if a firm's security is considered as non-investment grade, otherwise the variable is set to zero. We define a firm as non-investment grade if the firm's S&P long-term issuer credit rating is below *BBB+*. *Source:* Compustat.
ECOST	A dummy variable with the value of one (zero) if a firm's *ECOST* is in the top (bottom) decile of yearly *ECOST* distribution. *ECOST* captures expected costs of financial distress and is calculated as the standard deviation of the ratio of the first difference of a firm's earnings before depreciation, interest, and taxes to average total assets, multiplied by the asset intangibility measured by the ratio of the sum of R&D and advertising expenses to total assets (Graham et al., 1998). *Source:* Compustat.
INVOP	A dummy variable with the value of one (zero) if a firm's *TOBINQ* is in the top (bottom) decile of yearly *TOBINQ* distribution. *Source:* Compustat.
Need for external financing (NEF)	A dummy variable with the value of one if a firm's total asset growth is higher than the sustainable growth rate (ROE/(1-ROE)) during a year, otherwise set to zero, where *ROE* indicates return on equity. *Source:* Compustat.
DLW	A dummy variable with the value of one if a firm's state of incorporation is Delaware during year *t*, otherwise set to zero. *Source:* Compustat.
NBSEG	Natural logarithm of the sum of one and the number of business segments during year *t*. *Source:* Compustat.
NGSEG	Natural logarithm of the sum of one and the number of geographic segments during year *t*. *Source:* Compustat.
NITEM	Total number of non-missing items in Compustat during year *t*. *Source:* Compustat.
SI	A ratio of special items (SPI) to total assets (AT). *Source:* Compustat.
MADUM	A dummy variable with the value of one if a firm is identified as an acquirer during year *t*, otherwise set to zero. *Source:* SDC Platinum.
SEODUM	A dummy variable with the value of one if a firm has seasoned equity offering during year *t*, otherwise set to zero. *Source:* SDC Platinum.

ACCTQUAL	Measures financial reporting quality, calculated as the negative of the standard deviations of the residuals during a five-year window using McNichols (2002) modified Dechow and Dichev (2002) model, estimated for each industry-year (Koo et al., 2017). *Source:* Compustat.
ACCTCOMP	Measures financial statement comparability, which includes the mean of a firm's four highest financial comparability scores in year *t* (De Franco et al., 2011). *Source:* https://mitmgmtfaculty.mit.edu/rverdi/
EP	Measures earnings persistence, calculated as a dummy variable with the value of one if ΔROA at year *t* and ΔROA at year *t+1* have the same sign, otherwise the variable is set to zero. *Source:* Compustat.
EM	Measures earnings management, calculated as the three-year moving sum of the residuals from the accruals model estimated using the modified Jones model (Dechow, Sloan, and Sweeney, 1995). *Source:* Compustat.
ACCTCONS	Measures conditional conservatism, calculated following Khan and Watts (2009). Firms with higher value of *ACCTCONS* are considered as more conservative. *Source:* Compustat, CRSP.
RDP	*RDP* is the relative dividend premium calculated as the difference between the average market-to-book ratio of the dividend-paying firms and the market-to-book ratio of a firm. *Source:* Compustat.

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TABLE 1

Summary statistics, correlation, and univariate analysis

Panel A: Descriptive statistics

Variable	N	Mean	Std. Dev.	P25	Median	P75
DIV	76,668	0.630	1.765	0.000	0.000	0.000
TP	68,095	2.401	5.305	0.000	0.000	2.248
BOG	76,668	82.787	7.704	78.000	83.000	88.000
ROA	76,668	-0.455	2.235	-0.136	0.036	0.085
TOBINQ	76,668	5.527	21.252	1.134	1.595	2.681
INVEST	76,668	0.153	0.218	0.036	0.087	0.183
SIZE	76,668	5.024	2.584	3.182	5.071	6.868
AGE	76,668	2.675	0.757	2.079	2.639	3.258
sdROA	76,668	0.764	3.547	0.027	0.066	0.196
DEBT	76,668	0.418	1.088	0.032	0.205	0.395
CFO	76,668	-0.161	0.918	-0.055	0.058	0.120
TANG	76,668	0.252	0.234	0.069	0.174	0.367
RETE	76,668	-0.183	13.610	-0.766	0.319	0.863
TETA	76,668	-0.141	3.409	0.244	0.462	0.665
CASH	76,668	0.200	0.238	0.028	0.100	0.283
SHARES	76,668	3.316	1.394	2.366	3.266	4.153
EQIS	76,668	0.754	0.431	1.000	1.000	1.000
DEBTIS	76,668	0.502	0.500	0.000	1.000	1.000

Panel B: Correlation analysis

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
(1)	*DIV*	1.000																	
(2)	*TP*	**0.557**	1.000																
(3)	*BOG*	**-0.080**	**-0.010**	1.000															
(4)	*ROA*	**0.085**	**0.084**	**0.051**	1.000														
(5)	*TOBINQ*	**-0.052**	**-0.048**	**-0.065**	**-0.748**	1.000													
(6)	*INVEST*	**-0.102**	**-0.071**	**0.186**	**-0.323**	**0.218**	1.000												
(7)	*SIZE*	**0.280**	**0.313**	**0.220**	**0.278**	**-0.173**	**-0.093**	1.000											
(8)	*AGE*	**0.268**	**0.183**	-0.004	**0.181**	**-0.151**	**-0.183**	**0.336**	1.000										
(9)	*sdROA*	**-0.069**	**-0.067**	**-0.063**	**-0.676**	**0.633**	**0.190**	**-0.243**	**-0.150**	1.000									
(10)	*DEBT*	**-0.068**	**-0.077**	**-0.063**	**-0.597**	**0.594**	**0.195**	**-0.252**	**-0.090**	**0.489**	1.000								
(11)	*CFO*	**0.112**	**0.115**	**0.020**	**0.831**	**-0.710**	**-0.420**	**0.319**	**0.205**	**-0.603**	**-0.614**	1.000							
(12)	*TANG*	**0.035**	**-0.028**	**-0.217**	**0.056**	**-0.067**	**-0.010**	**0.069**	**0.070**	**-0.062**	**0.014**	**0.099**	1.000						
(13)	*RETE*	**0.022**	**0.018**	**-0.044**	**-0.149**	**0.131**	**0.019**	-0.005	**0.022**	**0.125**	**0.149**	**-0.141**	**0.018**	1.000					
(14)	*TETA*	**0.064**	**0.070**	**0.069**	**0.749**	**-0.751**	**-0.216**	**0.272**	**0.099**	**-0.618**	**-0.845**	**0.715**	**0.039**	**-0.171**	1.000				
(15)	*CASH*	**-0.050**	**0.006**	**0.254**	**-0.140**	**0.158**	**0.245**	**-0.082**	**-0.196**	**0.133**	**-0.018**	**-0.205**	**-0.383**	**-0.068**	**-0.055**	1.000			
(16)	*SHARES*	**0.149**	**0.174**	**0.233**	**-0.056**	**0.076**	**0.051**	**0.631**	**0.151**	**0.062**	**0.068**	**-0.038**	**0.030**	**0.032**	**-0.071**	-0.005	1.000		
(17)	*EQIS*	0.002	**0.102**	**0.153**	**0.060**	**-0.068**	**0.123**	**0.317**	**-0.028**	**-0.066**	**-0.137**	**0.044**	**-0.077**	**-0.027**	**0.129**	**0.092**	**0.176**	1.000	
(18)	*DEBTIS*	**0.008**	-0.006	**-0.022**	**0.093**	**-0.099**	**-0.037**	**0.188**	**0.111**	**-0.087**	**0.044**	**0.098**	**0.240**	**0.033**	**0.041**	**-0.364**	**0.125**	**0.007**	1.000

Panel C: Univariate analysis

	High readability		Low readability		High – Low	
Variable	N	Mean	N	Mean	Diff. in means	*p*-value
DIV	39,246	0.791	37,422	0.461	0.330***	0.000
TP	36,131	2.536	31,964	2.247	0.292***	0.000
ROA	39,246	-0.590	37,422	-0.314	-0.277***	0.000
TOBINQ	39,246	7.071	37,422	3.908	3.163***	0.000
INVEST	39,246	0.122	37,422	0.185	-0.063***	0.000
SIZE	39,246	4.665	37,422	5.400	-0.735***	0.000
AGE	39,246	2.705	37,422	2.642	0.063***	0.000
sdROA	39,246	1.016	37,422	0.499	0.516***	0.000
DEBT	39,246	0.488	37,422	0.344	0.143***	0.000
CFO	39,246	-0.195	37,422	-0.126	-0.069***	0.000
TANG	39,246	0.292	37,422	0.209	0.083***	0.000
RETE	39,246	0.319	37,422	-0.708	1.027***	0.000
TETA	39,246	-0.383	37,422	0.112	-0.495***	0.000
CASH	39,246	0.159	37,422	0.243	-0.084***	0.000
SHARES	39,246	3.147	37,422	3.493	-0.346***	0.000
EQIS	39,246	0.701	37,422	0.809	-0.108***	0.000
DEBTIS	39,246	0.507	37,422	0.498	0.009***	0.005

Notes: This table presents the descriptive statistics for the variables used in baseline regression. All continuous variables are winsorized at the 1st and 99th percentile. Appendix A provides variable definitions.

TABLE 2

Annual report readability and payouts – Baseline

	Dependent variable			
	(1)		(2)	
	Cash payout (*DIV*)		Total payout (*TP*)	
	Coeff.	*p*-Value	Coeff.	*p*-Value
BOG	-0.049***	0.000	-0.081***	0.000
ROA	-0.143	0.132	-0.343***	0.000
TOBINQ	-0.015	0.267	-0.018**	0.021
INVEST	-3.389***	0.000	-2.738***	0.000
SIZE	0.769***	0.000	1.636***	0.000
AGE	1.058***	0.000	1.122***	0.000
sdROA	-0.122*	0.065	-0.001	0.980
DEBT	-0.680***	0.000	-0.520***	0.004
CFO	1.803**	0.011	1.840***	0.000
TANG	0.536***	0.001	-0.638***	0.007
RETE	0.008**	0.031	0.012***	0.008
TETA	-0.128	0.112	-0.179***	0.005
CASH	-0.384*	0.060	1.348***	0.000
SHARES	-0.610***	0.000	-1.174***	0.000
EQIS	-0.179***	0.002	0.293***	0.003
DEBTIS	-0.061	0.195	-0.374***	0.000
Lag(PAYOUT)	0.892***	0.000	0.559***	0.000
Constant	-2.804***	0.000	-3.454***	0.000
Year FE	Yes		Yes	
Industry FE	Yes		Yes	
Pseudo-R^2	0.284		0.111	
Observations	76,668		68,095	

Notes: This table shows the results for the Tobit regression estimates of Cash payout (*DIV*) and Total payout (*TP*) on the annual readability (*BOG*). All variables are defined in Appendix A. The *p*-values are calculated based on robust standard errors clustered at the firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

TABLE 3

Cross-sectional analysis: Financial constraints

	Dependent variable			
	Cash payout (DIV)		Total payout (TP)	
	(1)	(2)	(3)	(4)
BOG	-0.014**	-0.037***	-0.033***	-0.039***
	(0.025)	(0.000)	(0.009)	(0.001)
BOG×NON-IG	-0.040***		-0.051***	
	(0.000)		(0.000)	
NON-IG	2.956***		3.484***	
	(0.000)		(0.001)	
BOG×ECOST		-0.037**		-0.126***
		(0.049)		(0.000)
ECOST		2.006		7.798***
		(0.185)		(0.001)
Control variables	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Pseudo-R^2	0.281	0.286	0.110	0.107
Observations	73,457	26,322	65,117	23,349

Notes: This table shows the effect of financial constraints and investment opportunities on the relation between annual report readability (*BOG*) and corporate payouts. Firm's financial constraints are represented as non-investment grade (*Non-IG*) and expected cost of financial distress (*ECOST*). All the regression models include an unreported intercept. The *p*-values are calculated based on robust standard errors clustered at the firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively. All variables are defined in Appendix A.

TABLE 4

Cross-sectional analysis: Investment opportunities and need for external financing

	Dependent variable			
	Cash payout (DIV)		Total payout (TP)	
	(1)	(2)	(3)	(4)
BOG	-0.064***	-0.040***	-0.039*	-0.042***
	(0.000)	(0.000)	(0.082)	(0.000)
BOG×INVOP	-0.056**		-0.104***	
	(0.016)		(0.003)	
INVOP	2.789		3.815	
	(0.137)		(0.189)	
BOG×NEF		-0.017***		-0.052***
		(0.000)		(0.000)
NEF		0.444		1.096
		(0.264)		(0.154)
Control variables	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Pseudo-R^2	0.294	0.289	0.127	0.119
Observations	15,337	76,666	13,584	68,093

Notes: This table shows the effect of investment opportunities and need for external financing on the relation between annual report readability (*BOG*) and corporate payouts. *INVOP* refers to firm's investment opportunities, which is a dummy variable with the value of one (zero) if a firm's TOBINQ is in the top (bottom) decile of yearly TOBINQ distribution. *NEF* refers to the need for external financing, which is a dummy variable with the value of one if a firm's total asset growth is higher than the sustainable growth rate during a year and zero otherwise. All the regression models include an unreported intercept. The *p*-values are calculated based on robust standard errors clustered at the firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively. All variables are defined in Appendix A.

TABLE 5

Omitted variable analyses: Controlling for readability determinants, falsification, and 2SLS

	Dependent variable					
	Cash payout (DIV)			Total payout (TP)		
	(1)	(2)	(3)	(4)	(5)	(6)
BOG	-0.049***	0.001	-0.018***	-0.080***	-0.003	-0.049***
	(0.000)	(0.177)	(0.000)	(0.000)	(0.132)	(0.000)
DLW	-0.381***			-0.183*		
	(0.000)			(0.053)		
NBSEG	0.075***			0.027		
	(0.000)			(0.433)		
NGSEG	-0.021			-0.035		
	(0.347)			(0.382)		
NITEM	0.007***			0.012***		
	(0.000)			(0.000)		
SI	0.015			-0.001***		
	(0.108)			(0.000)		
MADUM	0.066			1.850***		
	(0.111)			(0.000)		
SEODUM	-0.774***			-2.499***		
	(0.000)			(0.000)		
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo-R^2	0.286	0.886	0.502	0.115	0.563	0.302
Observations	76,668	63,794	76,668	68,095	55,301	68,095

Notes: This table presents the relation between annual report readability (*BOG*) and corporate payouts controlling for readability determinants (column (1) and (4)), falsification tests (column (2) and (5)), and instrumental variable analysis (column (3) and (6)). The *p*-values are calculated based on robust standard errors clustered at the firm level. All the regression models include an unreported intercept. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively. All variables are defined in Appendix A.

TABLE 6

Omitted variable analyses: Firm fixed effects, change regression, PSM, and weighting regression

Panel A: Firm fixed effects and change regression

	Dependent variable			
	Cash payout (DIV)		Total payout (TP)	
	(1)	(2)	(3)	(4)
BOG	-0.011***		-0.035***	
	(0.000)		(0.000)	
ΔBOG		-0.005***		-0.023***
		(0.001)		(0.001)
Control variables	Yes		Yes	
ΔControl variables		Yes		Yes
Year FE	Yes	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes	Yes
Pseudo-R^2	0.157	0.142	0.064	0.196
Observations	76,668	63,794	68,095	55,301

Panel B: Propensity score matching (PSM) and weighting regression

	Dependent variable			
	Cash payout (DIV)		Total payout (TP)	
	(1)	(2)	(3)	(4)
	Second-stage PSM	Weighting regression	Second-stage PSM	Weighting regression
High BOG	-0.518***	-0.376***	-0.714***	-0.922***
	(0.000)	(0.000)	(0.000)	(0.000)
Control variables	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
R^2/Pseudo-R^2	0.287	0.438	0.109	0.301
Observations	74,844	76,668	66,375	68,095

Notes: This table shows firm-fixed effects and change regression estimates in Panel A and the second stage of the propensity score matching (PSM) and weighting regression results in Panel B. In Panel A, columns (2) and (4) include variables in changed form (difference between time *t* and *t-1*). All the regression models include an unreported intercept. The *p*-values are calculated based on robust standard errors clustered at the firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively. All variables are defined in Appendix A.

TABLE 7

Robustness: Does the *BOG-PAYOUT* relation merely reflect other accounting attributes?

Panel A: Earnings management and earnings persistence

	Dependent variable			
	Cash payout (DIV)		Total payout (TP)	
	(1)	(2)	(3)	(4)
BOG	-0.038***	-0.047***	-0.073***	-0.083***
	(0.000)	(0.000)	(0.000)	(0.000)
BOG×EM	-0.003		-0.001	
	(0.128)		(0.635)	
EM	0.170		0.0.34	
	(0.258)		(0.861)	
BOG×EP		0.002		0.009
		(0.632)		(0.286)
EP		-0.180		-0.433
		(0.574)		(0.520)
Control variables	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Pseudo-R^2	0.295	0.282	0.112	0.110
Observations	65,897	68,713	58,996	61,044

Panel B: Accounting quality, accounting comparability, and accounting conservatism

	Dependent variable					
	Cash payout (DIV)			Total payout (TP)		
	(1)	(2)	(3)	(4)	(5)	(6)
BOG	-0.039***	-0.037***	-0.042***	-0.078***	-0.072***	-0.072***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
BOG×ACCTQUAL	0.012			-0.006		
	(0.266)			(0.692)		
ACCTQUAL	-0.992			0.867		
	(0.263)			(0.509)		
BOG×ACCTCOMP		0.001			-0.001	
		(0.879)			(0.923)	
ACCTCOMP		0.060			0.343	
		(0.889)			(0.576)	
BOG×ACCTCONS			0.003			0.005
			(0.796)			(0.863)
ACCTCONS			-0.166			-0.819
			(0.876)			(0.730)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo-R^2	0.290	0.291	0.272	0.113	0.096	0.093
Observations	55,233	30,536	51,493	49,832	27,065	45,657

Notes: This table presents the relation between annual report readability (*BOG*) and corporate payouts controlling for other accounting attributes. Panel A shows the results for earning management (EM) and earnings persistence (EP). Panel B shows the results for accounting quality (ACCTQUAL), accounting comparability (ACCTCOMP), and accounting conservatism (ACCTCONS). All the regression models include an unreported intercept. The *p*-values are calculated based on robust standard errors clustered at the firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively. All variables are defined in Appendix A.

TABLE 8

Cash holdings, relative dividend premium, and financial statement readability

	Dependent variable		
	Cash Holdings	Cash payout (DIV)	Total payout (TP)
	(1)	(2)	(3)
BOG	0.002***	-0.049***	0.080***
	(0.000)	(0.000)	(0.000)
RDP		0.004	-0.010
		(0.304)	(0.169)
Control variables	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Pseudo-R^2	0.374	0.284	0.111
Observations	76,668	76,668	68,095

Notes: This table shows the regression estimates of the relation between annual report readability (*BOG*) and corporate cash holdings in column (1) and the role of relative dividend premium (*RDP*) in BOG-PAYOUT relation in column (2)-(3). All the regression models include an unreported intercept. The *p*-values are calculated based on robust standard errors clustered at the firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively. All variables are defined in Appendix A.

TABLE 9

Alternative measures of readability of annual report

Panel A: Cash payout (DIV)							
	Dependent variable: Cash payout (DIV)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	FOG	*FLESCH*	*KINCAID*	*NWORD*	*FILESIZE*	*UNCERT*	*WMODAL*
READABILITY	-0.022***	0.010**	-0.029***	-0.496***	-0.520***	-0.530***	-1.825***
	(0.005)	(0.025)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo-R^2	0.290	0.290	0.290	0.267	0.267	0.266	0.267
Observations	42,527	42,527	42,527	56,153	56,153	56,153	56,153
Panel B: Total payout (TP)							
READABILITY	-0.028*	0.035***	-0.041**	-0.730***	-0.778***	-0.470***	-2.234***
	(0.086)	(0.000)	(0.030)	(0.000)	(0.000)	(0.007)	(0.000)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pseudo-R^2	0.090	0.090	0.090	0.104	0.104	0.104	0.104
Observations	37,150	37,150	37,150	49,773	49,773	49,773	49,773

Notes: This table shows the regression estimates of the relation between annual report readability (BOG) and corporate payouts with alternative measures of readability. All the regression models include an unreported intercept. The *p*-values are calculated based on robust standard errors clustered at the firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively. All variables are defined in Appendix A.