**Does wedge size matter? Financial reporting quality and effective regulation of dual-class firms**

Abstract

Dual-class capital structures create a gap (“wedge”) between voting rights and cash flow rights. Our analysis indicates that the larger the wedge, the higher the quality of financial reporting, reflecting a tradeoff between the dilution of voting rights and enhancement of the credibility of the information provided to investors. It suggests that increasing management’s insulation from market pressures is stronger than agency costs and thus reduces the motivation to manipulate earnings. Therefore, with respect to financial reporting, a nuanced regulation restricting the size of the wedge may not be more effective.

**Key words:** Dual-class, earnings quality, financial reports, disclosure, corporate governance, wedge

**JEL Codes:** G32, G34, G38, K22, M41, M48

# Introduction

This paper deals with one of the most heated debates in current financial regulation: the effectiveness of regulation of dual-class firms. In 2021, 23% of U.S. companies going public did so with a dual-class structure, where one class of shares confers more votes per share than the other (Council of Institutional Investors, 2022). By creating a gap (“wedge”) between voting rights and cash flow rights, this capital structure allows insiders to raise capital without relinquishing effective control of the company (Bebchuk et al., 2000).

In the past few years, the policy debate over the desirability of this capital structure has intensified. On one hand, proponents of the dual-class structure argue that it encourages innovation by insulating management from short-term market pressures (Goshen & Hamdani, 2016; Jordan et al., 2016). On the other hand, opponents argue that the combination of weak ownership incentives and entrenchment results in agency problems (Bebchuk & Kastiel, 2019).

The regulatory debate over the use of dual-class stock is ongoing and, interestingly, developing in opposite directions. While this capital structure is historically permitted in the United States, institutional investors and index providers have recently expressed strong opposition to the use of dual-class structures (Solomon et al., 2020).[[1]](#footnote-2) By contrast, jurisdictions that traditionally prohibited the use of dual-class stock have faced increasing market pressures to allow this capital structure. London’s, Hong Kong’s, and Singapore’s stock exchanges have recently revised their listing rules to facilitate the use of dual-class shares (Reddy, 2021).

The current binary restrict-or-allow regulation of dual-class firms does not consider the size of the wedge between voting and cash flow rights. Indeed, while research regarding the effects of the dual- versus single-class structure and its policy implications is ongoing (Bauguess et al., 2012; Dimitrov & Jain, 2006; Lauterbach & Pajuste, 2015; Solomon, 2020), there is little research focusing on the size of the wedge and its implications. Claessens et al. (2002) study 1301 companies from eight East Asian economies to examine the impact on firm value of dual-class shares, pyramid structures, and crossholdings among companies. They find that firm value increases with the cash flow rights of the largest shareholder but decreases when voting rights exceed cash flow rights and that the value discount generally increases in line with the size of the wedge between voting and cash flow rights.

Based on an analysis of a comprehensive list of dual-class firms in the United States, Masulis et al. (2009) examine how the gap between insider voting and cash flow rights impacts the extraction of private benefits of control. They find that as the gap widens, corporate cash holdings become worthless to outside shareholders, CEOs receive higher levels of compensation, insiders are more likely to make value-destroying acquisitions, and capital expenditures make a lower contribution to firm value. Using the same dataset, Gompers et al. (2010) find evidence that firm value is positively associated with insiders’ cash flow rights and negatively associated with insiders’ voting rights. Furthermore, the larger the wedge between the insiders’ voting rights and cash flow rights, the greater the reduction in firm value. These studies support the agency hypothesis that insiders endowed with voting rights in excess of their cash flow rights are more prone to pursue private benefits at the expense of outside shareholders. Moreover, they explain why firm value decreases as insiders’ ratio of voting rights to cash flow rights increases.

Bebchuk and Kastiel (2019) analyze the perils of the wedge between the controller’s voting rights and cash flow rights, explain how it generates considerable governance risks and costs, and show how these costs can be expected to escalate as the controller’s equity stake decreases. Using a hand-collected dataset of the governance arrangements in U.S. dual-class firms, they provide empirical evidence of the current size and potential growth of the wedge. Specifically, they analyze the extent to which the controller at each company would be able to reduce her equity stake in the future without relinquishing control.

Our paper seeks to fill the gap in the academic literature by providing policymakers with the missing empirical and analytical framework for evaluating whether a nuanced financial regulation of dual-class firms that considers the size of the wedge would be more effective.

We use a sample of dual-class firms publicly traded in the U.S. between 2012 and 2019 and measure the size of the wedge for each firm each year. The findings suggest that as the wedge grows, the firms are “older,” smaller, more profitable, and less leveraged.

We then examine the quality of financial information provided by companies as this disproportionate control is exerted. While the quality of earnings is considered a function of the firm’s fundamental performance and characteristics (Dechow et al., 2010), previous studies have found conflicting results as to the effect of the dual-class structure on the quality of information provided. Some studies suggest that controllers report accounting information for their self-interest, causing reported earnings to be less credible (Francis et al., 2005; Jiraporn, 2005; Lobanova et al., 2019), while others provide evidence that because dual-class firms are under less market pressure, they have fewer incentives to manipulate earnings and therefore the quality of their financial reports is higher (Chen, 2008; Li & Zaiats, 2017; Nguyen & Xu, 2010; Palas & Solomon, 2022; Solomon, 2020).

However, there is little research on the quality of financial reports across the wedge size spectrum, and the results are inconsistent. Francis et al. (2005) use the size of the wedge as an explanatory variable to distinguish between dual- and single-class firms. Their results indicate that the returns–earnings relation is less informative for dual-class companies. Forst et al. (2019) assess the quality of information provided by dual-class firms as measured by financial analysts’ forecast accuracy and forecast dispersion. Their findings suggest that the wedge is negatively associated with forecast accuracy and positively associated with forecast dispersion, which suggests that as the wedge grows, the quality of information, and analysts’ ability to utilize it, decrease. In contrast, Jordan et al. (2016) show a pattern of a negative relation between short-term market pressures and the wedge (not all tests were statistically significant), implying that as the wedge widens, firms are under less market pressure and therefore have fewer incentives to manipulate earnings.

The research referred to above does not attempt to examine the financial data itself and its quality in conjunction with the size of the wedge. In this paper, we examine whether the quality of financial reports changes across the wedge size spectrum by using well-known proxy measures for information quality: earnings persistence, cash flow persistence, and the use of discretionary accruals (Ball et al., 2016; Bartov, et al., 2001; Dechow et al., 2010; Dechow et al., 1995; Lipe, 1986).

Given the heated regulatory debate over the dual-class structure and its implications for investor protection, our findings are important to policymakers. They generate a more nuanced picture of this form of corporate control and provide analytical tools for evaluating the effectiveness of the current regulation of dual-class firms.

# Basic characteristics of dual-class firms with respect to the wedge

The data were extracted from annual financial filings of 5,303 U.S. publicly traded firms[[2]](#footnote-3) from 2012 to 2019 (a total of eight years). Dual-class firms were identified as those having more than one type of stock and unequal voting rights. These firms were then compared to the Council of Institutional Investors (2019) list, and any missing firms were added. The final sample included 248 firms with dual-class stock that reported their financial statements using the XBRL format.[[3]](#footnote-4)

The main variable of interest in this paper is the size of the wedge. Dual-class firms included in the analysis have at least two outstanding classes of common stock and unequal voting rights that create a wedge between ownership and voting interests. The wedge was calculated for each class of common stock with super-voting rights as that class’s percentage of total voting rights minus that class’s percentage of total outstanding equity (based on the Council of Institutional Investors (2019) list). The wedge quantifies the degree of misalignment between voting and economic interests created by the dual-class structure.[[4]](#footnote-5)

Previous research has found that more than half of dual-class companies are in the service and manufacturing industries (Palas & Solomon, 2022). There does not seem to be a vast difference in average wedge size by industries (based on their two-digit SIC code) and it ranges between 39-50%. Nonetheless, wedge size does vary among observations (a company may have between 1-8 observations), among companies, and over time.

**Table 1**

**Wedge characteristics.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Wedgea** | **# of Observationsb** | **% of Observations** | **Average Wedgec** |
| 1%-10% | 73 | 4.90% | 4.96% |
| 11%-20% | 104 | 6.98% | 14.60% |
| 21%-30% | 123 | 8.26% | 25.08% |
| 31%-40% | 200 | 13.43% | 40.66% |
| 41%-50% | 320 | 21.49% | 58.90% |
| 51%-60% | 394 | 26.46% | 54.57% |
| 61%-70% | 99 | 6.65% | 63.49% |
| 71%-80% | 26 | 1.75% | 77.54% |
| 81%-90% | 49 | 3.29% | 41.14% |
| 91%-100% | 101 | 6.78% | 95.01% |
| Total | 1489 |  | 47.60% |
| a Wedge within specified range.b Number of observations within specified range. c Average wedge within range. |

Almost 48% of observations are within the range of 41%-60% and only 18.5% of observations had a wedge larger than 60% (Table 1).

Over the time-period examined the companies’ wedge increased by 4.89% on average. 41% of the companies had an average decrease in wedge size of 16%, while 59% of the companies increased their wedge size by an average of 20%.

We use six well-known main characteristics (Chen, 2008; Cremers et al., 2020; Francis et al., 2005; Jordan et al., 2016; Palas & Solomon, 2022) to analyze characteristics of the wedge: listing age, size, profitability, leverage, growth, and valuation.

**Table 2**

**Characteristics correlation with wedge size.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Category** | **Measurement** | **Average** | **Correlationj** |
| Listing Age | Years Since IPO | 18.12 | \*\*\* |
| Sizea | Sales Revenue | 1,098 | \*\* |
| Market Value | 7,763 | \*\*\* |
| Total Assets | 7,748 | \*\*\* |
| Profitability | Profit Marginb | 0.07 |  |
| ROAc | 0.01 | \*\*\* |
| ROEd | 0.04 |  |
| Leverage | Debt Percentagee | 0.26 | \*\* |
| Growth | Change in Revenuesf | 0.05 | \*\*\* |
| R & D Expenseg | 0.00 | \_\*\*\* |
| Valuation | Price/Earnings Ratioh | 81.08 |  |
| Price/Book Value Ratioi | 4.79 | \*\*\* |
| a Measured in millions of dollars.b Net income in quarter *t* as a percentage of sales revenues in quarter *t*.c Net income in quarter *t* as a percentage of total assets in quarter *t*.d Net income in quarter *t* as a percentage of stockholders’ equity in quarter *t*.e Total debt in quarter *t* as a percentage of total assets in quarter *t*.f Sales revenues in quarter *t* minus sales revenues in quarter *t*-1 divided by sales revenues in quarter *t*-1.g R&D expenses in quarter *t* as a percentage of sales revenues in quarter *t*.h Market value in quarter *t* divided by net income in in quarter *t*.i Market value in quarter *t* divided by total assets in in quarter *t*.j \*,\*\*,\*\*\* indicate significance at the 10 percent, 5 percent, and 1 percent levels, respectively, for the correlation specifications. |

Table 2 shows that except for three measurements (profit margin, ROE, and price/earnings ratio), all measurements are significantly associated with the size of the wedge. We find that the larger the wedge, the “older” the firm—that is, the longer the length of time that has passed since the firm’s IPO. This finding confirms the concern of Bebchuk & Kastiel (2019) that controllers of dual-class firms may increase the wedge by reducing their equity stake while retaining a lock on control as time passes after the IPO.

While dual-class firms were found to be larger and more leveraged than single-class firms (Francis et al., 2005; Gompers et al., 2010; Palas & Solomon, 2022), within dual-class firms the wedge is larger for smaller and less leveraged firms. Dual-class firms were found to be more profitable than single-class firms (Francis et al., 2005; Gompers et al., 2010; Palas & Solomon, 2022) and these findings are consistent as the wedge increases within dual-class firms. Growth and valuation measurements present conflicting results.

In further analysis, we include all twelve measurements as control variables when examining the association between the size of the wedge and the quality of reporting.

# Quality of reporting

There is no agreement in the literature about the measure of “earnings quality”; we use three well-known proxies for financial information quality.

## Earnings persistence

Earnings persistence fits well with the view of earnings as a summary metric of expected cash flows useful for equity valuation. Firms with more persistent earnings have more sustainable earnings/cash flow streams that will be a more useful input into DCF-based equity valuation (Dechow et al., 2010). Similarly to Dechow & Dichev (2002)Dechow & Dichev (2002), we measure persistence as the regression of future earnings on current earnings. We use earnings per share (EPS) as a proxy measure for earnings (Abarbanell & Bushee, 1997).

While there may be concern that EPS can be manipulated through stock repurchases (Almeida, 2019), EPS is still considered the most important performance target (Graham et al., 2005). In addition, manipulation through repurchases is often associated with real economic actions, which affect earnings as well as EPS (Cooper, Downes, and Rao 2018; Almeida 2019), and the repurchase effect seems to be discounted by the market (Hribar et al., 2006). It therefore seems unlikely that any single measure of performance can completely eliminate manipulation (Almeida, 2019).

The main regression equation is

$EPS\_{j,t}= ∝\_{0}+ ∝\_{1 }EPS\_{j,t-1}+ ∝\_{2} WEDGE\_{j,t}+∝\_{3 }EPS\_{j,t-1} $\*$WEDGE\_{j,t}+ ∝\_{4 }CONTROLS \_{j,t}+ e\_{j.t}$ (1)

$EPS\_{j,t(t-1)}$ is firm *j*’s *EPS* for year *t*( *t*-1), and $WEDGE\_{j,t}$ is measured as the size of the wedge for firm *j* in year *t*. The main variable of interest is the interaction variable, which answers the question *are earnings more persistent for firms with a greater wedge?* A positive $∝\_{3 }$ suggests that the larger the wedge, the more persistent the earnings. Twelve variables representing listing age, size, profitability, leverage, growth, and valuation (the variables presented in Table 2) were entered as controls.[[5]](#footnote-6)

We use a linear model with panel data (a sample of firms over time) to determine the effect of the wedge on the relation between current and past earnings. We also include a fixed firm effect[[6]](#footnote-7) (effects not reflected in the firm data) and a fixed year effect (events during a specific year that are unrelated to the firm, such as an economic crisis or national security event).

**Table 3**

**Tests of the relation between current earnings and past earnings and wedge size.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Model 1** | **Model 2** | **Model 3** |
| **Constant** | \*\*\*0.24(0.05) | \*0.14(0.07) |  |
| $EPS\_{j,t-1}$a | \*\*\*0.47 (0.06) | \*\*\*0.35 (0.06) | 0.05 (0.07) |
| $WEDGE\_{j,t}$b | \*\*0.23-(0.10) | \*\*\*0.36-(0.10) | 0.36-(0.40) |
| $EPS\_{j,t-1}$\*$WEDGE\_{j,t}$c | \*\*\*0.69(0.12) | \*\*\*0.71(0.12) | \*\*\*0.61(0.17) |
| **Control variables**d |  | + | + |
| **Fixed year effect** |  | + | + |
| **Fixed company effect** |  |  | + |
| **# of observations** | 1489 | 1489 | 1489 |
| $$R^{2}$$ | 0.48 | 0.55 | 0.68 |

\*\*\*significant at 1%; \*\*significant at 5%; \*significant at 10%

The numbers in parentheses are the estimate’s standard errors.

a Firm *j* earnings per share for year *t-1*.

b Firm *j* wedge for year *t*.

c The interaction between the two independent variables.

d 12 variables representing listing age, size, profitability, leverage, growth, and valuation

Listing age ($IPO \_{j,t}$) denotes the number of years since IPO. Size is represented by three variables: $REV\_{j,t}$ is the total revenues of firm *j* at year *t*, $MCAP\_{j,t}$ is the market value of firm *j* at year *t*, $AST\_{j,t}$ is the total assets of firm *j* at year *t*. Profitability is represented by three variables: $PRM\_{j,t}$ is the profit margin (net income divided by revenues) of firm *j* at year *t*, $ROA\_{j,t}$ is the return on assets (net income divided by total assets) of company *j* at year *t*, and $ROE\_{j,t}$ is the return on equity (net income divided by total equity) of firm *j* at year *t*. Leverage is denoted by $DAS\_{j,t }$, measured total debt as a percentage of total assets of firm *j* at year *t*. Growth includes two variables: Change in Revenues, measured as Sales Revenues in year *t* minus Sales Revenues in year *t*-1 divided by Sales Revenues in year *t*-1, and R&D expense, measured as R&D Expense in year *t* as a percentage of Sales Revenuesin year *t* ($CRV\_{j,t} $and $R\&D\_{j,t}, $respectively). Valuation also includes two variables for firm *j* at time *t*: Price to Earnings ratio ($P/E\_{j,t}$) and Price to Book Value ratio ($P/B\_{j,t})$.

For our analysis, we use three models in which the dependent variable is $EPS\_{j,t}$. In Model 1, the independent variables are only the previous period’s earnings and the current-period wedge. Model 2 includes all twelve control variables and the year fixed effect. Model 3 includes, in addition to the control variables, firm fixed effects.

The results of all three models are presented in Table 3. The main variable of interest is the interaction between earnings persistence and the size of the wedge, $EPS\_{j,t-1} $\*$WEDGE\_{j,t}$. The coefficient for the main variable of interest is positive and highly significant for all three models, suggesting that the slope coefficient, relating the current period’s earnings to the next period’s earnings, is steeper, and therefore more informative, as the wedge grows. The results remain robust when fixed company effects are analyzed. The findings suggest that the larger the wedge, the higher the quality of information provided.

## Cash Flow Persistence

While earnings persistence is often considered an indicator of earnings quality (Schipper & Vincent, 2003), its major weakness is its dependence on the firm’s performance as well as the accounting measurement system. This weakness allows it to be susceptible to earnings manipulation in the short run(Dechow et al., 2010). Cash flows tend to be more closely related to how firms are valued (Foerster et al., 2017) and therefore may be used as a proxy for earnings quality (Nam et al., 2012).

We rerun all three models, but with cash flow per share $CFS\_{}$, calculated as total cash flows from operations divided by the number of shares, replacing all *EPS* variables.

**Table 4**

**Tests of the relation between current cash flow and one year past cash flow and wedge size.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Model 1** | **Model 2** | **Model 3** |
| **Constant** | \*\*\*9.43(2.4) | \*\*\*12.14(4.03) |  |
| $CFS\_{j,t-1}$a | \*\*\*0.05- (0.01) | \*\*\*0.05- (0.01) | \*\*\*0.27(0.08) |
| $WEDGE\_{j,t}$b | \*8.73-(4.6) | \*8.95-(4.8) | 31-(30.8) |
| $CFS\_{j,t-1} $\*$WEDGE\_{j,t}$c | \*\*\*0.63(0.09) | \*\*\*0.61(0.09) | \*\*\*0.66-(0.19) |
| **Control variables**d |  | + | + |
| **Fixed year effect** |  | + | + |
| **Fixed company effect** |  |  | + |
| **# of observations** | 1247 | 1247 | 1247 |
| $$R^{2}$$ | 0.05 | 0.07 | 0.34 |

\*\*\*significant at 1%; \*\*significant at 5%; \*significant at 10%

The numbers in parentheses are the estimate’s standard errors.

a Firm *j* cash flow per share in year *t-1.*

b Firm *j* wedge for year *t*.

c The interaction between the two independent variables.

d 15 variables representing listing age, size, profitability, leverage, growth, and valuation

Listing age ($IPO \_{j,t}$) denotes the number of years since IPO. Size is represented by three variables: $REV\_{j,t}$ is the total revenues of firm *j* at year *t*, $MCAP\_{j,t}$ is the market value of firm *j* at year *t*, $AST\_{j,t}$ is the total assets of firm *j* at year *t*. Profitability is represented by three variables: $PRM\_{j,t}$ is the profit margin (net income divided by revenues) of firm *j* at year *t*, $ROA\_{j,t}$ is the return on assets (net income divided by total assets) of company *j* at year *t*, and $ROE\_{j,t}$ is the return on equity (net income divided by total equity) of firm *j* at year *t*. Leverage is denoted by $DAS\_{j,t }$, measured total debt as a percentage of total assets of firm *j* at year *t*. Growth includes two variables: Change in Revenues, measured as Sales Revenues in year *t* minus Sales Revenues in year *t*-1 divided by Sales Revenues in year *t*-1, and R&D expense, measured as R&D Expense in year *t* as a percentage of Sales Revenuesin year *t* ($CRV\_{j,t} $and $R\&D\_{j,t}, $respectively). Valuation also includes two variables for firm *j* at time *t*: Price to Earnings ratio ($P/E\_{j,t}$) and Price to Book Value ratio ($P/B\_{j,t})$.

The findings in Table 4 indicate a significant cash flow persistence ($CFS\_{j,t-1}) $relating this period’s cash flows to those of the previous period over all models. While cash flow is persistent and significant for model 3, it presents a positive relationship, which may suggest that the negative relationship (presented in the other models) is affected by firm-specific variables which cannot be observed. Theory and the literature do not provide a plausible explanation for why dual-class firms might have a negative (or positive) cash flow persistence. The $WEDGE\_{j,t} $coefficient is negative, however not significant for model 3, implying that as the wedge increases next period’s cash flows are lower. The main variable of interest is the interaction between cash flow persistence and the size of the wedge, $CFS\_{j,t-1} $\*$WEDGE\_{j,t}$. The coefficient for the main variable of interest is highly significant for all models, suggesting that the slope coefficient, relating the current period’s cash flows to the next period’s cash flows is more informative, as the wedge grows. As can be expected the coefficient in model 3 changes signs similar to the cash flow persistence coefficient. The results suggest that as the size of the wedge increases, the current year’s cash flows become more closely associated with future cash flows, and the quality of information provided to investors increases.

## DCA

DCA measures accruals that are considered “unexpected” or “abnormal” relative to industry peers, that is, distortions induced by the application of accounting rules or earnings management. The general interpretation is that they represent a distortion that is of lower quality (Dechow et al., 2010). The study uses the modified Jones (1991) model, in which the firm’s current working capital accruals, or DCA, are compared to industry peers.

Current accruals, measured as the change in noncash current assets less the change in operating current liabilities, are the sum of both discretionary and nondiscretionary accruals. To identify the nondiscretionary component, a regression of current accruals on change in sales is run on all firms in the same two-digit SIC code for each year. Using the estimates for the regression parameters, each firm’s nondiscretionary current accruals are estimated. The regression residual is presumed to be dictated by the firm and industry conditions, due to the cross-sectional approach, and is considered to have been “managed.”[[7]](#footnote-8) Since there is no particular reason to suspect an unusual degree of income-increasing or income-decreasing accruals in the sample, the absolute values of the abnormal accruals are used to capture the extent of earnings management (Bartov et al., 2001; Jiraporn, 2005).

**Table 5**

**Tests of the relation between level of DCAa and wedge size**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable** | **Model 1** | **Model 2** | **Model 3** |
| **Constant** | 502,698(457,334) | \*\*\*3,609,853(776,379) |  |
| $WEDGE\_{j,t}$b | 514,288-(889,600) | 632,112-(917,762) | 3,653,682-(4,535,276) |
| **Control variables**c |  | + | + |
| **Fixed year effect** |  | + | + |
| **Fixed company effect** |  |  | + |
| **# of observations** | 1483 | 1483 | 1483 |
| $$R^{2}$$ | 0.0002 | 0.05 | 0.17 |

\*\*\*significant at 1%; \*\*significant at 5%; \*significant at 10%

The numbers in parentheses are the estimate’s standard errors.

a DCA is the absolute measure of abnormal current working capital accruals relative to industry peers.

b Firm *j* wedge for year *t*.

c12 variables representing listing age, size, profitability, leverage, growth, and valuation

Listing age ($IPO \_{j,t}$) denotes the number of years since IPO. Size is represented by three variables: $REV\_{j,t}$ is the total revenues of firm *j* at year *t*, $MCAP\_{j,t}$ is the market value of firm *j* at year *t*, $AST\_{j,t}$ is the total assets of firm *j* at year *t*. Profitability is represented by three variables: $PRM\_{j,t}$ is the profit margin (net income divided by revenues) of firm *j* at year *t*, $ROA\_{j,t}$ is the return on assets (net income divided by total assets) of company *j* at year *t*, and $ROE\_{j,t}$ is the return on equity (net income divided by total equity) of firm *j* at year *t*. Leverage is denoted by $DAS\_{j,t }$, measured total debt as a percentage of total assets of firm *j* at year *t*. Growth includes two variables: Change in Revenues, measured as Sales Revenues in year *t* minus Sales Revenues in year *t*-1 divided by Sales Revenues in year *t*-1, and R&D expense, measured as R&D Expense in year *t* as a percentage of Sales Revenuesin year *t* ($CRV\_{j,t} $and $R\&D\_{j,t}, $respectively). Valuation also includes two variables for firm *j* at time *t*: Price to Earnings ratio ($P/E\_{j,t}$) and Price to Book Value ratio ($P/B\_{j,t})$.

Table 5 presents the regression results where the dependent variable is the absolute value of DCA. The wedge coefficient is negative for all three models (although not significant), suggesting that income management decreases as the wedge grows.

# Conclusion

There is a growing body of research on the characteristics of dual-class firms, but the regulatory framework is controversial and binary—some jurisdictions permit the use of this capital structure while others prohibit it. This paper provides policymakers with analytical tools for evaluating the effectiveness of current financial regulation and assessing whether a nuanced regulation of dual-class firms, considering the size of the wedge, would be more effective.

We use a comprehensive sample of dual-class firms publicly traded in the U.S. between 2012 and 2019 and measure the size of the wedge for each firm each year. We find that as the wedge enlarges, dual-class firms tend to be “older,” smaller, more profitable, and less leveraged.

We examine the quality of financial reporting in relation to the size of the wedge. Our measures indicate that the larger the wedge, the higher the quality of reported earnings; however, not all results are statistically significant. While agency theory suggests that as the wedge size increases, the quality of financial reporting decreases, our findings indicate that the freedom from market pressures resulting from the wedge is stronger than agency costs. Management’s insulation from market pressures seems to reduce motivation to manipulate earnings to achieve short-term goals in dual-class companies compared to their single-class counterparts (Chen, 2008; Li & Zaiats, 2017; Nguyen & Xu, 2010; Palas & Solomon, 2022; Solomon et al., 2020), thus increasing the informativeness of the financial reports. Our findings suggest that this effect of management’s insulation continues beyond the dual- versus single-class distinction and is influenced by the size of the wedge for dual-class companies as well. They uncover important and counterintuitive evidence about the existence of a tradeoff between the dilution of voting rights and enhancement of the quality of information provided to investors.

Given the regulatory controversy over the use of dual-class structures and the heated debate about their implications for investor protection, our results suggest that a regulatory framework distinguishing among dual-class firms based on the size of the wedge may not be more effective. As far as disclosure of financial information is concerned, since a larger wedge does not decrease the quality of reporting, the current regulation adopted by many jurisdictions that permits dual-class structures regardless of the size of the wedge seems to be effective.

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1. In contrast to the rational apathy that characterizes retail shareholders, institutional investors, who hold most of the public float in the capital markets and thus play an important role in shareholder meetings, do exercise their voting rights (Solomon, 2017). [↑](#footnote-ref-2)
2. We use FinDynamics’ XBRL Analyst (<https://findynamics.com/xbrlanalyst>) to acquire the annual financial data. It is a plug-in for Microsoft Excel that enables access to a firm’s XBRL tagged data from its SEC filing. [↑](#footnote-ref-3)
3. For further explanation of how the data was extracted and analyzed, see Palas and Solomon (2022). [↑](#footnote-ref-4)
4. A wedge of 100%, for example, would mean that the superior-voting class of shares controls all the voting power while representing none of the equity interest in a firm. [↑](#footnote-ref-5)
5. In all regressions the correlation between the wedge and the controlling variables, although significant, was not high so we do not suspect a multicollinearity problem. [↑](#footnote-ref-6)
6. We examined both random and fixed firm effects for all regressions and then applied the Hausman test to the data. The Hausman test allows us to determine which test, random or fixed, is more appropriate (Vogt, 2005). Based on the Hausman test we determined that the model presenting fixed effects is more appropriate. [↑](#footnote-ref-7)
7. When DCA is calculated each variable is deflated by the book value of total assets. For a detailed explanation of the procedure, see Teoh et al., 1998; Jiraporn 2005. [↑](#footnote-ref-8)