

# Changing Corporate Governance Norms: Evidence from the Dismissal of Dual Class Shares in the U.K.\*

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## Abstract

In the U.K., between 1955 and 1970, dual class shares were nearly dismissed without any regulatory intervention. We show that the decline in the use of dual class shares is positively correlated with measures of the relative valuations of one-share-one-vote and dual class firms. Following periods with high relative valuations of one-share-one-vote, one-share-one-vote firms exhibit lower returns than dual class firms suggesting that the latter were undervalued. Relative valuations appear correlated with the tone of a debate on dual class shares that revealed no new material information. Our analysis suggests that investor demand may have affected firms' share structure choices.

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Corporate governance structures vary dramatically across the world and over time. Different arrangements are often an optimal response to changing investment opportunities and institutional environments (La Porta, Lopez de Silanes, Shleifer, and Vishny, 1998), but are also believed to depend on culture and corporate governance norms (Stulz and Williamson, 2003; Dyck and Zingales, 2004). Failures to adopt appropriate governance structures are known to cause short-termism (Stein, 1989), financial constraints (Durnev and Kim, 2005), higher cost of capital (Leuz and Hail, 2006) and less foreign investment (Leuz, Lins, and Warnock, 2009) ultimately hampering countries' economic performance (Levine, 2005). While existing literature mostly explores the effect of laws and other institutions on firms' corporate governance, our paper studies whether changing corporate governance norms may induce firms to supplant governance structures that do *not* harm and potentially enhance their performance.<sup>1</sup>

For either psychological or institutional reasons, norms of strong corporate governance could affect investor demand. To the extent that arbitrage fails to prevent changes in demand from driving apart the prices of firms with different corporate governance, managers may have incentives to cater to investor demand and to change the governance structure according to the prevailing norm.

This argument builds on a line of research recognizing that social dynamics may affect investor demand, lead to security mispricing (Shiller, 1984), and ultimately influence managers' rational decisions.<sup>2</sup> To the best of our knowledge, we are the first to explore how this mechanism may affect firms' corporate governance.

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<sup>1</sup> Media, legal scholars, shareholder associations, and institutional investors often indicate governance mechanisms as manifestations of weak or strong corporate governance. Doidge, Dyck, Mahmudi and Virani (2015), for instance, provide evidence on how new strong corporate governance criteria set by the Canadian Coalition for Good Governance are related to changes in corporate governance.

<sup>2</sup> Investor demand has been shown to affect corporate financing decisions (Baker and Wurgler, 2004a and b and Polk and Sapienza, 2002) as well as merger waves (Rhodes-Kropf, Robinson and Viswanathan, 2005), firm names (Cooper, Dimitrov and Rau, 2001) and nominal share prices (Weld, Michaely, Thaler and Benartzi, 2009).

To achieve this objective, we focus on the London Stock Exchange in the mid-1950s. Our unique setting has a major advantage over the current period because norms of good governance were in the making. The London Stock Exchange was transforming in a modern stock market and it was starting to be dominated by institutional investors (Cheffins, 2008; Chambers and Dimson 2009; Franks, Mayer and Rossi, 2009). Such transformation was naturally accompanied by discussions on the principles based on which power had to be allocated within companies. We can thus use changes in norms of strong corporate governance to answer our economic question.

Corporate governance discussions focused on the principle of one-share-one-vote. Up to the mid-1950s, companies had routinely issued limited-voting shares to allow insiders with limited capital to maintain control. Starting from the mid-1950s, an intense debate developed over 15 years on whether deviations from one-share-one-vote violated the principle of shareholder democracy. No laws and regulations were implemented. Nevertheless, investor demand was presumably affected and reflected in the debate.

To guide our empirical analysis, we construct a simple model relating managerial decisions to have dual class share structures to alternative proxies for the relative valuations of voting and limited-voting shares. If managers cater to investor demand, we expect a negative correlation between the premium on one-share-one-vote and the proportion of dual class firms. If the premium is driven by other factors, such as changes in private benefits of control, *ceteris paribus*, we expect to observe *more* dual class firms when the premium is high.

We show that when alternative proxies for the premium associated with one-share-one-vote are high, the proportion of dual-class firms in the market declines and dual-class firms are more likely to unify their shares into a single voting class. Firms become more likely to issue limited-voting shares when the premium drops. This evidence is consistent with the catering

hypothesis, but not with changes in private benefits of control. Also consistent with the catering hypothesis, we find no evidence that dual class share structures are associated with weaker firm performance, different investment policies, growth opportunities, worse corporate governance outcomes, or higher risk exposure during periods in which the proxies for the one-share-one-vote premium are highest.

Negative news coverage of limited-voting shares appears to be associated with an increase in the proxies for the one-share-one-vote premium even though the news revealed no new material information about firms and their corporate governance. This is consistent with the idea that changes in opinions and prevailing norms lead to changes in investors' relative valuations of voting and limited voting shares.

Two important pieces of evidence provide additional support to our interpretation of the results. First, negative news coverage of limited-voting shares has a stronger impact on illiquid and high volatility stocks. For such stocks, arbitrage is considered to be riskier at least in the short run (Barberis and Thaler, 2003) further supporting the hypothesis that the effect of negative news coverage captures price deviations from their fundamental values and that dual class share structures are supplanted because firms cater to investor demand.

Second, the difference in returns of voting and limited-voting shares is negatively related to their ex ante relative valuations and the negative coverage of dual class shares suggesting that voting shares are relatively overpriced when their relative valuation is high. This predictability result is consistent with a time-varying mispricing associated with the demand for limited-voting shares and confirms that changes in relative valuations are not explained by differences in the ex post returns accruing to voting and limited-voting shareholders.

Our historical setting also helps us to rule out an alternative explanation that relies on the threat of regulation. News coverage could convey information about regulators' possible plans to ban or outlaw limited-voting shares: such threat could generate a positive association between negative news coverage and the relative valuations of voting shares in the case (not necessarily plausible) that regulation would have been implemented in a way to harm non-voting shareholders.<sup>3</sup> To address this issue, we repeat our analysis distinguishing between two types of limited-voting shares: preference shares and limited-voting ordinary shares. Regulatory discussions concerned only limited-voting ordinary shares: if regulation were the main driver of our results, we should find a positive relationship between news and the proxies for the premium on one-share-one-vote *only* for the limited-voting ordinary shares. Our findings however show a positive association for both preference and limited-voting ordinary shares: as no regulations were contemplated about preference shares, this result rules out alternative explanations based on regulation changes.

Our paper is related to a large corporate governance literature exploring how different corporate governance mechanisms, and dual class shares in particular, contribute to the maximization of shareholder value. Empirical evidence on the desirability of dual class shares is mixed. For instance, De Angelo and De Angelo (1985) provide evidence that dual class shares allow management to take a long-term view on investment. In the same spirit, Smart, Thirumalaib, Zutter (2008) and Bennedsen and Nielsen (2010) show that the operating performance of dual class firms is similar to that of single-class firms. However, Masulis, Wang and Xie (2009) and Gompers, Ishii and Metrick (2003 and 2010) find that dual class shares are associated with lower firms' valuations and greater agency problems. McGuire, Wang and

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<sup>3</sup> Even though we consider this eventuality, we found no historical evidence suggesting that the regulator intended to outlaw limited-voting shares in a way that could harm limited-voting shareholders.

Wilson (2014) show that firms with dual class shares take less risk suggesting that managers of dual class firms are more likely to enjoy the quiet life. Francis, Schipper and Vincent (2005) find that earnings announcements of dual class firms are less informative than those of single class firms and that financial reports of dual class firms may not effectively convey information to investors.

Others highlight that voting shares generally sell at a premium over limited-voting shares and argue that the voting premium increases in voting shareholders' private benefits of control (Zingales, 1994 and 1995; Nenova, 2003; Kalay, Karakas and Pant, 2012, Hong, 2013). Our results suggest that investor demand may also affect the voting premium.

Our paper is also connected to a strand of literature exploring the role of media in corporate governance. Media are generally viewed as disciplining managers and insiders (Dyck, Volchkova, and Zingales, 2008; Liu and McConnell, 2013; Dai et al., 2015). However, Kuhnen and Niessen (2012) argue that the negative media coverage of executive stock options may have led firms to use this form of compensation to a lesser extent. Insofar as the debate on dual class shares reflects or affects investor tastes, our paper also suggests an association between media coverage and corporate policies, but also that the changes in corporate governance associated with media coverage are not necessarily optimal.

The remainder of this paper is organized as follows. Section 1 describes the institutional background. Section 2 presents a simple framework exploring managerial share structure decisions. Section 3 describes sample construction and data sources. Sections 4 and 5 present the empirical analysis. Section 6 concludes.

## 1. Institutional Background

### 1.1 *The British Stock Market*

In the U.K. of the 1950s, the stock market played an important role in the funding of public companies. Companies listed in the London Stock Exchange had highly dispersed ownership.<sup>4</sup> Families owned minority stakes, but had sometimes maintained control with a disproportionate representation on the board and with dual class shares (Franks, Mayer, Rossi, 2005 and 2009).<sup>5</sup>

This historical context provides an ideal laboratory to explore the catering motive for corporate governance. A number of factors would prevent the analysis using contemporary data. First, corporate governance varies little over time (Kole and Lehn, 1997). Second, nowadays, investors look with diffidence at the stocks of firms with dual class shares (Giannetti and Simonov, 2006; Li, Ortiz-Molina and Zhao, 2008; Leuz, Lins and Warnock, 2009; McCahery, Sautner and Starks, 2015), presumably leading to less swings in investor demand. This would make it hard to test whether companies cater to investors' tastes in choosing their corporate governance.

In the U.K., following the 1948 Company Act that increased disclosure and allowed for proxy voting (Cheffins, 2008, pp. 356-360), the London Stock Exchange was transforming in a modern stock market (Cheffins, 2008; Chambers and Dimson 2009; Franks, Mayer and Rossi, 2009). Such transformation was naturally accompanied by discussions on firm corporate

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<sup>4</sup> Franks, Mayer and Rossi (2009) document that the proportion of shares held by the top 3 shareholders was 33.83% in 1950. Other studies provide similar evidence. In the sample of Braggion and Moore (2011), the Top 3 shareholders held on average 24% of the stocks between 1895 and 1905. The directors' average holdings were 8.1% already in 1911 (Hannah and Foreman-Peck, 2011).

<sup>5</sup> The London Stock Exchange required to place at least 2/3 of any security to the public in any public issue. To reduce the dilution of control, firms started to issue limited-voting shares to the public (Cheffins, 2008, pp. 226-227; Hannah, 2007).

governance and on the use of limited-voting shares, which as we argue may caused swings in investor demand.

Finally, even though dual class shares have been used in recent high profile initial public offerings (such as Facebook, Google, LinkedIn), few companies around the world still use dual class shares; furthermore, the shares granting relatively more voting rights to the holders are often not traded preventing the type of empirical tests we carry out. For our sample period, we have a relatively large sample of companies with listed voting and limited-voting shares, which allow us to perform a richer empirical analysis.

### *1.2 The debate on limited-voting shares*

Limited-voting shares were widely used in the London Stock Exchange and did not raise any criticisms up to the first half of the 1950s. They were considered particularly suitable for retail investors who used dividends to evaluate firm performance (Cheffins, 2008, pp.108-121).<sup>6</sup> In fact, Ang and Megginson (1989) document that the creation of superior voting shares in the London Stock Exchange was usually associated with positive price effects at the announcement.

At the beginning of 1956, the London Stock Exchange recommended that non-voting ordinary shares were explicitly designated as such (Times, February 1, 1956). The announcement also mentioned that this was not a necessary condition for obtaining a listing and that shares with limited-voting rights were not recommended to report any explicit wording. Also preference shares, which gave (limited-voting) shareholders right to a preferential dividend and in some instances to further dividend distribution (participating preference shares), were unaffected by

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<sup>6</sup> The debate that emerged in the UK did not have a correspondent in the US. By 1900, in most of the US states, the default voting rule for ordinary shares without preferential treatment was one-share-one-vote. This trend culminated in 1926 when the New York Stock Exchange allowed only trading of securities issued by companies whose ordinary shares complied with the one-share-one-vote principle. Until 1985, when the ban was eliminated, only limited-voting shares with preferential dividend (preference shares) were allowed for trade in the New York Stock Exchange.



this recommendation. No further regulatory interventions were undertaken. It is therefore surprising that by the end of the sixties limited-voting ordinary shares as well as preference shares were used to a much lower extent.<sup>7</sup>

In what follows, we explore to what extent the dismissal of dual class shares may have catered to a change in investor tastes leading to valuation errors. A debate that developed over this period and that was ignited by institutional investors that were starting to gain importance in the stock market may help to understand the investors' views on dual class shares.<sup>8</sup> The arguments are nicely summarized in an article published in *The Economist* on April 14, 1956: “*Non-voting shares ought always to be regarded with reserve (...) They can put control in the hands of an irresponsible oligarchy with a minority financial stake (...). The danger lies in the perpetuities that non-voting shareholders are powerless to control.*”<sup>9</sup>

Similarly, on August 1, 1957, at the Annual meeting of The Trustees Corporation Limited, an institutional investor, the fund manager stated (as reported in the Times of London): “*I refer to the practice that is becoming increasingly prevalent of issuing non-voting ordinary shares. (...) I deprecate this practice. (...) It is surely right that all those who own the risk bearing capital should be entitled to share in the control of the company*”.

Over the next two years, almost every month, there were stories with negative coverage of limited-voting shares. The news mostly referred to institutional investors that expressed opinions against dual class shares in their annual meeting and reiterated the “*commonly accepted doctrine*

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<sup>7</sup> Dual class shares are much less used in the UK nowadays (Faccio and Lang, 2002; OECD, 2007) even though no ban or regulation were ever implemented (cft. Cheffins 2008 p. 317; pp. 328-331 for a detailed description of the 1967 Company Act).

<sup>8</sup> Institutional investors were sleeping giants and did not attempt to monitor or exercise control (Cheffins, 2008, p. 373). Note, however, that even if institutional investors supported one-share-one-vote share structures for the option of becoming active in shaping firm policies, what is crucial here is whether investors' inability of taking an active role in the management of firms translated into weaker firm performance (a conjecture for which we find no empirical support in Subsection 4.2).

<sup>9</sup> Most of the shares with limited-voting rights had no voting rights at all.

*that all equity shareholders should have a voice in the control of the company*” (The Economist, June 1, 1957).

Institutional investors were reported to have developed a “marked distaste” and a “prejudice” against the “undesirable practice” of issuing limited-voting shares. On August 24, 1957, The Economist wrote: *“The growing dislike by many institutions for non-voting shares will be –and indeed already has been— reflected in a widening of the price difference between the voting and non-voting shares where both are quoted.”*

Starting from 1959, we find stories that justify the use of limited-voting shares. For instance, on July 27, 1959, in a public statement, the exchange expressed support for shares with restricted voting rights, especially if they gave right to a preferential payment of dividends. Another story published on November 13, 1959 by the Times of London justified the use of dual class shares on the ground that nobody is obliged to buy limited-voting shares. Acceptance of dual class shares was reinstated by the Jenkins Committee, which in the summer 1960 argued that it may be desirable that control is retained by insiders, especially in small family firms. The Institute of Directors, the Board of Trade, the Institute of Secretaries, and the London Stock Exchange also advocated in favor of dual class shares.

The debate then subsided for a few years, but started again in mid-1964. In October 1964, we find a call for a new bill abolishing limited-voting shares and, in the following months, the debate resumed again and substantially followed the same cycle as before.

The debate remained lively in the second half of the 1960s, but it toned down during the 1970s. After 1970, we find a very limited number of news concerning the desirability of limited-voting shares. Dual class shares were now generally viewed as an inferior claim. For instance, the Times on May 30, 1970 reported that *“The pragmatic stock market view is that voting shares*

*deserve to be rated at a premium over non-voting shares*". Similarly, on December 9, 1970, "*the opinion in the City and industry has moved against differential votes*". Taking this evidence in consideration and the fact that most companies had ultimately abandoned dual class share structures, we end our sample period on December 31, 1970.

Our account of the debate makes clear that no new material information that may have affected expectations on the relative returns of voting and limited-voting shares was revealed. No corporate scandals or other major events occurred. Rather, social dynamics, which Shiller (1984) argues may affect investor demand and ultimately stock prices, may have turned to favor securities with voting rights. The opinions reiterated by institutional investors may capture this social dynamics. Besides reflecting the preferences of some institutional investors, these opinions may have affected the preference and demand for voting shares of other market participants (including retail investors).<sup>10</sup> In what follows, we provide a simple framework describing how changes in investor demand unrelated to fundamentals are expected to affect the use of dual class shares.

## **2. Conceptual Framework**

This section provides a conceptual framework to study how changes in the relative valuations of single and dual class shares should be related to a firm's decision to have dual class shares under different theories.

According to classic corporate governance theories (e.g, Zingales,1994), an increase in the one-share-one-vote premium is expected to be related to an increase in the extraction of private benefits of control. It is easy to show that, *ceteris paribus*, changes in the economic

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<sup>10</sup> Put differently, our empirical analysis does not rely on institutional investors being marginal investors precisely because the debate may have affected the preferences of retail investors.

environment leading to more extraction of private benefits should increase insiders' utility from dual class shares. Hence, we should observe a negative correlation between share unifications and the one-share-one-vote premium if an increase in the latter captures an increase in the extraction of private benefits of control.

To see this, consider the mechanism of a standard model in which a firm chooses the quality of corporate governance in order to maximize its payoff (Dojige, Karolyi and Stulz, 2004). By entrenching control, dual class shares allow the manager to extract more private benefits of control. For simplicity, the manager of a firm with single share class is assumed not to be able to extract private benefits of control.

The manager's payoff with dual class shares ( $U^D$ ) depends on the private benefits of control,  $B$ , and on the long-term value of the firm ( $V - B - \frac{c}{2}B^2$ ) according to his ownership share,  $\alpha$ :

$$U^D = B + \alpha \left( V - B - \frac{c}{2}B^2 \right).$$

As it is common in the literature (e.g., Burkart, Gromb and Panunzi, 1997), the extraction of private benefits of control is assumed to be inefficient (involves a convex cost  $\frac{c}{2}B^2$ ), where  $c$  is an exogenous parameter. The parameter  $c$  may be thought to increase in the level of investor protection and firm level corporate governance.

Private benefits of control in dual class firms are endogenously determined by maximizing the utility of a manager with dual class shares. From the first order condition, the optimal level of private benefits of control extraction is:

$$B^* = \frac{1 - \alpha}{\alpha c}.$$

Thus, extraction of private benefits of control depends negatively on the exogenously given managerial ownership and on the cost of extracting private benefits of control,  $c$ . A decrease in  $c$  increases  $B^*$  and the utility from dual class shares. The utility with a single share class is always  $U^o = \alpha V$ .

The relative price of firms with dual class shares reflects the ratio of the cash flows distributed to the (outside) shareholders of firms with single and dual class shares, respectively:

$\frac{V}{(V - B^* - \frac{c}{2}B^{*2})}$ . It is easy to demonstrate that a lower cost of extracting private benefits of control,  $c$ ,

by increasing  $B^*$ , decreases the relative price of dual class shares. Since the latter increases the utility from having dual class shares, *ceteris paribus*, a firm should be less likely to unify its share classes when a decrease in  $c$  leads to an increase in  $B$ .

Let's now consider the implications of changes in uninformed investor demand, driven by changing norms of corporate governance, but unmotivated by fundamentals (including extraction of private benefits of control). The investor demand hypothesis covers also narratives suggesting that investors trust and therefore value more firms with one-share-one-vote although there is no evidence that managers of dual class firms extract (more) private benefits of control or destroy shareholder value. Quite to the contrary, dual class shares could maximize of shareholder value (as implied by several theories surveyed by Burkart and Lee, 2008).

We assume that uninformed investor demand affects the relative price of dual and single class firms because of markets frictions that limit arbitrage.<sup>11</sup> As is common in the literature (Rhodes-Kropf and Viswanathan, 2004; Polk and Sapienza, 2008), we do not model the source of misvaluation.

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<sup>11</sup> We do not model the market frictions limiting arbitrage. They can be thought to be determined in a framework similar to Baker and Wurgler (2004a). This is without loss of generality because managers take firm valuations under different share structures as given when making corporate decisions.

The payoff of the manager of a firm with dual class shares and future cash flows,  $V$ , is:

$$U^D = \alpha V + (1 - \lambda)p^D V$$

The manager's payoff ( $U^D$ ) depends on the long-term value of the firm ( $V$ ) according to his ownership share,  $\alpha$ . As is typical in behavioral corporate finance catering models (e.g., Baker and Wurgler, 2004; Polk and Sapienza, 2008), the manager also gives a weight  $(1 - \lambda)$  to the current market valuation of the firm's cash flows, which are valued relative to firms with single class shares at price,  $p^D$ .<sup>12</sup> As explained before, the current market valuation is affected by non-fundamental investor demand. The long-term (fundamental-driven) relative valuation of single and dual class firms is one.

The utility weight  $(1 - \lambda)$  is an exogenous preference parameter. There are different ways to rationalize why the manager's payoff may depend on the firm current valuation. First, the compensation of the manager is likely to depend on the firm's current valuation. Second, undervalued companies may be subject to takeovers or negative media coverage, which may induce a positive correlation between firm valuation and managerial utility.

We normalize the price for one unit of cash flows of single class firms to  $p^0=1$ . The payoff of a manager of a firm with a single share class, is therefore:  $U^o = (\alpha + (1 - \lambda))V$ .

As before, managers choose firm share structures to maximize their payoffs. When a demand shock decreases the relative price of dual class shares,  $p^D$ , managers will choose to unify their share classes if the weight  $(1 - \lambda)$  on the current market valuation of the firm's cash flows is sufficiently high. This yields a negative correlation between proportion of dual class shares and premium on one-share-one-vote.

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<sup>12</sup> Our  $p^D$  must be interpreted precisely as the parameter measuring mispricing in Polk and Sapienza (2008).

In summary, *ceteris paribus*, an increase in the one-share-one-vote premium due to an increase in  $B^*$  is positively correlated with the proportion of dual class firms, the opposite of what occurs if managers have a catering motive and uninformed investors' demand changes. In what follows, we use these empirical predictions to guide our empirical analysis.

### **3. Data Sources and Sample Construction**

We construct a new historical dataset on dual class shares in the UK. We start from a list of companies listed in the London Stock Exchange (LSE) from the London Share Price Database (henceforth, LSPD). The LSPD provides share prices for all the largest companies listed on the London Stock Exchange plus a random 33% of the remaining firms. The LSPD has been widely used in existing historical studies (see, for instance, Dimson, 1979) and does not suffer from survivorship bias.

We hand-collect stocks' voting rights on an annual basis from 1950 to 1970 for all firms listed in the sections "Commercial and Industrial" of the Stock Exchange Official Yearbook. The Yearbook was first published in 1875 with the purpose of providing information on joint stock limited liability companies quoted in the London Stock Exchange. It is regarded as the most authoritative source of information on the matter. The Stock Exchange Yearbook also allows us to identify firms issuing limited-voting shares and unifying their shares classes into a single class of voting shares.

We provide variable definitions and descriptive statistics in Table 1. Slightly over 12% of the dual class firms in our sample issued limited-voting ordinary shares or participating preference shares (Slightly over 10% of the limited-voting ordinary shares and participating preference shares were participating preference shares). The rest of the dual class firms issued

non-participating preference shares. All limited-voting shares either carried no voting rights or granted voting rights only in specific sets of issues and circumstances, such as the liquidation of the company or a significant delay in the payment of the preferential dividend.

We consider both limited-voting ordinary shares and preference shares in our analysis because the latter are generally treated as equity without voting rights even when they have no right to participate in further dividends distributions (see, for instance, Faccio and Lang (2002) and, for the historical period we consider, Franks, Mayer and Rossi, 2009).<sup>13</sup> Theoretically, this is the case because preference shares have two important features of equity contracts: The claims of preference shareholders are not redeemable (Fluck, 1998) and firms' inability to pay dividends does not trigger default. Since no market participant or regulator ever called for preference shares to be banned, as we show below, the fact that our results are similarly strong for limited-voting ordinary shares and preference shares provides further strong support to our conclusion that changes in investors' uninformed demand for voting shares matter.

We hand-collect prices and dividends of limited-voting shares at monthly frequency, starting January 1950 and ending December 1970 from the London Stock Exchange Daily Official List, available at the Guildhall Library in London. We also hand collected monthly prices and dividend of voting shares between 1950 and 1954 and obtain prices and dividends of ordinary voting shares at a monthly frequency starting from January 1955 from the LSPD.<sup>14</sup> We record dividends, par value of shares and bid and ask prices in the last trading day of the month. We compute the price of limited-voting shares as the average of the bid and ask prices at the end of the month (as we do for the price of voting shares).

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<sup>13</sup> Consistent with the notion that preference shares were treated as equity by investors and firms, a significant number of companies quoted in the London Stock Exchange had preference shares carrying full voting rights. We do not include preference shares with full voting rights in our analysis.

<sup>14</sup> The LSPD compiles the prices of voting shares from London Stock Exchange Daily Official List, the same source we use, starting from 1955.



Finally, for some of our tests, we merge the information on share prices with the Cambridge/DTI Databank (Meeks and Wheeler, 1999), which provides financial statements and other firm-specific information for UK publicly quoted companies in the commercial and industrial sectors. Table 1 summarizes the main variables in the analysis and provides precise definitions.

#### **4. Investor Demand and Dual Share Structures**

##### *4.1. Measuring Relative Valuations*

Measuring the relative valuations of firms with single and dual class shares is challenging. The most straightforward proxy, based on Baker and Wurgler (2004a), would be the difference in the average market-to-book ratios of single and dual class firms (henceforth, the *one-share-one-vote premium*). A concern with this proxy is that changes in the relative prices of single and dual class firms may capture changes in firm characteristics other than changes in private benefits or investor demand.<sup>15</sup>

To focus on variation in relative valuations driven by private benefits of control or investor demand, we would like to measure the premium attributed to one-share-one-vote firms using differences in the market prices of identical firms with different share structures. In this case, the premium would abstract from time-varying differences in other firm characteristics and capture either private benefits of control or changes in investor demand. We could thus directly test the implications of the theory.

To get closer to this ideal measurement, we use two alternative proxies. First, we construct proxies based on the measures developed in Rhodes-Kropf, Robinson, and

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<sup>15</sup> Hoberg and Prabhala (2008) move such a criticism to the proxy used by Baker and Wurgler (2004a and 2004b) for explaining dividend payouts.

Viswanathan (2005), Pastor and Veronesi (2003) and Hoberg and Phillips (2010) and used in much recent work examining misvaluation. In particular, we first estimate a firm level valuation model pooling all firms and years in our sample and regressing a firm's market to book ratio on the firm's size, age, leverage, standard deviation of stock returns, dividend payout ratio and industry dummies. We then use monthly data to compute the market to book ratio. For each firm, the valuation error in a month is the deviation of the firm's actual market valuation in a month from its predicted value. To obtain the relative valuation of single and dual class firms, we average the valuation error within each group of firms and take the difference between single and dual class firms. Since our empirical model specification is closest to Hoberg and Phillips (2010), we refer to this variable as *HP Relative Valuation*. This variable allows us to capture differences in the relative valuations controlling for firm characteristics.

Second, we define the *voting premium*, which we compute as the price of a voting share issued by a firm minus the price of a limited-voting share issued by the same firm, divided by the price of the limited-voting share, following Zingales (1995). Since this variable is defined only for firms that issue limited-voting shares, we take the average across all dual class firms in our sample. Conceptually, the voting premium captures differences in the value of shares of the same firm. While this allows us to isolate changes in relative valuations arising from private benefits of control or investor demand, the voting premium may understate investors' demand for one-share-one-vote as also the voting shares of dual class firms may be undervalued if investors dislike dual class share structures.

All three proxies show that differences in valuations between single and dual class shares were close to zero up to the mid-1950s, with quarters in which firms' dual class shares (and limited-voting shares) appeared to be valued more than single class firms (and voting shares). All

proxies spike by over 100% in the second half of the 1950s and remain elevated up to the beginning of the 1960s, when they drop by approximately 50%. The relative valuations of single class firms (and voting shares) increase again in the second half of the sixties and remain at high levels for the rest of the sample.

In what follows, we explore whether these changes in relative valuations help explaining firms' decisions to have dual class shares.

#### *4.2. Relative Valuations and the Proportion of Dual Class Firms*

We start by documenting the historical evolution of the proportion of dual class firms and how this relates to different proxies for the relative valuations of single and dual class firms.

We explore whether in quarters in which the relative valuations of single class firms are higher the proportion of dual class firms decreases, as a catering motive would imply. We aggregate data at the quarterly level rather than using monthly frequency, as we do in other parts of the analysis, because it takes some time for firms to change their share structures.<sup>16</sup>

Column 1 of Table 2 shows that the proportion of firms with limited voting shares drops when the one-share-one-vote premium is high. This result is not only statistically significant but also economically large: a one-standard-deviation change in the one-share-one-vote premium is associated with a drop in the proportion of dual class firms of over 60% of a standard deviation. Column 2 and 3 show that the negative correlation between proportion of dual class firms and relative valuations emerges also when we use the two alternative measures for relative valuations, mitigating concerns that we may be capturing differences in firm characteristics, other than private benefits of control or investor demand. In column 2 and column 3, a one-standard-deviation increase of both HP relative valuation and the voting premium is associated

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<sup>16</sup> For doing so, we take the average of the relative valuations proxies over the quarter.

with nearly half of a standard deviation drop in the proportion of dual class firms indicating that changes in firm characteristics are unlikely to drive our findings.

The findings in columns 1 to 3 are consistent with the hypothesis that swings in investor demand, driven by changing norms of strong corporate governance, are associated with firms' propensities to use dual class shares; they reject explanations that rely on private benefits of control.

In the rest of the table, we test whether one of our two most conservative measures of misvaluation, HP relative valuation, can explain changes in the use of one share one vote. It appears that the proxies for relative valuation can explain not only the stock of dual class firms, but also the flows. In column 4, we related the number of share unifications in a quarter to HP relative valuation. As expected, more firms unify their share classes when the relative valuation of single class firms is higher. A one-standard-deviation change in the measure of relative valuation explains nearly 30% of the standard deviation of the unifications.

Importantly, this result indicates that our findings are not uniquely driven by changes in sample composition. For instance, the fact that firms actively unify their share classes indicates that the negative relation between one-share-one-vote premium and proportion of dual class firms is not due to the acquisition (and exit) of dual class firms.

Confirming that the dynamics of limited-voting ordinary shares are similar to those of preference shares, we find a positive and statistically significant relationship between HP relative valuation and unifications involving only limited-voting ordinary shares (column 5). The result is also economically significant: a one-standard-deviation change in the relative valuation measure explains about 25% of the standard deviation of unifications.

In the same vein, in column 6, we consider the number of firms that issue limited-voting shares for the first time during a quarter. Also in this case, a one-standard-deviation increase in HP relative valuation is associated with a drop in the number of firms issuing limited-voting shares, equivalent to almost 26% of the standard deviation of this variable. In column 8, we consider the number of firms that issued limited-voting ordinary shares, and again, we find a negative relationship with the relative valuation of single class firms. A one-standard-deviation change of the proxy explains about 25% of the standard deviation of the issuances.

The results of the time series tests are confirmed when we consider the cross-sectional dimension of our data. Unfortunately, we are unable to consider share unifications because we have accounting information on a restricted sample of firms.<sup>17</sup> Table 3 relates the probability of a firm having a one-share-one-vote share structure in a certain year with the one-share-one-vote premium and the other relative valuations proxies. In these specifications, we can control for firm characteristics and various measures of firms' risk, which have been considered an alternative explanation to the dividend catering hypothesis (Hoberg and Prabhala, 2008). We continue to find that as the valuation of one-share-one-vote firms increases vis-à-vis the valuation of dual class firms, firms become more likely to have one-share-one-vote share structures.

#### *4.3 Relative Valuations and Corporate Policies*

Another implication of the hypothesis that firms abandon dual class shares because of a catering motive is that dual class shares should not affect negatively firm performance and

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<sup>17</sup> Using the Stock Exchange Yearbook, we are able to identify all firms that either unified their shares or issued limited voting shares. Unfortunately, very few of these firms have accounting information available in Cambridge DTI databank. As a result, we are unable to systematically check differences in ex-ante characteristics of firms that change their voting structures and to include firm fixed effects.

corporate policies. We rather expect firms to be undervalued because of changes in uniformed investor demand.

We explore the effect of dual class shares on firm performance. We distinguish between years in which the one-share-one-vote premium is above and below the sample median for the following reason. If the one-share-one-vote premium captures the suboptimality of dual class shares, we would expect firms with dual class shares to be less profitable and to have different investment policies in high premium periods.

Table 4 shows how having a one-share-one-vote structure is associated with firm profitability, investment, leverage, and board turnover.<sup>18</sup> We find no evidence that in high premium periods firms with dual class shares pursue different policies or perform better than other firms. If anything, firms with one-share-one-vote share structures invest more and have higher leverage than other firms in low premium periods. Thus, the benefits from having one-share-one-vote share structures on investment and access to financial loans are if anything lower, not higher, during high premium periods.

These findings indicate that our results cannot be explained by differences in firm growth opportunities, or in the ability to seize growth opportunities, of firms with different share structures. The results are consistent with the catering hypothesis, because firms for which it is relatively less desirable to have one-share-one-vote structures are expected to adopt this governance structure to cater to investor tastes during high premium periods.<sup>19</sup> Thus, the association between single class share structures and firm performance becomes weaker.

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<sup>18</sup> We do not consider the market to book ratio because we aim to understand whether some firms are misvalued.

<sup>19</sup> This result resembles the finding of contemporaneous work by Cremers, Litov and Sepe (2014), who question the common wisdom that staggered boards reduce firm value. These authors show that the valuations of firms that de-stagger their boards when many other firms do so decrease. Our paper contribution is to propose and provide evidence that these patterns may be due to a catering motive.

The fact that firms with dual class shares do not perform worse when their relative valuations are low also allows us to exclude a possible alternative explanation of the results in Table 2. The negative association between proportion of dual class firms and one-share-vote premium may arise if only firms with the highest private benefits of control have dual class shares when dual class shares are most pernicious. Since when the premium is higher, dual class firms do not appear to perform worse, we can exclude this explanation.

Finally, the findings in Table 4 also indicate that dual class firms do *not* take more risk as if anything they have lower leverage and invest less as is consistent with McGuire et al (2014). This is important for the interpretation of the return predictability tests in Subsection 5.3.

## **5. Positive Evidence on the Determinants of the Premium Proxies**

In this section, we provide evidence on the determinants of the measures of relative valuation by relating the tone of the debate on dual class shares to the premium proxies.

### *5.1. Classifying the News Coverage of Dual Class Shares*

To evaluate whether the debate on dual class shares is related to the relative valuations of single and dual class firms, we perform a systematic search of the Times of London Digital Archive and the Financial Times Historical Archive for news regarding dual class shares using the words “non-voting shares”, “voteless shares”, “restricted voting rights”, and “limited-voting rights” from 1950 to 1970. The terminology “dual class shares” was not used at that time and yields no results. Our systematic news search yields 1,275 news from the Financial Times and 612 news from the Times of London, that is, a total of 1,887 news.<sup>20</sup>

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<sup>20</sup> To give a sense of the salience of the debate, we performed the same search in the Times of London and the Financial Times between 1998 and 2013. The search yields 458 news, notwithstanding the number of pages and the international coverage (especially of the Financial Times) have increased dramatically between 1955 and 2004. Furthermore, the tone of the news in the more recent period exhibits no swings. The news mostly concern specific

We quantify the tone of the news on dual class shares, similarly to Tetlock (2007) and Garcia (2013). First, we read all news in chronological order and exclude any news related to specific companies, their handling of limited-voting shares, share unifications, or problems regarding the issuance of limited-voting shares. We focus on a subset of news that are opinions of public figures, such as institutional investors, the Board of Trade, or Members of Parliamentary Committees. Such news unequivocally reinstate known opinions on the desirability of dual share structures and provide no new fundamental information.

After transforming the scanned news images into text using the ABBYY software, the leading package in optical character recognition (OCR) processing, we feed the text files into the Pennebaker et al. (2007) linguistic inquiry and word count (LIWC) software.<sup>21</sup> The program automatically processes text files and analyzes their content based on an internal dictionary. In particular, it computes scores measuring the degree positivity and negativity in each article by counting the number of words related to positive and negative emotions.

The program's default dictionary contains 500 words measuring negative emotions and 405 words identifying positive emotions. However, the built-in dictionary may not well represent the degree of negativity and positivity in a finance context. For this reason, we also classify the tone of the news using the dictionary of Loughran and McDonald (2011), which was specifically built to capture negative and positive emotions in a finance context. Using the two alternative dictionaries yields similar results and, for brevity, we only present results using scores based on the built-in dictionary.

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companies and, less often, crystallized views on dual class shares. As we show below, variation in the tone and volume of the news are substantial in our sample period.

<sup>21</sup> Once the conversion was completed, we had to resolve two additional problems. First, in some instances, the scanned images contained several articles, but only one (or few) of them displayed the desired keyword. In these cases, we manually extracted the relevant article(s). Second, while the quality of the transcription was generally good, the accuracy of OCR processing was low for some images. In these cases, we manually corrected the transcription errors.



Our final indexes of negative (positive) news coverage are obtained by summing the negative (positive) scores attributed to the news published during each month. In this way, we not only capture the emotion intensity, but also the intensity of the debate. The scores measuring negative and positive emotions in the news on dual class shares have a coefficient of correlation of nearly 80% because positive opinions on dual class shares were voiced when the criticisms were strongest.

For this reason, our analysis relies on two alternative indexes. First, we use the score of negative emotions, *Negative News Score*, to capture the negativity and intensity of the press coverage of dual class shares. Second, we define an index, *News Intensity*, which sums *Negative News Score* with the corresponding score of positive emotions. This second index aims to capture the intensity of the tones and the volume of the debate on dual class shares. We explore to what extent these two indexes can help explain the changes in relative valuations of single and dual class firms.

### *5.2 Determinants of Dual Class Shares Negative News coverage*

We start by exploring the determinants of the two proxies for the intensity and the tone of dual class shares news. We test whether negative news coverage of dual class shares follows increases in the proxies for the relative valuations of single and dual class shares using several lags of these proxies.

We also relate news coverage of dual class shares to market conditions and, more in general, systematic risk factors using the market return and the Fama-French factor portfolios, small-minus-big and high-minus-low.<sup>22</sup> Since the premium proxies may capture limited-voting

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<sup>22</sup> Following Fama and French (1993), we construct the small-minus-big portfolio by classifying firms with market value above the median as “big” and firms with market value below the median as “small”. Similarly, the low-minus-high portfolio is constructed by classifying firms with market-to-book ratio above the 70<sup>th</sup> percentile as

shareholders' dissatisfaction for differential treatment after takeovers, we construct a factor capturing firms' acquisition activities as the number of acquired and delisted firms in the current and following three months.<sup>23</sup>

Table 5 shows that none of these factors is associated with negative news coverage of limited-voting shares. Also, negative news coverage of limited-voting shares does not simply follow an increase in the premium proxies.

These results indicate that changes in private benefits of control, which should have been associated with acquisition activities, are unrelated to the debate on dual class shares and, more generally, confirm that our findings cannot be driven by changes in private benefits of control. The findings are also unsurprising as market conditions or takeover activities were never mentioned in the press in connection to limited-voting shares. Arguably, the tone and the intensity of the debate reveal how some investors viewed limited-voting shares and how they may have changed the views of other investors. It is thus interesting to ask how the debate is related to the relative price of these securities.

### *5.3 Media Coverage and Relative Valuations*

#### *5.3.1 Aggregate Evidence*

Table 6 relates the monthly time series of the one-share-one-vote premium, HP relative valuation and the voting premium, all measured at the end of the month, to our two proxies for the intensity and tone of the debate on dual class shares during the month. While we present results for all three measures of relative valuations, in what follows, we concentrate on the voting

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“high” and firms with market-to-book below the 30<sup>th</sup> percentile as “low”. Portfolios are rebalanced at the beginning of each year.

<sup>23</sup> Franks and Harris (1989) indicate that this was nearly the maximum amount of time lapsing between the announcement of an acquisition and its completion.

premium because by comparing the prices of voting and limited-voting shares for the same firms, our estimates are less likely to be affected by changes in firms' characteristics.

Since extraction of private benefits of control by insiders may change over the business cycles (Lemmon and Lins, 2003), we control for changing market conditions including the market return and the Fama-French factor portfolios, small-minus-big and high-minus-low, in all specifications.

We also consider that limited-voting securities, especially if benefiting from preferential treatment, may have features that make them more similar to debt. If the returns of fixed income securities were somewhat correlated with the tone of the debate on dual class shares, this could bias our findings. We control for the inflation rate and the aggregate returns of debentures, a type of fixed income security that was highly popular for corporate financing during this period, at yearly frequency from Coyle and Turner (2013).<sup>24</sup>

Both proxies for the tone and the intensity of the debate appear to be positively associated to the one-share-one-vote premium, the HP relative valuation measure, and the voting premium. The effects are also economically significant: In column 1 (5), a one-standard-deviation change in the intensity and volume of negative emotions explain nearly 20% (19%) of the one-share-one-vote premium's (voting premium's) standard deviation. The economic magnitudes are even larger when we consider the polarization of the debate, using the proxy NEWS (Table 6, columns 3 and 6). In column 6, a one-standard-deviation change in this variable explains more than a quarter of a standard deviation of the voting premium.<sup>25</sup>

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<sup>24</sup> In unreported robustness checks, we use the UK Bond returns index of Dimson et al (2002) instead of the Coyle and Turner (2013) index as a measure of fixed income securities returns. While the Coyle and Turner (2013) index is based on the returns of corporate fixed income securities, the Dimson et al. (2002) index is based on the returns of Treasury Bills. Our results are invariant.

<sup>25</sup> In unreported results, we also find a negative association between negative news coverage/news intensity and the proportion of limited-voting shares.

In column 4 and 7, we further take into account that, during the 1950s, an active market for corporate takeovers emerged in the UK (Cheffins, 2008, pp. 307-308). Since bidders could acquire a target purchasing only voting shares at a premium up to 1968, this could have affected the voting premium (Megginson, 1990). Therefore, we control for takeover activity. As expected, the acquisition factor is positively associated with the one-share-one-vote premium. However, including this control leaves unaffected the effect of the Negative News Score.<sup>26</sup>

### *5.3.2 Firm Level Evidence*

To provide additional evidence that the effect of news coverage is driven by changes in non-fundamental investor demand, we evaluate the cross-sectional effects of the Negative News Score on the voting premium in a firm level analysis. This analysis is only possible for the voting premium, which provides a measure of relative valuation at the firm level. Understanding which firms are most affected gives us further insights on the mechanisms leading to the association between negative news coverage and relative valuations.

In Panel A of Table 7, we reproduce the aggregate level results including a wider set of controls. Throughout the analysis, we control for differences in dividend payouts and liquidity between voting and limited-voting shares of the same firm (Bailey, 1988). While differences in liquidity are highly significant and indicate that the voting premium is smaller if voting shares are less liquid, it does not appear that differences in dividend payouts affect the voting premium. We also include year fixed effects to capture that the volume of news may differ from year to year.<sup>27</sup>

In columns 1 to 3, both proxies for the negative coverage of dual class shares are associated with a higher end-of-month voting premium. In column 1, a one-standard-deviation

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<sup>26</sup> Results are equally invariant if we exclude any firms that are target of a takeover, further confirming that the debate is unlikely to be related to the takeover market.

<sup>27</sup> In all tests, we cluster errors at the firm level. Results are invariant if we also cluster at the time level.

increase of the Negative News Score leads to a 26% increase of the voting premium with respect to its median value. The coefficient of the negative news coverage remains unaltered in column 3 when we absorb time-invariant firm heterogeneity by including firm fixed effects. This result suggests that any firm attributes that are slow to change, such as ownership structure, are unlikely to explain our findings. It is also consistent with the evidence that corporate ownership was already highly dispersed and therefore unlikely to be related to the voting premium. This conclusion is further supported by the fact that in column 6 a firm's age, which is known to be negatively related to ownership concentration, is not statistically significant.

Some may argue that the benefits of non-participating preference shareholders are capped and that these securities therefore are more similar to debt. To address such a concern, in columns 4 and 5, we consider the voting premium for limited-voting ordinary shares and participating preference shares in two different subsamples.<sup>28</sup> The tone of the debate appears to have a similar effect on limited-voting ordinary shares and preference shares.

This is consistent with the fact that both types of shares carried high dividend yields, had limited-voting rights, and contributed capital in perpetuity, a feature that in the public debate was considered to have to be associated with voting rights (see, for instance, *The Economist*, April 14, 1956). However, proposals for enfranchising limited-voting shareholders or banning future issues of limited-voting shares only entailed ordinary shares as preference shares had right to a preferential dividend. The fact that limited-voting ordinary shares and preference shares were similarly affected by the debate indicates that fear of regulations hurting limited-voting shareholders cannot explain our findings and suggests that prejudice against limited-voting shares matter. It also confirms that preferential dividends and the fact that dividend payments

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<sup>28</sup> Participating preference shares are considered equivalent to limited-voting ordinary shares in all studies on the voting premium (see, for instance, Nenova, 2003).

were capped for non-participating preference shares cannot explain why the dynamics of the voting premium is related to the tone of the debate.

In column 6, we further control for firm heterogeneity by including controls for firm age, market capitalization, leverage, and cash holdings. We also control for firm corporate governance, by considering board turnover, a variable that we expect to be negatively correlated with entrenchment of control, and a dummy that takes value equal to one for family firms. It is evident that the effect of negative news coverage on the voting premium remains unchanged, suggesting that changes in firm characteristics and sample composition do not drive our results.

In column 7, we consider an additional proxy for the voting premium that takes into account the number of votes each share grants and the differences in cash flow rights between voting and limited-voting shares.<sup>29</sup> The results we obtain are similar to those obtained in the benchmark case.

In Panel B, we interact the Negative News Score with firm characteristics. In column 1, the effect of negative news coverage on the voting premium does not appear to depend on the difference in liquidity between voting and limited-voting shares, indicating that different exposure to liquidity risk of voting and limited-voting shares cannot explain our findings.

If negative news coverage of dual class shares led the prices of voting and limited-voting shares to diverge in a way that is not warranted by fundamentals, we should observe that the effect of negative news coverage on the voting premium is larger for stocks that are riskier to

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<sup>29</sup> To correct for differences in cash flow rights, following Zingales (1994), we use the following definition of the voting premium:  $\frac{1}{(n_v - n_{nv})} \frac{(P_v - P_{nv})}{P_{nv}} - \frac{\varepsilon}{\rho P_{nv}}$ , where  $P_v$  ( $P_{nv}$ ) is the price of a voting (limited-voting) share,  $n_v$  ( $n_{nv}$ ) is the number of votes of voting (limited-voting) shares,  $\varepsilon$  are the cash flow rights of limited-voting minus the cash-flow rights of voting shares, and  $\rho$  is the discount rate. We compute the discount rate as the average monthly return of all stocks listed in the London Stock Exchange between 1955 and 1970.

arbitrage. Arbitrage would involve buying limited-voting shares and shorting voting shares. The risk of such arbitrage is larger for firms with volatile returns or illiquid stocks, as it is potentially more costly to unravel the position if needed (Barberis and Thaler, 2003). In column 2, we measure the illiquidity of a firm's stocks using the sum of the bid ask spreads of voting and limited-voting shares. We define a firm to have illiquid stocks if this variable is in the top tercile. The effect of negative news coverage appears to be stronger for firms with more illiquid stocks. In column 3, the positive effect of negative news coverage on the voting premium appears to be driven by stocks with highly volatile returns. These findings that the effect of the negative news score are larger for firms with high arbitrage costs support the notion that changes in the voting premium following negative news coverage are unrelated to fundamentals.

#### *5.4. The Relative Returns of Voting and Limited-voting Shares*

This subsection presents a more direct test to explore whether changes in premiums indeed capture uninformed investor demand or some omitted factor that rationally affects future expectations on the cash flows accruing to voting and limited-voting shareholders. If the relative prices of voting and limited-voting shares were correct, we should observe that current prices do not predict the returns of voting and limited-voting shares, precisely because any information should have already been incorporated in prices. Even if news were slowly incorporated into prices, we would expect that the returns of voting shares are higher than those of limited-voting shares following periods with negative news coverage and high voting premium.

If instead months with negative news coverage and high voting premium were followed by systematically lower returns for voting shares than for limited-voting shares, voting shares would be revealed to be overvalued with respect to limited-voting shares.

The results in Table 8 strongly support the latter hypothesis. In columns 1 to 3, the dependent variable is the average monthly return over a quarter of a value-weighted portfolio long voting shares and short limited-voting shares. In columns 4 to 6, the dependent variable is the average monthly return over a quarter of a value-weighted portfolio long one-share-one-vote firms and short dual class firms.<sup>30</sup> Following months of high voting premium and more intense negative news coverage, we find that the voting shares (one-share-one-vote firms) portfolio has systematically lower returns than the limited-voting shares (dual class firms) portfolio. The results are similar for both proxies for negative news coverage (although in column 5 the effect of the Negative News Score is not statistically significant at conventional levels).

The effects are also large from an economic point of view. In column 1, a one-standard-deviation increase in the voting premium leads to a nearly 4.5 percentage points lower monthly return for the portfolio of voting shares relative to non-voting shares. In column 2, a one-standard-deviation increase in the bad news score decreases the monthly return of voting shares relative to limited-voting shares by 1 percentage point.

Importantly, the predictable differences in returns we highlight are hard to explain using differences in risk exposure. In columns 1 to 3, we compare portfolios of stocks issued by the same firms, which should ultimately have similar risk exposure. In columns 4 to 6, we compare the returns of different firms. However, from the results in Table 4, we know that dual class firms do *not* take more risk than other firms, suggesting that differences in exposure to risk cannot drive the findings.

The predictable differences in returns highlighted in Table 8 suggest that market participants over-react to negative news coverage of dual class shares and that the changes in the

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<sup>30</sup> The portfolio construction is described in the caption of Table 8.



relative price of voting and limited-voting shares are then reversed in the following months. Put differently, voting shares and firms with one-share-one-vote share structures appear overvalued in periods with high voting premium and high negative news coverage of dual class shares.

## **6. Conclusions**

This paper shows that firms are more likely to abandon dual class share structures in periods in which one-share-one-vote firms have higher relative valuations. We find no evidence that companies with dual class shares have worse performance during these periods. It appears instead that a heated public debate about the use of dual class shares is an important determinant of single and dual class firms' relative valuations and that it affected negatively firms' ability to use dual class shares.

Our results suggest that investor demand may affect firm cost of capital and corporate governance, even if this is not justified by fundamentals and if current arrangements are not harmful for shareholder value. Put differently, social dynamics may cause corporate governance fads for listed companies. This could potentially explain why an increasing number of firms choose to go private and escape the limelight as well as the costs associated with public listings.

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**Table 1: Descriptive Statistics and Variable Definitions***Panel A. Quarterly Variables*

Variables	Definition	Mean	Median	Sd. Dev.	N
New Dual Class Firms – Full Sample	Number of one-share-one-vote firms issuing limited-voting shares in a quarter	2.65	2	1.94	84
New Dual Class Firms – Ordinary Non-Voting	Number of one-share-one-vote firms issuing limited-voting ordinary shares in a quarter	1.02	1	1.29	84
Proportion of Dual Class Firms	Number of dual class firms in a quarter, divided by the total number of firms in the same quarter	0.602	0.610	0.043	84
Unifications – Full Sample	Number of firms that unify their shares into a single class of voting shares during a quarter,	2.46	2	2.16	84
Unifications – Ordinary Non-Voting	Number of firms that unify their limited-voting ordinary shares into a single class of voting shares during a quarter	0.57	0	0.75	84

*Panel B. Firm-Year Variables*

Variables	Definition	Mean	Median	Sd. Dev.	N
Age	Firm age, defined as the current year minus the firm's year of birth, provided by the Cambridge DTI databank	7.957	5.500	7.486	9894
Board Turnover	The proportion of a firm's directors that are replaced or dropped during two years	0.148	0.125	0.168	2054
CEO Turnover	A dummy variable that equals 1 if the firm's CEO is replaced during two years	0.330	0.000	0.470	1281
Family Firm	A dummy variable that equals 1 if a firm is a family firm; Firms are defined as family firms if in their name appears the name of an individual, or the expressions "& brothers", "& sons" "& nephews"	0.203	0.000	0.402	9894
Investment	Expenditures (less receipts) in tangible (var37) and intangible assets (var38) plus trade investments and investments in subsidiaries (var39), divided by book value of assets at the beginning of the year.	0.067	0.043	0.133	9738
Leverage	Long-term liabilities (var8 in the Cambridge DTI databank) plus bank debt and overdrafts (var9 in the Cambridge DTI databank), divided by total capital and reserves	0.389	0.125	0.673	9894
One-Share-One-Vote	A dummy variable that equals 1 if the firm has a one-share-one-vote share structure, and zero otherwise	0.173	0.000	0.378	9894
ROA	Total profits (var66 in the Cambridge DTI databank), divided by total capital and reserves (var60 in the Cambridge DTI databank) plus total liabilities (var61 in the Cambridge DTI databank).	0.136	0.140	0.079	9894
Return	The firm's annual stock return, as reported by the	0.008	0.006	0.027	5319



London Share Price Database

Size	The firm's book value of assets (in thousands of Pounds)	16.646	2.737	80.480	9894
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*Panel C. Firm-Month Variables*

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Variables	Definition	Mean	Median	Sd. Dev.	N
Acquisition Target	A dummy variable that equals 1 between a firm's acquisition announcement and completion	0.006	0.000	0.079	67935
Cash to Asset Ratio	Cash (var21 in the Cambridge DTI databank) plus marketable securities (var19 in the Cambridge DTI databank) held by the firm, divided by the book value of assets	0.088	0.055	0.096	59590
Dividend Voting minus Dividend Non-Voting	Difference of the annual dividends (expressed as a percentage of the par value of shares) paid by voting and limited-voting shares	0.035	0.020	0.200	67395
Firm Voting Premium	The price of a voting share issued by a firm minus the price of the limited-voting share issued by the same firm, divided by the price of the limited-voting share.	0.441	0.044	1.489	52542
Illiquid Stock	Sum of the bid-ask spread of voting and limited-voting shares	0.041	0.033	0.029	52207
Liquidity Voting minus Liquidity Non-Voting	Difference between the bid-ask spread of voting and limited-voting shares	-0.001	-0.005	0.035	52542
Market Value	Total market value of the firm's ordinary shares, as reported by the London Share Price Database (in thousands of pounds)	16.454	4.000	66.284	42732
Returns Volatility	Sum of the standard deviation (computed over five years) of the returns of voting and limited-voting shares	0.223	0.127	0.714	57835

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*Panel D. Monthly Variables*

Variables	Definition	Mean	Median	Sd. Dev.	N
Acquisition Factor	The number of acquired and delisted firms in the current and following three months.	17.729	16.000	8.710	192
Bond index return	Annual return of corporate debentures in nominal terms (Source: Coyle and Turner (2013))	0.026	0.023	0.051	192
One-share-one vote returns minus Dual Class Returns	Difference in average quarterly returns of between an value weighted portfolio of one-share-one-vote firms and a value weighted portfolio of non-voting shares	0.002	0.003	0.033	191
High-minus-Low	Difference between the average returns of firms with market to book ratio above the 70th percentile and average returns of firms with market to book ratio below the 30th percentile	-0.004	-0.003	0.014	191
HP Relative Valuation	Difference between misvaluation measures of one-share-one-vote firms and dual class firms. The misvaluation measures are computed according to Hoberg and Phillips (2010) and defined as the difference between firm's actual and predicted market to book ratio. The predicted market to book ratio is the predicted value of a regression where the dependent variable is a firm's market to book ratio and the repressors are firm's size, age, leverage, standard deviation of its stock returns, the dividend payout ratio and industry dummies.	0.250	0.291	0.236	192
Inflation	Annual rate of inflation (Source: Coyle and Turner (2013))	0.036	0.038	0.015	192
Market Return	Value weighted average of returns of all shares in the London Share Price Database	0.007	0.007	0.041	191
Negative News Score	The sum of the LIWC negative emotions scores identifying of each news article on dual class	5.171	3.695	4.893	192

	shares published in a certain month				
News Intensity	The sum of the LIWC negative and positive emotions scores identifying of each news article on dual class shares published in a certain month	41.610	35.015	29.348	192
One-Share-One-Vote Premium	Average market to book ratio of the one-share-one-vote firms minus average market to book ratio of dual class firms	0.22	0.25	0.239	192
Small-minus-Big	Difference between the average returns of firms with market capitalization above the median minus the average returns of firms with market capitalization below the median	0.001	0.001	0.017	191
Voting Premium	Average across dual class firms of the price of a voting share issued by a firm minus the price of the limited-voting share issued by the same firm divided by the price of the limited-voting share	0.451	0.436	0.228	192
Voting Returns minus Non-Voting Returns	Difference in average quarterly returns between a value weighted portfolio of voting shares and a value weighted portfolio of non-voting shares	0.009	0.003	0.068	192

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**Table 2**  
**The proportion of Dual Class Firms and the Relative Prices**

The table presents time series regressions at quarterly frequency. In columns 1 to 3, the dependent variable is the proportion of dual class firms. In column 4 (5), the dependent variable is the number of firms that unify their share classes (their ordinary limited-voting shares). In column 6 (7), the dependent variable is the number of new dual class firms (new firms with ordinary limited-voting shares). Newey-West standard errors adjusted for one lag autocorrelation of the residuals are presented in parenthesis. \*\*\*, \*\*, and \* denote statistical significance at the 1, 5, and 10% level respectively.

Dependent Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Proportion of Dual Class Shares			Unifications		Issuances	
				Full Sample	Ordinary Limited-Voting	Full Sample	Ordinary Limited -voting
One-share-one-vote-Premium	-0.116*** (0.022)						
HP Relative Valuation		-0.103*** (0.024)		3.073*** (0.978)	0.757** (0.296)	-2.116** (0.932)	-1.341* (0.745)
Voting Premium			-0.106*** (0.030)				
Constant	0.619*** (0.005)	0.623*** (0.007)	0.647*** (0.013)	1.892*** (0.272)	0.430*** (0.080)	3.049*** (0.308)	1.274*** (0.238)
Obs	84	84	84	84	84	84	84
R2	0.44	0.30	0.30	0.12	0.06	0.07	0.07

**Table 3**  
**Share Structure and Firm Characteristics**

The unit of observation is the firm year. The dependent variable is a dummy variable that takes value equal to one if the firm has a one-share-one-vote structure and zero otherwise. Standard errors correcting for heteroscedasticity and clustered both at the firm and year level are presented in parenthesis. \*\*\*, \*\*, and \* denote statistical significance at the 1, 5, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
One-share-one-vote Premium (1 year lag)	0.049*** (0.007)	0.045*** (0.009)				
HP Relative Valuation (1 year lag)			0.158*** (0.023)	0.129*** (0.033)		
Non-Voting-Premium (1 year lag)					0.154*** (0.027)	0.123*** (0.033)
Systemic Risk (1 year lag)		-1.507 (5.662)		7.079 (6.016)		3.484 (6.082)
Idiosyncratic Risk (1 year lag)		-0.003 (0.004)		-0.005 (0.005)		-0.006 (0.005)
Log Age	0.074*** (0.020)	0.100*** (0.035)	0.148*** (0.017)	0.164*** (0.029)	0.148*** (0.017)	0.178*** (0.028)
Log Size	-0.016* (0.009)	-0.016 (0.011)	-0.011 (0.009)	-0.012 (0.011)	-0.011 (0.009)	-0.012 (0.011)
Family Firm	-0.000 (0.028)	0.005 (0.039)	0.000 (0.029)	0.006 (0.039)	-0.000 (0.029)	0.006 (0.039)
Leverage	0.026 (0.020)	0.031 (0.024)	0.033* (0.020)	0.038 (0.024)	0.037* (0.020)	0.041* (0.024)
ROA	-0.039 (0.121)	-0.156 (0.165)	-0.030 (0.122)	-0.154 (0.165)	-0.026 (0.122)	-0.169 (0.166)
Constant	0.066 (0.083)	0.005 (0.116)	-0.067 (0.078)	-0.160 (0.106)	-0.109 (0.078)	-0.197* (0.105)
Obs	8873	5869	8873	5869	8873	5869
R2	.121	.109	.108	.0999	.106	.0984

**Table 4**  
**Share Structure and Firm Performance**

The unit of observation is the firm year. The sample includes both firms with and without dual class shares. The dependent variable is indicated in each column. Columns 1 to 5 consider the subsample of years in which the one-share-one-vote premium is above the sample median. Columns 6 to 10 consider the subsample of years when the one-share-one-vote premium is below the sample median. Standard errors presented in parentheses are corrected for heteroscedasticity and clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1, 5, and 10%, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Periods with High One-Share-One-Vote Premium					Periods with Low One-Share-One-Vote Premium				
	ROA	Investment	Leverage	Board Turnover	CEO Turnover	ROA	Investment	Leverage	Board Turnover	CEO Turnover
One-Share-One-Vote	-0.006 (0.005)	-0.003 (0.007)	0.096 (0.074)	0.007 (0.009)	0.026 (0.037)	-0.003 (0.006)	0.012* (0.007)	0.116*** (0.042)	0.039 (0.039)	0.014 (0.047)
One-Share-On- Vote*Return				-0.069 (0.370)	1.327 (1.389)				-0.994 (1.237)	2.372 (1.635)
log Age	-0.012*** (0.005)	-0.035*** (0.012)	-0.035 (0.054)	0.030*** (0.008)	-0.060* (0.033)	-0.045*** (0.002)	-0.017** (0.007)	0.005 (0.015)	0.102** (0.044)	-0.208*** (0.050)
Log Size	0.001 (0.002)	0.018*** (0.003)	0.138*** (0.023)	0.013*** (0.003)	0.057*** (0.015)	0.004*** (0.002)	0.009*** (0.001)	0.084*** (0.021)	0.012 (0.008)	0.062*** (0.015)
Family Firm	0.001 (0.007)	-0.006 (0.009)	-0.073 (0.078)	-0.026*** (0.010)	-0.011 (0.047)	-0.006 (0.005)	-0.007* (0.003)	0.041 (0.038)	-0.023 (0.031)	-0.023 (0.050)
Firm's Share Returns				0.148 (0.188)	0.029 (0.790)				0.351 (0.802)	-0.702 (1.053)
Constant	0.159*** (0.023)	0.046 (0.043)	-0.504* (0.279)	-0.019 (0.037)	-0.128 (0.170)	0.171*** (0.015)	0.006 (0.014)	-0.420*** (0.156)	-0.138 (0.110)	0.501** (0.201)
Industry_FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year_FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs	2988	2956	2988	1617	742	6906	6782	6906	343	538
R2	.129	.0422	.162	.092	.12	.147	.0485	.105	.106	.0906

**Table 5**  
**Determinants of News Coverage**

The table presents time series regressions at a monthly frequency. The dependent variable is indicated on top of each column. Newey-West standard errors adjusted for three lags autocorrelation of the residuals are presented in parenthesis. \*\*\*, \*\*, and \* denote statistical significance at the 1, 5, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	News Intensity		Negative News Score		News Intensity		Negative News Score
One-Share-One-Vote Premium (1 month lag)	18.154 (11.613)						
HP Relative Valuation (1 month lag)		19.564 (12.299)	2.300 (1.921)	0.596 (4.934)			
HP Relative Valuation (2 months lag)				1.782 (4.734)			
Voting Premium (1 month lag)					14.844 (11.335)	2.326 (1.844)	-0.444 (3.722)
Voting Premium (2 months lag)							2.948 (3.539)
Acquisition Factor	0.490 (0.320)	0.504 (0.316)	0.046 (0.053)	0.045 (0.054)	0.469 (0.328)	0.035 (0.054)	0.036 (0.055)
Market Return	49.531 (76.724)	74.643 (78.100)	13.146 (16.150)	13.491 (16.280)	66.935 (78.368)	13.155 (16.266)	15.634 (16.509)
Small-minus-Big	381.003** (184.066)	442.262** (193.404)	50.176 (35.690)	50.734 (35.986)	380.407** (179.374)	43.326 (33.765)	50.544 (35.440)
High-minus-Low	-86.414 (163.836)	-85.451 (160.305)	-12.235 (29.965)	-12.327 (30.033)	-81.487 (160.978)	-12.022 (29.919)	-12.136 (30.025)
Constant	27.683*** (5.682)	26.277*** (5.101)	3.571*** (0.808)	3.586*** (0.821)	25.300*** (7.390)	3.304*** (1.154)	3.193*** (1.181)
Obs	191	191	191	190	191	191	190
R2	0.09	0.10	0.04	0.04	0.09	0.04	0.04



**Table 6**  
**News Coverage and Relative Prices**

The table presents time series regressions at a monthly frequency. The dependent variable is indicated on top of each column. Newey-West standard errors adjusted for three lags autocorrelation of the residuals are presented in parenthesis. \*\*\*, \*\*, and \* denote statistical significance at the 1, 5, and 10% level, respectively.

	(1) One-Share-One- Vote Premium	(2)	(3) HP Relative Valuation	(4)	(5)	(6) Voting Premium	(7)
Negative News Score	0.012*** (0.004)	0.009** (0.004)		0.009** (0.004)	0.009** (0.004)		0.008** (0.004)
News Intensity			0.002*** (0.001)			0.002** (0.001)	
Acquisition Factor				0.005 (0.003)			0.011*** (0.003)
Bond index return (Nominal)	1.605** (0.742)	1.715** (0.798)	1.770** (0.785)	1.837** (0.761)	-0.188 (0.646)	-0.137 (0.640)	0.060 (0.532)
Annual Inflation	4.739*** (1.787)	4.123*** (1.279)	4.368*** (1.282)	4.679*** (1.451)	0.936 (2.379)	1.152 (2.407)	2.115 (1.994)
Market Return	0.240 (0.857)	-1.121* (0.662)	-1.162* (0.666)	-1.581** (0.784)	0.327 (0.960)	0.291 (0.974)	-0.596 (0.977)
Small-minus-Big	-0.359 (1.845)	-2.664* (1.392)	-3.071** (1.482)	-3.491** (1.591)	2.114 (1.795)	1.742 (1.816)	0.407 (1.945)
High-minus-Low	1.226 (1.083)	1.254 (1.005)	1.324 (1.011)	1.308 (1.045)	0.030 (1.274)	0.092 (1.286)	0.215 (1.227)
Constant	-0.051 (0.084)	0.026 (0.068)	-0.015 (0.075)	-0.083 (0.112)	0.377*** (0.110)	0.340*** (0.115)	0.150 (0.110)
Obs	191	191	191	191	191	191	191
R2	0.18	0.17	0.19	0.19	0.06	0.07	0.20

**Table 7**  
**Firm Level Evidence on the Determinants of the Voting Premium**  
*Panel A. Controlling for Firm Characteristics*

The unit of observation is the firm month. In all columns, the dependent variable is the voting premium of firm  $i$  at the end of month  $t$ . In column 4, we consider the voting premium only for the subsample of firms with ordinary limited-voting and participating preference shares. In column 5, we consider the voting premium only for the subsample of firms with preference shares. In column 7, the premium is computed adjusting for differences in cash-flow and voting rights among the different classes of shares. All models include year fixed effects as indicated at the end of the table, but coefficients are not reported. The model in column 3 also controls for firm fixed effects. Standard errors are presented in parentheses and are corrected for heteroscedasticity and clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1, 5, and 10%, respectively.

	(1)	(2)	(3)	(4) Excluding Preference Shares	(5) Only Preference Shares	(6)	(7) Adjusted Voting Premium
Negative News Score	0.004*** (0.001)		0.005*** (0.001)	0.003** (0.002)	0.005*** (0.002)	0.003*** (0.001)	0.001** (0.001)
News Intensity		0.001*** (0.000)					
Board Turnover						-0.077 (0.178)	
Cash to Asset Ratio						0.264 (0.525)	
Log Firm Market Value						0.302*** (0.038)	
Leverage						0.030 (0.077)	
Age						0.017 (0.013)	
Family Firm						0.161 (0.151)	
Liquidity Voting minus Liquidity Non-Voting	-12.369*** (1.581)	-12.369*** (1.581)	-4.227** (2.054)	-2.708** (1.112)	-13.758*** (1.469)	-18.286*** (2.038)	-14.227*** (1.540)
Dividend Voting minus Dividend Non-Voting	0.161 (0.150)	0.161 (0.150)	0.271 (0.213)	-0.011 (0.019)	0.358 (0.381)	0.136 (0.115)	3.291*** (0.531)
Acquisition Factor	0.003** (0.001)	0.003** (0.001)	0.004*** (0.001)	-0.001 (0.001)	0.003** (0.001)	0.006*** (0.001)	0.003*** (0.001)
Market Return	-0.155 (0.359)	-0.129 (0.359)	-0.050 (0.350)	-0.727 (0.469)	-0.176 (0.400)	0.488*** (0.089)	0.281*** (0.105)
Small-minus-Big	-0.251	-0.278	-0.065	-1.097	-0.163	0.804***	0.423**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
				Excluding Preference Shares	Only Preference Shares		Adjusted Voting Premium
High-minus-Low	(0.510) -0.734**	(0.512) -0.687**	(0.492) -0.902***	(0.781) 0.081	(0.563) -0.577	(0.140) -0.546***	(0.165) -0.617***
Constant	(0.330) 0.309***	(0.335) 0.308***	(0.324) 0.222***	(0.341) -0.118***	(0.405) 0.536***	(0.145) -2.195***	(0.171) -0.110
	(0.086)	(0.085)	(0.061)	(0.041)	(0.111)	(0.324)	(0.100)
Firms_FE	No	No	Yes	No	No	No	No
Year_FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs	44893	44893	44893	8690	39878	29533	39591
R2	.101	.101	.0481	.0281	.11	.268	.15

*Panel B. Cross-Sectional Differences between Firms*

The unit of observation is the firm month. In all columns, the dependent variable is the voting premium of firm  $i$  at the end of month  $t$ . Standard errors are presented in parentheses and are corrected for heteroscedasticity and clustered at the firm level. \*\*\*, \*\*, and \* denote statistical significance at the 1, 5, and 10%, respectively.

	(1)	(2)	(3)
Negative News Score	0.003 <sup>***</sup> (0.001)	0.003 <sup>***</sup> (0.001)	-0.005 (0.003)
Liquidity Voting minus Liquidity Non-Voting*Negative News Score	-0.276 (0.390)		
Illiquid Stock*Negative News Score		0.405 <sup>***</sup> (0.082)	
Returns Volatility*Negative News Score			0.043 <sup>***</sup> (0.016)
Returns Volatility			-0.120 <sup>*</sup> (0.067)
Illiquid Stock		-9.662 <sup>***</sup> (1.498)	
Liquidity Voting minus Liquidity Non-Voting	-10.840 <sup>***</sup> (1.497)	-9.347 <sup>***</sup> (1.487)	-12.375 <sup>***</sup> (1.509)
Dividend Voting minus Dividend Non-Voting	0.162 (0.150)	0.008 (0.125)	0.172 (0.154)
Acquisition Factor	0.003 <sup>***</sup> (0.001)	0.001 (0.001)	0.003 <sup>**</sup> (0.001)
Market Return	-0.167 (0.355)	-0.239 (0.358)	-0.151 (0.355)
Small-minus-Big	-0.252 (0.511)	-0.398 (0.510)	-0.257 (0.507)
High-minus-Low	-0.742 <sup>**</sup> (0.329)	-0.627 <sup>*</sup> (0.333)	-0.614 <sup>*</sup> (0.320)
Constant	0.308 <sup>**</sup> (0.086)	0.668 <sup>***</sup> (0.103)	0.335 <sup>***</sup> (0.088)
Year_FE	Yes	Yes	Yes
Obs	44893	44653	44846
R2	.102	.128	.112

**Table 8****The Informativeness of the Voting Premium and the News Coverage about Future Returns**

The table presents time series regressions at a monthly frequency. In columns 1 to 3, the dependent variable is the difference in returns between a portfolio of voting shares and a portfolio of non-voting shares issued by the same firms, whereas in columns 4 to 6, the dependent variable is the difference of the returns of one-share-one-vote firms minus the returns of the non-voting shares issued by dual class firms. The return of the portfolio long voting shares and short limited-voting shares is computed as voting returns minus non-voting returns considering only dual class firms. For each dual class firm and in each quarter, we take the difference between the average returns of single class voting shares and limited voting shares. We then take the value weighted average of these values across firms for each month in our sample. To be included in the portfolio, firms need to have a dual class voting structure for at least four consecutive months. This ensures that firms that change their voting status within a quarter are not included. The portfolio long one-share-one-vote firms and short dual class firms is computed as the monthly difference between the weighted average quarterly returns of one-share-one-vote firms and the weighted average quarterly returns of limited-voting shares issued by dual class firms. Also in this case, we consider only firms that have dual class or one-share-one-vote for at least four consecutive months. Newey-West standard errors adjusted for three lags autocorrelation of the residuals are presented in parenthesis. \*\*\*, \*\*, and \* denote statistical significance at the 1, 5, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	Voting Returns minus Non-Voting Returns			One-Share-One-Vote Returns minus Dual Class Returns		
Voting Premium	-0.111*** (0.025)			-0.059*** (0.018)		
Negative News Score		-0.002** (0.001)			-0.001 (0.001)	
News Intensity			-0.001*** (0.000)			-0.001** (0.000)
Acquisition Factor	0.003*** (0.001)	0.002** (0.001)	0.002** (0.001)	0.001*** (0.000)	0.001 (0.000)	0.001* (0.000)
Bond index return (Nominal)	0.107 (0.151)	0.096 (0.153)	0.080 (0.150)	0.092 (0.066)	0.091 (0.064)	0.086 (0.063)
Annual Inflation	-0.599 (0.450)	-0.904* (0.469)	-0.991** (0.462)	-0.077 (0.214)	-0.192 (0.219)	-0.224 (0.218)
Market Return	0.093 (0.222)	0.166 (0.225)	0.167 (0.222)	-0.125 (0.149)	-0.086 (0.152)	-0.085 (0.151)
Small-minus-Big	0.134 (0.423)	0.140 (0.439)	0.265 (0.436)	-0.236 (0.330)	-0.257 (0.327)	-0.215 (0.323)
High-minus-Low	0.550* (0.326)	0.505 (0.365)	0.476 (0.370)	-0.251 (0.166)	-0.287 (0.174)	-0.298* (0.172)
Constant	0.023 (0.029)	0.016 (0.028)	0.029 (0.027)	0.006 (0.014)	-0.002 (0.014)	0.003 (0.014)
Obs	191	191	191	191	191	191
R2	0.27	0.18	0.22	0.22	0.08	0.10