Catering Incentives and Corporate Governance: Evidence from the Dismissal of Dual Class Shares in the U.K.*

Fabio Braggion
(Tilburg University)

Mariassunta Giannetti
(Stockholm School of Economics, CEPR and ECGI)

Abstract. In the U.K., between 1955 and 1970, dual class shares went from being very popular to be nearly dismissed without any regulatory intervention. We show that market-based measures of investor demand for one-share-one-vote, constructed following Baker and Wurgler (2004a), are negatively related to the use of dual class share structures. We provide evidence showing that investor demand is related to the tone and the intensity of a debate on dual class shares in which no new material information was revealed and that voting shares exhibit lower returns than limited-voting shares following relatively high demand for one-share-one-vote. Our results suggest that non-fundamental investor demand limited firms' ability to use dual class shares and have broader implications for corporate governance.

Keywords: Corporate Governance; Dual Class Shares; Investor Demand; Public Debate
JEL Codes: G02, G1, G3

* Braggion is an Associate Professor of Finance at Tilburg University, E-mail: f.braggion@uvt.nl. Giannetti is a Professor of Finance at the Stockholm School of Economics, a Research Fellow of CEPR, and a Research Associate of ECGI. Contact information: Stockholm School of Economics, PO Box 6501, Sveavagen 65, S 11 383 Stockholm, Sweden, E-mail: mariassunta.giannetti@hhs.se. We thank John Coates, Joy Engelberg, Fabrizio Ferri, Carola Frydman, Michael Halling, Leslie Hannah, Dirk Jenter, Samuli Knufer, Lyndon Moore, Adair Morse, Nathalie Moyen, Laura Starks, Oren Sussman, John Turner and seminar participants at the NBER Law and Economics Program Meeting, London Business School Summer Conference in Corporate Finance, IDC Rothschild Caesarea Conference, Stockholm School of Economics, Tilburg University, Cheung Kong Business School, the Swiss Finance Institute at the University of Geneva, and the Said School of Business at Oxford University for comments. Giannetti also acknowledges financial support from the Jan Wallander and Tom Hedelius Foundation and the Bank of Sweden Tercentenary Foundation.

On Waiting in Vain for the New Masses to Denounce Nonvoting Stocks:
Then you who drive the fractious nail,
And you who lay the heavy rail,
And all who bear the dinner pail
And daily punch the clock—
Shall it be said your hearts are stone?
They are your brethren and they groan!
Oh, drop a tear for those who own Nonvoting corporate stock.

New York World, 1920

1. Introduction

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 (Durnev and Kim, 2005). However, also changing "norms" of good corporate governance and investor tastes may matter.[1]

The objective of this paper is to investigate whether firms change their governance structures to cater to the prevailing norms. Media, legal scholars, shareholder associations, and institutional investors often set one-size-fits-all norms of strong corporate governance and indicate governance mechanisms, such as dual class shares, staggered boards, or option-based compensation, as manifestations of weak corporate governance (e.g., Gompers, Ishii and Metrick, 2003). We ask whether their opinions may lead some firms to supplant the less accepted corporate governance structures even though they do not harm performance.

We argue that 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 structures,

[1] Doidge, Dyck, Mahmudi and Virani (2015) provide anecdotal evidence on how new strong corporate governance criteria set by the Canadian Coalition for good Governance are related to changes in corporate governance.

managers may have incentives to rationally cater to investor demand and to change the governance structure according to the prevailing norm.

This argument builds on a line of research that views managerial decisions as rational responses to security mispricing arising from time-varying investor tastes. Existing literature has focused on corporate financing decisions (see, for instance, Baker and Wurgler, 2004 and Polk and Sapienza, 2002). To the best of our knowledge, we are the first to show how mispricing may affect firms' corporate governance.

To achieve this objective, we focus on the London Stock Exchange in the mid-1950s. In this period, the London Stock Exchange was transforming in a modern stock market attracting trading from local stock exchanges, where investments had relied on personal relationships, and it was starting to be dominated by institutional investors (see Cheffins, 2008 and 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.

These discussions focused on the principle of one-share-one-vote. Up to the early 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. But investors' tastes were presumably affected and reflected in the debate. We exploit the swings in the relative prices of voting and limited-voting shares, which as we show are associated with the tone and intensity of this debate, to provide evidence that firms alter their voting structure to cater to investor demand.

The UK of the mid-1950s provides an ideal laboratory to explore these issues. A number of factors would prevent the analysis using contemporary data. First, nowadays, institutional investors

appear to spurn the stocks of firms with dual class share structures (Giannetti and Simonov, 2006; Li, Ortiz-Molina and Zhao, 2008; Leuz, Lins and Warnock, 2009; McCahery, Sautner and Starks, 2015).[2] Consequently, a less intense debate of dual class shares and lack of swings in stock prices make it hard to test whether companies cater to investors' tastes in choosing their corporate governance.

Second, 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.

We explore whether firms' decisions to have dual class share structures cater to investor tastes constructing market-based proxies for investor demand that resemble the ones developed by Baker and Wurgler (2004a and b) to explain dividend payouts. First, we define the one-share-one-vote premium as the difference between the market valuation of one-share-one-vote firms and dual class firms. Such measure captures investor's demand for the one-share-one-vote governance structure. Our results show that when the premium is 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. At the same time, firms are also less likely to issue non-voting shares.

We obtain the same results when instead of focusing on the one-share-one-vote premium, we measure investor demand for one-share-one-vote structures with the average voting premium. The voting premium is defined as the relative price of the voting and limited-voting shares of the same (dual class) firm (see Zingales, 1994) and it allows us to hold firm characteristics constant.

[2] In the NYSE, companies with a single class of shares are also forbidden from issuing limited-voting shares; Only IPO firms can list with dual class share structure. Due to regulations as well investor demand, the number of listed companies using dual class shares is thus limited in the US as well as in Europe further limiting the possibility of testing catering theories.

As an alternative explanation for our findings, we consider whether the one-share-one-vote premium and the voting premium may reflect rational expectations on how different governance structures will affect firms' future performance and the cash flows accruing to the shareholders with limited-voting rights. If this is the case, dual-class firms should underperform one-share-one-vote firms. We find no evidence that dual class share structures are associated with weaker firm performance, different investment policies or worse corporate governance outcomes during periods in which the premium on one-share-one-vote is highest. If anything, one-share-one-vote class share structures are associated with higher profitability only in periods with low premium, when fewer firms select these share structures, presumably to maximize shareholder value, rather than to cater to investor tastes for one-share-one-vote.

We also investigate which sources of investor demand determine the changes in the one-share-one-vote premium and the voting premium. In particular, controlling for their known fundamental determinants, we test whether the premium measures are related to the tone and the intensity of the debate on dual class shares.

We show that negative news coverage of limited-voting shares is associated with an increase in the relative valuation of one-share-one-vote firms and the voting premium even though it does not reveal any new material information about firms and their corporate governance. Importantly, negative news coverage of limited-voting shares has a stronger impact on the voting premium of illiquid and high volatility stocks. For such stocks, arbitrage is considered to be riskier at least in the short run (Barberis and Thaler, 2003). As a result, our finding indicates that the effect of negative news coverage is likely to capture price deviations from their fundamental values and supports the hypothesis that dual class share structures may be supplanted because firms cater to investor tastes.

In line with our conjecture about catering, we also find that, following both high voting premium and negative news coverage periods, the returns of a portfolio of voting shares systematically underperform the returns of a portfolio of limited-voting shares. The difference in returns of voting and limited-voting shares would be negatively related to the prevailing excess demand for one-vote-one-share firms and voting shares (captured by the voting premium and the negative news coverage in these tests) if this demand were currently so high that voting shares are relatively overpriced. Thus, this predictability result is particularly suggestive of a time-varying mispricing associated with the demand for dual class shares and confirms that changes in the voting premium are not explained by differences in the ex post returns accruing to voting and limited-voting shareholders. Taken together, our findings provide evidence that dual class share structures are unlikely to be dominated by one-share-one-vote structures in high premium periods and that the prevailing norm of good corporate governance affects firm corporate governance decisions for behavioral reasons.

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.[3] 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) 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 (2010) find that dual class shares are associated with lower firms' valuations and greater agency problems between

[3] See Adams and Ferreira (2007) for a survey of the empirical literature on dual class shares.

insiders and outsiders. Others highlight that voting shares generally sell at a premium over limited-voting shares and argue that the voting premium increases in the probability of a takeover or a proxy context and in voting shareholders' extraction of private benefits of control (Zingales, 1994 and 1995; Nenova, 2003; Hauser and Lauterbach, 2004; Kalay, Karakas and Pant, 2012). Our results suggest that even if there are firms and circumstances for which dual class shares may be optimal, swinging investor tastes may lead firms to abandon dual class share structures.

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). 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 that media may influence corporate policies, independently from the optimality of the changes.

Finally, our paper is related to a strand of literature that emphasizes the impact of non-fundamental investor demand on investment (Polk and Sapienza, 2002), financial policies (Baker and Wurgler, 2004a and b), and other corporate decisions, such as firm names (Cooper, Dimitrov and Rau, 2001) and nominal share prices (Weld, Michaely, Thaler and Benartzi, 2009).[4] To the best of our knowledge, we are the first to propose that these effects matter also for corporate governance and highlight the effect of non-fundamental investor demand on dual class shares.

The remainder of this paper is organized as follows. Section 2 describes the institutional background. Section 3 describes sample construction and data sources. Section 4 and 5 present the empirical analysis. Section 6 concludes.

[4] See Baker and Wurgler (2012) for a recent survey.

2. The British Stock Market and the Use of Limited-Voting Shares

The stock market played an important role in the funding of public companies in the UK since the 19th century. However, only during the 1950s, following the 1948 Company Act that increased disclosure and allowed for proxy voting (Cheffins, 2008, pp. 356-360), the London Stock Exchange started to attract trading from local exchanges, where investments had relied on personal relationships. During this period, institutional investors also started to acquire increasing importance even though retail investors were still prevalent (Cheffins, 2008 and Franks, Mayer and Rossi, 2009).

By 1955, when our sample starts, the companies listed in the London Stock Exchange had highly dispersed ownership. For instance, 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).

Families owned minority stakes, but had sometimes maintained control with a disproportionate representation on the board and, increasingly with dual class shares (Franks, Mayer, Rossi, 2005 and 2009), possibly because in the later nineteenth century, the London Stock Exchange required to place at least 2/3 of any security to the public in any public issue. This rule made difficult the formation of control blocks (Hannah 2007) and, to reduce the dilution of control, firms started to issue limited-voting (ordinary or preference) shares to the public (Cheffins, 2008, pp. 226-227). Companies issued both ordinary limited-voting shares and preference shares. The

latter gave (limited-voting) shareholders right to a preferential dividend and in some instances to further dividend distribution (participating preference shares).

Limited-voting shares did not raise any criticisms up to the first half of the 1950s and were considered particularly suitable for retail investors, which dominated the buy side of the market and that were not in a position to acquire real knowledge of the business in which they had invested (Cheffins, 2008, pp.108-121). These investors used dividends as the metric for evaluating firm performance. Thus, the prices of all shares, regardless of their class, were disproportionately influenced by dividends and sentiment affecting the demand for shares and insensitive to retained earnings (Fisher, 1961; *The Economist*, June 9, 1979).

At the beginning of 1956, the quotations' committee of the London Stock Exchange, following the advice of the Chartered Institute of Secretaries, a professional association, recommended that non-voting ordinary shares were explicitly designated as such (Times, February 1, 1956).[5] 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. No further regulatory interventions were undertaken.[6] It is therefore a bit surprising that by the end of the sixties dual class share structures were supplanted in favor of one-share-one-vote. In what follows, we explore to what extent this change may have catered to a change in investor tastes.

[5] 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 disposed that, from then on, it would have 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.

[6] Dual class shares are almost completely disused in the UK nowadays even if no regulation was ever implemented (OECD, 2007).

3. Data Sources and Sample Construction

We obtain a list of companies listed in the London Stock Exchange (LSE) from 1955 to 1970 from the London Share Price Database (henceforth, LSPD). The sample includes 2,166 companies and covers all the largest companies listed on the London Stock Exchange during this period 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. From the LSPD, we also obtain data on prices and returns of ordinary voting shares at a monthly frequency, starting from January 1955.

Since the LSPD does not provide information on stocks' voting rights or prices for multiple share classes of the same firm, we hand-collect information on shares' voting rights from 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. We retrieve data on voting rights on an annual basis from 1956 to 1970 for all firms listed in the yearbook in the sections "Commercial and Industrial". 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.

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 are participating preference shares).[7] 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 very specific circumstances, such as the liquidation of the company

[7] The list of firms with limited-voting ordinary shares or participating preference shares and non-participating preference shares is presented in the Internet Appendix.

or a significant delay in the payment of the preferential dividend. Even if these eventualities occurred, limited-voting shareholders could usually vote only on a specific set of issues.

We hand-collect prices and dividends of limited-voting shares at monthly frequency, starting in January 1955 and ending December 1970, from the London Stock Exchange Daily Official List, available at the Guildhall Library in London.[8] 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).

We collect data for both limited-voting ordinary shares and preference shares because in the literature 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).[9] Theoretically, this is the case because preference shares have two important features of equity contracts: The claims of preference shareholders have unlimited horizon (Fluck, 1998) and firms' inability to pay dividends does not lead to default.

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

4. Investor Demand and Dual Share Structures

[8] This is the same source used by LSPD to compile the prices of voting shares.

[9] 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.

4.1. Relative Prices 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 investor demand.

We compute the proportion of dual class firms as the number of firms with outstanding preference or ordinary limited-voting shares out of all companies listed in the LSE during a quarter. Figure 1 shows that the proportion of firms with limited-voting shares fluctuates during our sample period and then sharply drops after 1965, even if there was no change in regulation.

In what follows, we explore to what extent investor demand and managerial catering incentives can explain these patterns. We also make sure that any findings are not exclusively determined by the post-1965 observations.

Our approach to determine whether catering incentives matter relies on stock market-based measures of investor demand for dual class firms. In particular, we follow Baker and Wurgler (2004a) who suggest that managers cater to investors prevailing demand for dividends if more firms start paying dividends when investors place a premium on dividend paying firms. Our first measure of investor demand, which we call the one-share-one-vote premium, is the difference in the average market-to-book ratios of one-share-one-vote and dual class firms. We view the one-share-one-vote premium, and the other measure of relative prices that we introduce later, as a summary statistics for investor demand.

We explore whether in quarters in which the one-share-one-vote premium is higher the proportion of dual class firms decreases, because presumably fewer firms issue limited-voting shares and more firms unify their share structures. 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 times for firms to change their share structures and using a finer frequency would just add noise.

Figure 2 and columns 2 and 3 of Table 2 support the conjecture that the proportion of dual class firms decreases in quarters in which the one-share-one-vote premium is high. Column 2 indicates that the result is not uniquely determined by the large increase in the one-share-one-vote premium associated with the drop in the proportion of dual class firms after 1965. The economic effects are large. In column 1, a one-standard-deviation change in the one-share-one-vote premium during a quarter is associated with a half-standard-deviation drop in the proportion of dual class firms. Even before 1965, in column 2, changes in the one-share-one-vote premium explain over 30 percent of the standard deviation of the proportion of dual class firms.

A possible concern is that changes in the relative prices of single class and dual class firms may capture changes in firm characteristics, not only changes in non-fundamental investor demand. Conceptually, we would like to measure the premium attributed to one-share-one-vote firms using the differences between the market prices of identical firms with precisely the same investment opportunities, but different share structures. In this case, the premium would abstract from time-varying differences in firms investment opportunities.

To get closer to this ideal measurement, 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 then take the average across all dual class firms in our sample. The voting premium has the advantage that captures the premium attributed to voting shares abstracting from firm characteristics. However, it 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.

Columns 3 and 4 show that even when we use the voting premium, an increase in the relative price of voting shares is associated with a drop in the proportion of dual class shares. The magnitudes are once again economically significant. In column 4, a one-standard-deviation increase in the voting premium is associated with nearly half of a standard deviation drop in the proportion of dual class firms. The somewhat lower statistical significance is to be expected as the voting premium is likely to understate investors' demand for one-share-one-vote.

Importantly, the one-share-one-vote premium can explain not only the stock of dual class firms, but also the flows. In column 5, we define the unification rate as the number of firms that abandon dual class shares by unifying their share classes during a quarter as a proportion of the number of dual class firms at the end of the previous quarter. As expected, more firms unify their share classes when the one-share-one-vote premium is higher. A one-standard-deviation change in the premium explains over 80 percent of the standard deviation of the unification rate.

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 as a proportion of one-share-one-vote firms. A one-standard-deviation increase in the one-share-one-vote premium is associated with a drop in the proportion of dual class firms, equivalent to over 10% of the standard deviation of this variable.

Table 3 presents related evidence at the firm level. We estimate the probability that a firm has a one-share-one-vote share structure in a given year as a function of the one-share-one-vote premium and the voting premium prevailing during the previous year. In this firm level specification, we are able to control for firm characteristics.[10] In this way, we are also able to evaluate whether changes in the characteristics of firms entering our sample may be driving the findings in Table 2.

[10] Unfortunately, due to the fact that the Cambridge/DTI database is very unbalanced and that firms rarely change share structure, we are unable to include firm fixed effects.

We continue to find that as any of the two premium proxies increase, firms become more likely to have one-share-one-vote share structures. This evidence consistently indicates that firms' share structure responds to market based proxies for investor demand. Put differently, the supply of one-share-one-vote firms increases precisely when their relative price is relatively higher. There is no evidence that investor demand may be driven by changes in firm characteristics that make optimal one-share-one-vote.

In the next sections, we perform a battery of tests to evaluate whether the premium proxies indeed capture non-fundamental investor demand or are rather affected by changes in economic conditions that warrant the corporate governance changes we document.

4.2 Corporate Policies Evidence on the Determinants of Investor Demand

The premium on one-share-one-vote could be driven by the extraction of private benefits of control associated with dual class share structures if this becomes more pernicious during particular time periods, for instance, when firms have better growth opportunities. We may not be able to abstract from these unobservable differences in firm characteristics even when we use the voting premium if during these times voting shareholders are able to appropriate a larger fraction of firm cash flows as private benefits of control because the latter would tend to increase the voting premium.

If the premium proxies capture an increase in portfolio investors' benefits associated with one-share-one-vote share structures, we should observe that on average dual class firms underperform other firms to a larger extent in high premium periods.

Panel A of Table 4 explores how having a one-share-one-vote structure is associated with two alternative proxies for firm profitability, the ROE and the ROA, and investment. We explore

these relationships in years in which the one-share-one-vote premium is above and below the sample median.[11] 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.

We find no evidence that this is the case. If anything, firms with dual class share structures have lower profitability than other firms in low premium periods (columns 4 and 5). Thus, the benefits from having one-share-one-vote share structures are if anything lower, not higher, during high premium periods. This may indicate that firms for which it is relatively less desirable to have one-share-one-vote share structures may have adopted this governance structure to cater to investor tastes.

This result resembles the finding of 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. In the light of our corporate governance catering conjecture, this may depend, similarly to the dismissal of dual class shares in the U.K., on The Shareholder Rights Project (founded and directed by Professor Lucian Bebchuk) that had a leading role in indicating staggered boards as a sign of weak corporate governance.

Panel B of Table 4 considers different capital structure and corporate governance outcomes. We do not find any differences in leverage between dual class and one class firms either in high or low premium periods. Dual class firms however appear to issue more debt in low premium periods. This suggests that they may have exhausted their debt capacity in high premium periods, when they

[11] The results are similar to ones we report if we split the sample on the basis of the voting premium or we use a one year lag of the premium proxies.

are relatively more undervalued, and therefore they may need to unify their share classes to raise capital.

Importantly, we do not find that dual class share structures are associated with lower board and CEO turnover performance sensitivity in high or low premium periods (columns 3, 4, 7 and 8). This also suggests that the dismissal of dual class share structures is not associated with the exacerbation of agency problems in high premium periods.

5. Positive Evidence on the Determinants of the Premium Proxies

5.1 The debate on limited-voting shares

The evidence provided so far does not appear to support the conjecture that changes in the premiums capture time-varying contracting problems, such as agency or asymmetric information. However, the premiums may depend on other firms' specific factors that we did not foresee. For instance, the expectation that a firm will be taken over may rationally increase the voting premium as non-voting shareholders may not be able to fully cash-in the gains of the acquisition. In this section, we provide further positive evidence on whether changes in the premiums really capture shocks to investors' non-fundamental demand.

To achieve this, we perform an exhaustive analysis of the debate on dual class shares in the press during our sample period and relate the tone of the debate to the behavior of the premium proxies. Arguably, the heated debate on dual class shares (and the absence of changes in regulations) make our analysis of catering incentives in corporate governance during this period particularly salient.

Among other sources, 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 1955 to 1970. The terminology “dual class shares” was not used at that time and yields no results.

The debate appears to have been ignited by institutional investors who during this period were sleeping giants and did not attempt to monitor or exercise control (Cheffins, 2008, p. 373). Note, however, that even if institutional investors’ support for one-share-one-vote share structures derived from 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 4.1).

A characteristic of the debate is that hardly any 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, opinions were often reiterated by institutional investors, which may both have affected and reflected how *all* market participants (including retail investors) viewed limited-voting shares. [12]

For instance, on February 26, 1956, the retiring president of the Chartered Institute of Secretaries held a speech on the dangers posed by limited-voting shares. 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.*” [13]

[12] Put differently, our conjecture that the debate on dual class shares matters does not rely on institutional investors being marginal investors precisely because the debate may affect the preferences of retail investors.
[13] During this period, most of the shares with limited-voting rights had no voting rights at all.

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 an opinion against dual class shares in their annual meeting and reiterated the "*commonly accepted doctrine 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 and started to frown upon limited-voting equity issues. On August 24, 1957, The Economist notes: "*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 rights. 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 justifies 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 and limited-voting shares could be issued, especially by small family firms. Similar news followed.

However, institutional investors still refused to participate in the issuance of new shares involving restricted voting rights. An animated debate ensued with both the Institute of Directors and the London Stock Exchange. The former advocated in favor of dual class shares; the latter issued a pronouncement stating that it would be wrong to refuse the trading of limited-voting shares. Other bodies, such as the Board of Trade and the Institute of Secretaries, pronounced in favor of dual class share structures.

The debate appears to then subside for a few years and to start 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 in the previous years.

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. The news also supported the idea that opinions in the market had crystallized and 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.[14]

5.2. Classifying the News Coverage of Dual Class Shares

[14] While non-voting shares had become significantly less popular by this period, due to lack of demand, as also Faccio and Lang (2002) note, the London Stock Exchange and the British corporate law never went as far as banning non-voting shares (cft. Cheffins (2008 p. 317); also see Cheffins (2008, pp. 328-331) for a detailed description of the 1967 Company Act).

To evaluate whether the debate is related to the one-share-one-vote premium and the voting premium, we quantify the tone of the news on dual class shares, similarly to Tetlock (2007) and Garcia (2013). We proceed as follows. Our systematic news search yields 1,266 news from the Financial Times and 610 news from the Times of London, that is, a total of 1,876 news.[15] First, we read all news in chronological order and exclude any news related to specific companies and their handling of limited-voting shares: For instance, news about share unifications or problems regarding the issuance of limited-voting shares. Following Shiller (2000) and Tetlock (2007), we focus on a subset of news that are opinions of public figures either in the business or in the political worlds, 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.

Second, we transform the scanned images reporting the news into text using the ABBYY software, the leading package in optical character recognition (OCR) processing.[16] Third, we feed the text files into the Pennebaker et al. (2007) linguistic inquiry and word count (LIWC) software. The program automatically processes text files and analyzes their content based on an internal dictionary. In particular, it computes scores measuring the degree of positive and negative emotions in each article by counting the number of words related to positive and negative emotions.

[15] 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 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.

[16] 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.

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.

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 intensity of negative and positive emotions, but also the intensity of the debate. Interestingly, the scores measuring negative and positive emotions in the news on dual class shares have a coefficient of correlation of nearly 80%. As discussed in Subsection 5.1, this reflects that positive opinions on dual class shares were voiced when the criticisms were strongest.

For this reason, our analysis hereafter 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 then explore to what extent these two indexes can help explain the changes in relative prices that we observe.

5.3 Determinants of Dual Class Shares Negative News coverage

We start by exploring how the two proxies for the intensity and the tone of dual class shares news coverage are related to market conditions, takeover activity, and several lags of the premium

proxies. The latter variables aim to test whether negative news coverage of dual class shares follows increases in the one-share-one-vote premium and the voting premium.

We capture 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, in all specifications[17] Since the premium proxies may capture limited-voting 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.[18]

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 reflect an increase in the premium proxies.

These results are unsurprising as the voting premium, the one-share-one-vote premium, market conditions or takeover activities are never mentioned in the press in connection to limited-voting shares. It appears instead that the debate on limited-voting shares was ignited by the advent of institutional investors, which in occasion of shareholder meetings or press interviews were reiterating their views on the subject, independently from market conditions or specific firm situations. The tone and the intensity of the debate reveal how some investors were viewing limited-voting shares and how they may have changed the views of other investors, including retail investors. It is thus interesting to ask how the debate is related to the relative price of these securities.

[17] Following Fama and French (1993), we construct the small-minus-big portfolio by classifying firms with market value above the median of the firms in the London Share Price database 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 70th percentile of the firms in the London Share Price database as "high" and firms with market-to-book below the 30th percentile as "low". Portfolios are rebalanced at the beginning of each year.

[18] Franks and Harris (1989) indicate that this was nearly the maximum amount of time lapsing between the announcement of an acquisition and its completion.

5.4 Media Coverage and Relative Prices

Table 6 relates the monthly time series of the one-share-one-vote premium and of the voting premium, 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 both measures of relative prices, in what follows, we concentrate on the voting 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 firm 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.

Both proxies for the tone and the intensity of the debate appear to be positively related to the one-share-one-vote premium and the voting premium, indicating that investor opinions are indeed related to the premiums. The effects are also economically significant: In column 1 (3), a one-standard deviation change in the intensity and volume of negative emotions explain nearly 15% (6%) of the one-share-one-vote premium's (voting premium's) standard deviation. The economic magnitudes are significantly larger when we consider the polarization of the debate, using the proxy NEWS. In column 4, a one-standard-deviation change in this variable explains more than a quarter of a standard deviation of the voting premium.

In column 2 and 4, we further take into account that, during the 1950s, an active market for corporate takeovers had 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, expected additional payments accruing to the holders of voting shares could determine the increase in the voting premium and possibly in the one-share-one vote premium. Therefore, we control for takeover

activity and how this relates to the debate on limited-voting shares using the factor capturing firms' acquisition activities.

Finally, in columns 3 and 5, we 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 are able to obtain 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). To be able to evaluate to what extent, the premium is related to the return of fixed income securities, we control for the debenture returns and the inflation rate.

In all these tests, the coefficient of our variable of interest is unaffected and, more importantly, the two new control variables are not statistically significant indicating that our premium proxies are unlikely to be related to the return of fixed income securities.[19]

Table 7 continues to explore how news coverage relates to the voting premium. We perform the analysis at the firm level to control for firm characteristics, which may drive the premium (Panel A), and recognize the characteristics of firms whose voting premium is more affected by news coverage (Panel B).

Throughout the analysis, we control for differences in dividend payouts and liquidity between voting and limited-voting shares (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

[19] 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 Tuner (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.

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.[20]

In columns 1 to 3 of Panel A, both proxies for the negative coverage of dual class shares are associated with a higher end of month voting premium. 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 or corporate governance, are unlikely to explain our findings. It is also consistent with the evidence that corporate ownership in this period 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.[21] 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 mostly entailed ordinary shares as preference shares had right to a preferential

[20] In all tests, we cluster errors at the firm level. Results would be invariant if we also clustered at the time level.
[21] Participating preference shares are considered equivalent to limited-voting ordinary shares in all studies on the voting premium (see, for instance, Nenova, 2003).

dividend. The fact that limited-voting ordinary shares and preference shares were similarly affected by the debate is thus consistent with the notion that prejudice against limited-voting shares drives our findings. It also confirms that preferential dividends and the fact that dividend payments were capped for non-participating preference shares cannot explain why the dynamics of the voting premium is related to the tone of the debate, confirming the finding in Table 6 that the voting premium is not related to the return of debentures.

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 take into account the number of votes each share grants and the differences in cash flow rights between voting and limited-voting shares. [22] 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 because understanding which firms are most affected may give us further insights on the mechanisms leading to the association between negative news coverage and the voting premium.

[22] 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, ε are the cash flow rights of limited-voting minus the cash-flow rights of voting shares, and ρ 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.

To further address concerns that the effect of negative news coverage may be related to the takeover market, in column 1, we define a dummy variable that takes a value of 1 between the month of the announcement and the completion of the acquisition for any firm that becomes an acquisition target in our sample. We then explore whether the voting premium of target firms is more exposed to negative news coverage. As we would expect, in column 1, target firms have higher voting premium, but there is no evidence that their voting premium has higher exposure to negative news coverage.

In unreported tests, we estimate the probability of each firm being target of an acquisition. As is common in the literature (Dong, Hirshleifer, Richardson, and Teoh, 2006; Edmans, Goldstein and Jiang, 2012), we estimate the probability that a firm in a given year is target of a takeover as a function of firm size, measured by the logarithm of market capitalization, age, leverage, cash holdings, profitability, the market-to-book ratio, a dummy capturing whether the firm is a family firm, a dummy capturing whether the firm is a subsidiary, and industry fixed effects, using a probit model. We then use the predicted probability as a proxy for the probability that the firm is taken over. Our results are similar to the ones we report in column 1 of Panel A. 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.[23]

Another possible concern is that voting and limited-voting shares have different exposures to liquidity risk and that aggregate liquidity is somewhat related to the debate on dual class shares. Not only we control for the differences in liquidity between voting and limited-voting shares throughout

[23] The value of a vote may increase not only when firms are subject to takeovers, but also before shareholder meetings. Since most shareholder meetings occurred in May, June and July, we repeat our tests excluding the months of April, May, June and July. The effect is similar to the one reported in our baseline regressions, indicating that negative news coverage is unlikely to capture corporate events affecting the value of a vote.

the analysis, but in column 2, we also test whether the impact of the news on the voting premium is larger for firms for which voting and limited-voting shares have a larger difference in liquidity suggesting a different exposure to liquidity risk. In column 2, the effect of negative news coverage on the voting premium does not appear to depend on the difference in liquidity, 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 arbitrage. An 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. In column 3, 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 4, the positive effect of negative news coverage on the voting premium appears to be driven by stocks with highly volatile returns. These findings support the notion that the changes in the voting premium following negative news coverage are unlikely to be related to fundamentals.

5.3. The Relative Returns of Voting and Limited-voting Shares

In this subsection, we design a more direct test to explore whether changes in premiums indeed capture investor demand or are instead related to some omitted factor that rationally affects future expectations on the cash flows. If news coverage led to correct pricing of voting relative to limited-voting shares, we should observe that the debate is unrelated to the future relative 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 the voting shares are higher than those of the limited-voting shares following 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, the higher voting premium associated with negative news coverage of limited-voting shares would appear unjustified given ex post returns.

The results in Table 8 strongly support the latter hypothesis. The dependent variable is the average monthly return over a quarter of a portfolio long voting shares and short limited-voting shares. Following months of high voting premium and more intense negative news coverage, we find that the voting shares portfolio has systematically lower returns than the limited-voting shares portfolio. The results are similar for value-weighted and equally weighted portfolios and for both proxies for negative news coverage.

The effects are not only statistically significant, but also large from an economic point of view. In column 1, a one-standard-deviation increase in the voting premium leads to a nearly 3 points lower return for the portfolio of voting shares relative to non-voting shares. In column 3, a one-standard-deviation increase in the bad news score decreases the returns of voting shares relative to limited-voting shares by 1 percentage point. This evidence suggests that market participants over-react to negative news coverage of dual class shares and that the changes in the relative price of voting and limited-voting shares are then reversed in the following months.

6. Conclusions

This paper shows that firms are more likely to abandon dual class share structures in periods in which the one-share-one-vote premium increases. 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 the one-share-one-vote premium and that it affected negatively firms' ability to use dual class shares.

More in general, our results suggest that investors' non-fundamental 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 minority shareholders. These findings may provide a rationale for why an increasing number of firms choose to go private and escape the limelight of the stock market.

References

Adams, R. and D. Ferreira, 2007, One Share-One Vote: The Empirical Evidence, *Review of Finance*, 12, 51–91.

Bailey, W., 1988, Canada's Dual Class Shares: Further Evidence on the Market Value of Cash Dividends, *Journal of Finance* 43, 1143-1160.

Baker, M. and J. Wurgler, 2004, A Catering Theory of Dividends, *Journal of Finance* 59, 1125–65.

Baker, M. and J. Wurgler, 2004, Appearing and Disappearing Dividends: the Link to Catering Incentives, *Journal of Financial Economics* 73, 271–88.

Barberis, N. and R. Thaler, 2003, A survey of behavioral finance, *Handbook of the Economics of Finance*, *1*, 1053–1128.

Braggion, F. and L. Moore, 2011, "Dividend Policies in an Unregulated Market: The London Stock Exchange, 1895-1905". *Review of Financial Studies*. 24, 2935-2973.

Cheffins, B., 2008, *Corporate Ownership and Control: British Business Transformed*, Oxford University Press, Oxford.

Cooper, M. J., O. Dimitrov, and P. R. Rau, 2001, A rose. com by any other name, *Journal of Finance* 56, 2371–2388.

Coyle, C. and J. D. Turner, 2013, Law, Politics, and Financial Development: The Great Reversal of the U.K. Corporate Debt Market, *Journal of Economic History* 73, 810–846.

Cremers, M., L. P. Litov, and S. M. Sepe, 2014, Staggered Boards and Firm Value, Revisited, Working Paper, NotreDame University.

DeAngelo, H., and L. DeAngelo, 1985, Managerial ownership of voting rights: A study of public corporations with dual classes of common stock, *Journal of Financial Economics* 14, 33–69.

Dimson, E., 1979, Risk measurement when shares are subject to infrequent trading, *Journal of Financial Economics* 7, 197-226.

Dimson, E., P. Marsh, and M. Staunton, 2002, *Triumph of the Optimists: 101 Years of Global Investment Returns*. Princeton, NJ: Princeton University Press.

Doidge, C. And A. Dyck, H. Mahmudi, and A. Virani, 2015, Can Institutional Investors Improve Corporate Governance Through Collective Action?, Working Paper, University of Toronto.

Dong, M., D. Hirshleifer, S. Richardson, and S. H. Teoh, 2006, Does investor mis-valuation drive the takeover market?, *Journal of Finance* 61, 725–762.

Durnev, A. and E. H. Kim, 2005, To Steal or Not to Steal: Firm Attributes, Legal Environment, and Valuation, *Journal of Finance* 60, 1461-1493.

Dyck, A., N. Volchkova, and L. Zingales, 2008, The corporate governance role of the media: Evidence from Russia. *Journal of Finance* 63, 1093–1135.

Economist (The), various dates.

Edmans, A., I. Goldstein, and W. Jiang, 2012, The real effects of financial markets: The impact of prices on takeovers, *Journal of Finance* 67, 933–971.

Faccio, M. and L. Lang, 2002, The ultimate ownership of Western European corporations. *Journal of Financial Economics* 65, 365-395.

Fama, E. F., and K. R. French, 1993, Common risk factors in the returns on stocks and bonds, *Journal of Financial Economics* 33, 3–56.

Fisher, G. R., 1961, Some factors influencing share prices, *Economic Journal*, 71, 121-141

Fluck, S., 1998, Optimal Financial Contracting: Debt versus Outside Equity, *Review of Financial Studies* 11, 383-418.

Foreman-Peck, J. and L. Hannah, 2011, Extreme divorce: The managerial revolution in UK companies before 1914, *Economic History Review* 64, 1-22.

Franks, J., C. Mayer, and S. Rossi, 2005, Spending Less Time with the Family: The Decline of Family Ownership in the U.K. In R. K. Morck (ed.), *A History of Corporate Governance Around the World: Family Business Groups to Professional Managers*, pp. 581–607. Chicago: NBER and University of Chicago Press.

Franks, J. and R. S. Harris, 1989, Shareholder Wealth Effects of Corporate Takeovers, *Journal of Financial Economics* 23, 225-249.

Franks, J., C. Mayer, and S. Rossi, 2009, Ownership: Evolution and Regulation, *Review of Financial Studies* 22, 4009–4056.

Garcia, D., 2013, Sentiment during recessions, *Journal of Finance* 68, 1267–1300.

Giannetti, M., and A. Simonov, 2006, Which Investors Fear Expropriation? Evidence from Investors' Portfolio Choices, *Journal of Finance* 61, 1507-1547

Gompers, P. A., J. L. Ishii, and A. Metrick, 2003, Corporate Governance and Equity Prices, *Quarterly Journal of Economics* 118, 107-155

Gompers, P. A., Ishii, J., and A. Metrick, 2010, Extreme Governance: An Analysis of Dual class Firms in the United States, *Review of Financial Studies* 23, 1051–1088.

Hannah, L., 2007, The Divorce of Ownership from Control from 1900 Onwards: Re-Calibrating Imagined Global Trends, *Business History* 49, 404-438.

Hauser, S. and B. Lauterbach, 2004, The value of voting rights to majority shareholders: Evidence from dual class stock unifications, *Review of Financial Studies* 17, 1167–1184.

Kalay, A., O. Karakas, and S. Pant, 2012, The Market Value of Corporate Votes: Theory and Evidence from Option Prices, *Journal of Finance*, forthcoming.

Kuhnen, C. M. and A. Niessen, 2012, Public opinion and executive compensation, *Management Science* 58, 1249-272.

Lemmon, M. L. and K. V. Lins, 2003, Ownership structure, corporate governance, and firm value: Evidence from the East Asian financial crisis, *Journal of Finance* 58, 1445–1468.

Leuz, C., K. V. Lins, and F. E. Warnock, 2009, Do Foreigners Invest Less in Poorly Governed Firms?, *Review of Financial Studies* 22, 3245-3285.

Liu, B. and J. J McConnell, 2013, The role of the media in corporate governance: Do the media influence managers' capital allocation decisions?, *Journal of Financial Economics* 110, 1-17.

Li, K., H. Ortiz-Molina, and X. Zhao, 2008, Do Voting Rights Affect Institutional Investment Decisions? Evidence from Dual□Class Firms, *Financial Management* 37, 713–745.

Loughran, T. and B. McDonald, 2011, When is a liability not a liability? Textual analysis, dictionaries, and 10-Ks, *Journal of Finance* 66, 35–65.

McCahery, J., L. Starks, and Z. Sautner, 2015, Behind the scenes: The corporate governance preferences of institutional investors, *Journal of Finance*, forthcoming.

Masulis, R.W., C. Wang, and F. Xie, 2009, Agency Problems at Dual□Class Companies, *The Journal of Finance* 64, 1697-1727.

Meeks, G., and J. Wheeler, 1999, Cambridge/DTI Databank of Company Accounts, 1948-1990 [computer file]. 2nd ed. Department of Trade and Industry [original data producer]. Colchester, Essex: The Data Archive.

Nenova, T., 2003, The value of corporate voting rights and control: A cross-country analysis, *Journal of Financial Economics* 68, 325–351.

OECD Steering Group on Corporate Governance, 2007, Lack of Proportionality between Ownership and Control: Overview and Issues for Discussion, December.

Smart, S. B., Thirumalai, R. S., and C. J. Zutter, 2008, What's in a vote? The short- and long-run impact of dual class equity on IPO firm values, *Journal of Accounting and Economics* 45, 94–115.

Tetlock, P.C., 2007, Giving content to investor sentiment: The role of media in the stock market, *Journal of Finance* 62, 1139–1168.

Times of London (The), various dates.

Zingales, L., 1994, The value of the voting right: A study of the Milan stock exchange experience, *Review of Financial Studies* 7, 125–148.

Zingales, L., 1995, What determines the value of corporate votes?, *Quarterly Journal of Economics* 110, 1047–1073.

Figure 1
The Proportion of Firms with Limited-voting Shares

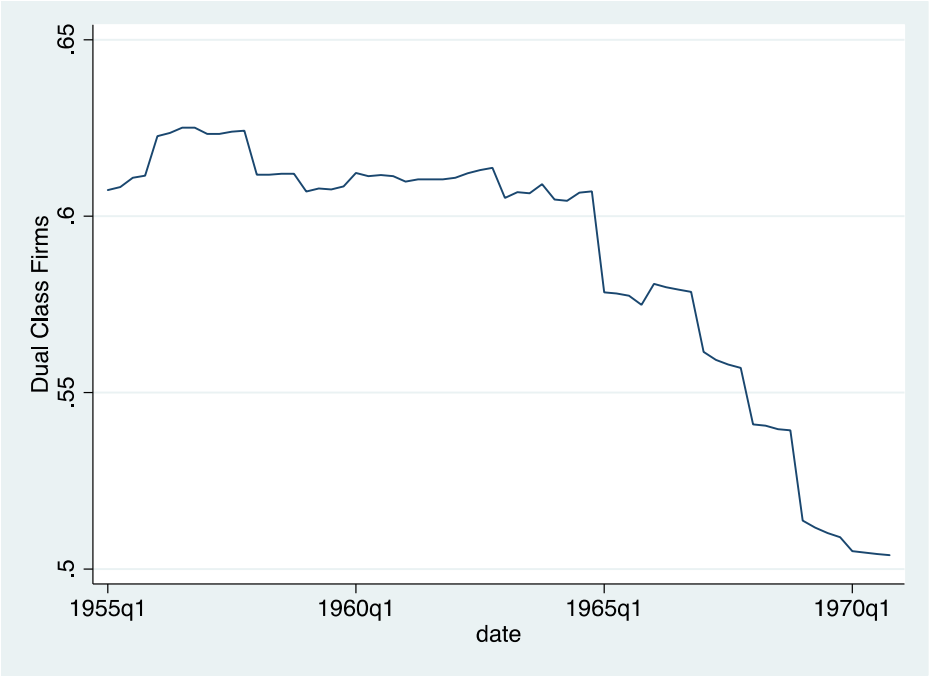

Figure 2
Dual Class Firms and the One-Share-One-Vote Premium

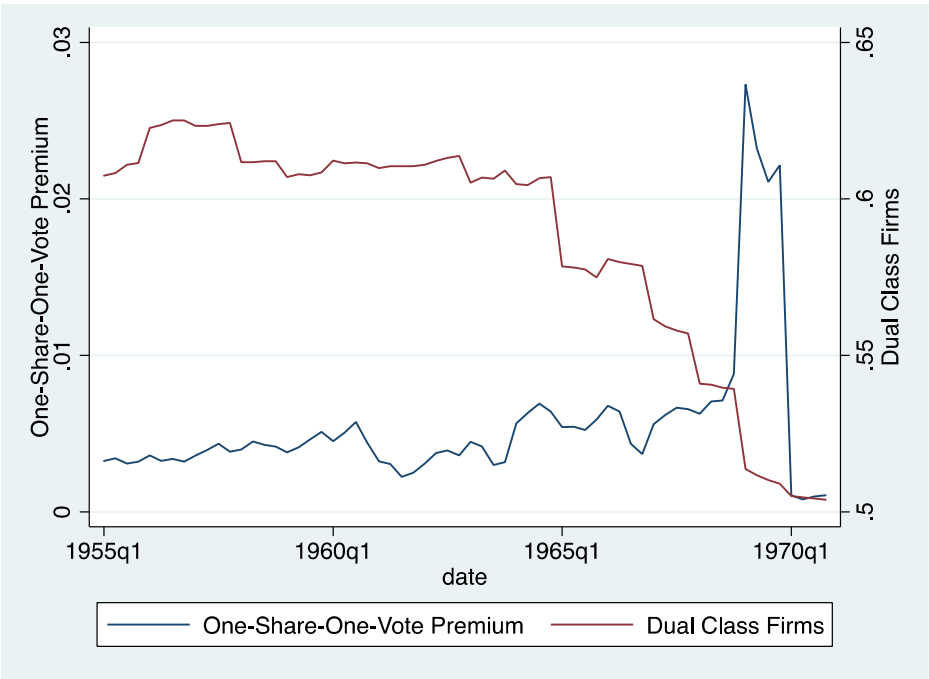

Table 1: Descriptive Statistics and Variable Definitions

Panel A. Quarterly Variables

Variables	Definition	Mean	Median	Sd. Dev.	N
New Dual Class Firms	Number of one-share-one-vote firms issuing limited-voting shares in a quarter divided by the total number of one-share-one-vote firms at the end of the previous quarter	0.002	0.002	0.002	64
Proportion of Dual Class Firms	Number of dual class firms in a quarter, divided by the total number of firms in the same quarter	0.587	0.607	0.038	64
Unification Rate	Number of firms that unify their shares into a single class of voting shares during a quarter, divided by the number of dual-class firms with limited voting shares at the end of the previous quarter	0.002	0.001	0.001	64

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	11.219	11.000	5.385	5522
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	0.331	0.000	0.471	1328
Debt Issuance	Total issuance of long term and bank debt (var26 and var27 in the Cambridge DTI databank) divided by book value of assets at the beginning of the year.	0.018	0.000	0.088	5468
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"	0.600	1.000	0.490	5492
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.	0.080	0.050	0.159	5468
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	0.489	0.215	0.766	5522
One-Share-One-Vote	A dummy variable that equals 1 if the firm has a one-share-one-vote share structure, and zero otherwise	0.158	0.000	0.365	5522
ROE	Total profits (var66 in the Cambridge DTI	0.207	0.203	0.128	5522

	databank), divided by total capital and reserves (var60 in the Cambridge DTI databank).				
ROA	Total profits (var66 in the Cambridge DTI databank), divided by book value of assets (var60+var61 in the Cambridge DTI databank)	0.133	0.131	0.072	5522
Return	The firm's annual stock return, as reported by the London Share Price Database	0.008	0.006	0.027	5515
Size	The firm's book value of assets (in thousands of Pounds)	26.229	5.286	105.296	5522

Panel C. Firm-Month Variables

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	102718
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	0.095	54410
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	0.058	0.058	0.186	45841
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.	0.481	0.061	1.340	45059
Illiquid Stock	Sum of the bid-ask spread of voting and limited-voting shares	0.039	0.032	0.025	44773
Liquidity Voting minus Liquidity Non-Voting	Difference between the bid-ask spread of voting and limited-voting shares	-0.002	-0.006	0.031	45059
Market Value	Total market value of the firm's ordinary shares, as reported by the London Share Price Database (in thousands of pounds)	16.518	4.000	66.376	42587
Returns Volatility	Sum of the standard deviation (computed over five years) of the returns of voting and limited-voting shares	0.139	0.122	0.102	35424

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.	18.073	16.000	8.868	192
Bond index return	Annual return of corporate debentures in nominal terms (Source: Coyle and Turner (2013))	0.026	0.023	0.051	192
EW Returns	Difference in average quarterly returns of between an equally weighted portfolio of voting shares and an equally weighted portfolio of limited-voting shares	0.015	0.013	0.065	192
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	-0.002	-0.002	0.018	191
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 shares published in a certain month	5.171	3.695	4.893	192
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	0.006	0.004	0.005	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	0.000	0.023	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	0.495	0.482	0.224	192
VW Returns	Difference in average quarterly returns between a value weighted portfolio of voting shares and a value weighted portfolio of limited-voting shares	0.009	0.006	0.068	192

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

The table presents time series regressions at a quarterly frequency. In columns 1-4 the dependent variable is the proportion of dual class firms, in column 5 the unification rate and column 6 new dual class firms. 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 Variable	(1)	(2)	(3)	(4)	(5)	(6)
	Proportion of Dual Class Firms				Unification Rate	New Dual Class Firms
	Full Sample	Before 1965	Full Sample	Before 1965	Full Sample	Full Sample
One-Share-One-Vote Premium	-3.822***	-1.859**			0.166***	-0.047*
	(0.877)	(0.828)			(0.030)	(0.027)
Voting Premium			-5.978*	-1.435**		
			(3.003)	(0.540)		
Constant	0.609***	0.620***	0.617***	0.619***	0.001***	0.002***
	(0.010)	(0.004)	(0.013)	(0.003)	(0.000)	(0.000)
Obs	64	40	64	40	64	64

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 heteroskedasticity 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)
One-Share-One-Vote Premium (1 year lag)	0.002***	
	(0.001)	
Voting Premium (1 year lag)		0.023*
		(0.012)
Log Age	0.041	0.043
	(0.028)	(0.027)
Log Size	-0.049***	-0.049***
	(0.012)	(0.012)
Family Firm	-0.041	-0.041
	(0.031)	(0.031)
Leverage	0.027	0.029
	(0.020)	(0.020)
ROA	0.349	0.346
	(0.215)	(0.215)
Constant	0.355***	0.344***
	(0.124)	(0.124)
Obs	4972	4972
R2	.0688	.0682

Table 4
Share Structure and Firm Performance
Panel A. Profitability and Investment

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)-(3) consider the subsample of years in which the one-share-one-vote premium is above the sample median. Columns (4)-(6) 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 heteroskedasticity and clustered at the firm level. ***, **, and * denote statistical significance at the 1, 5, and 10%, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	Periods with High One-Share-One-Vote Premium			Periods with Low One-Share-One-Vote Premium		
	ROE	ROA	Investment	ROE	ROA	Investment
One-Share-One-Vote	0.008	0.008	0.017	0.019*	0.013**	0.002
	(0.014)	(0.008)	(0.019)	(0.010)	(0.006)	(0.007)
Log Age	-0.033***	-0.011**	-0.036***	-0.055***	-0.032***	-0.010
	(0.008)	(0.005)	(0.011)	(0.009)	(0.006)	(0.007)
Log Size	0.013***	0.002	0.018***	0.012***	0.005***	0.016***
	(0.003)	(0.002)	(0.004)	(0.003)	(0.002)	(0.002)
Family Firm	-0.018*	-0.010	-0.003	-0.013*	-0.007	-0.009
	(0.010)	(0.006)	(0.011)	(0.008)	(0.006)	(0.006)
Constant	0.212***	0.157***	0.030	0.229***	0.171***	-0.040*
	(0.040)	(0.022)	(0.048)	(0.035)	(0.022)	(0.023)
Industry_FE	Yes	Yes	Yes	Yes	Yes	Yes
Year_FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs	2552	2552	2515	2940	2940	2923
R2	.131	.123	.0411	.106	.139	.059

Panel B. Capital Structure and Corporate Governance Outcomes

The unit of observation is the firm year. This sample includes both firms with and without dual class shares. The dependent variable is indicated in each column. Columns (1)-(4) consider the subsample of years when the one-share-one-vote premium is above the sample median. Columns (5)-(8) 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 heteroskedasticity 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)
	Periods with High One-Share-One-Vote Premium				Periods with Low One-Share-One-Vote Premium			
	Leverage	Debt Issues	Board Turnover	CEO Turnover	Leverage	Debt Issues	Board Turnover	CEO Turnover
One-Share-One-Vote	0.133	0.010	0.003	0.038	0.002	-0.006**	-0.011	0.039
	(0.130)	(0.008)	(0.013)	(0.050)	(0.055)	(0.003)	(0.016)	(0.057)
Return			0.230	0.798			-0.046	0.573
			(0.229)	(0.703)			(0.328)	(0.895)
One-Share-One-Vote *Return			-0.104	-2.743			-0.373	-2.939
			(0.434)	(1.797)			(0.617)	(1.915)
Log Age	-0.042	-0.016***	0.026***	-0.075**	-0.004	0.001	0.037**	-0.197***
	(0.051)	(0.005)	(0.008)	(0.031)	(0.050)	(0.003)	(0.014)	(0.046)
Log Size	0.154***	0.005***	0.013***	0.058***	0.077***	0.002*	0.013***	0.061***
	(0.028)	(0.002)	(0.003)	(0.014)	(0.018)	(0.001)	(0.005)	(0.015)
Family Firm	0.009	-0.002	-0.019*	0.021	-0.013	-0.001	-0.002	-0.008
	(0.089)	(0.005)	(0.011)	(0.037)	(0.047)	(0.004)	(0.014)	(0.042)
Constant	-0.718**	0.024	-0.084**	-0.099	-0.404**	-0.013	-0.032	0.483**
	(0.309)	(0.025)	(0.034)	(0.152)	(0.188)	(0.010)	(0.054)	(0.193)
Industry_FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year_FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs	2552	2515	1197	766	2940	2923	843	561
R2	.164	.0202	.0591	.115	.152	.0186	.114	.0937

Table 5
Determinants of Public Debate

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)
	Negative News Score		News Intensity	Negative News Score		News Intensity
One-Share-One-Vote Premium (1 month lag)	0.763	-0.307	0.946			
	(0.861)	(1.635)	(12.406)			
One-Share-One-Vote Premium (2 months lag)		1.208	7.509			
		(1.344)	(10.014)			
Voting Premium (1 month lag)				3.235	1.304	32.849
				(2.057)	(9.393)	(57.914)
Voting Premium (2 months lag)					1.908	-11.196
					(9.156)	(55.483)
Acquisition Factor	0.000	0.000	0.004	0.021	0.020	0.339
	(0.001)	(0.001)	(0.003)	(0.055)	(0.056)	(0.352)
Market Return	0.135	0.135	0.853	14.080	15.297	67.798
	(0.157)	(0.158)	(0.737)	(16.274)	(18.132)	(92.143)
Small-minus-Big	0.494	0.521	4.477**	41.325	48.067	343.210
	(0.328)	(0.334)	(1.750)	(33.710)	(42.221)	(224.071)
High-minus-Low	-0.115	-0.153	-1.030	-12.541	-11.692	-89.254
	(0.300)	(0.308)	(1.604)	(30.110)	(29.496)	(164.035)
Constant	0.038***	0.038***	0.275***	3.007**	3.056**	23.569***
	(0.010)	(0.010)	(0.068)	(1.169)	(1.227)	(7.737)
Obs	191	190	190	191	190	190

Table 6
Public Debate and Relative Prices

The table presents time series regressions at a monthly frequency. The dependent variable is indicated on top of each column. In columns 1 and 2, the coefficients of Negative News Score and News Intensity are multiplied by 100. 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)
	One-Share-One-Vote Premium			Non-Voting Premium		
Negative News Score	0.017*		0.015*	0.007*		0.006*
	(0.009)		(0.008)	(0.004)		(0.003)
News Intensity		0.003*			0.002**	
		(0.002)			(0.001)	
Acquisition Factor			0.000**			0.011***
			(0.000)			(0.003)
Bond Index Return	-0.041**	-0.040**	-0.037**	-0.603	-0.554	-0.377
	(0.017)	(0.017)	(0.015)	(0.617)	(0.608)	(0.501)
Inflation	0.026	0.029	0.042	-0.112	0.124	0.903
	(0.031)	(0.031)	(0.038)	(2.333)	(2.361)	(1.903)
Market Return	0.007	0.006	-0.009	1.174	1.134	0.207
	(0.016)	(0.016)	(0.017)	(0.819)	(0.823)	(0.833)
Small-minus-Big	0.011	0.006	-0.016	3.422**	3.052*	1.671
	(0.035)	(0.036)	(0.035)	(1.662)	(1.669)	(1.766)
High-minus-Low	0.020	0.021	0.023	0.175	0.243	0.376
	(0.025)	(0.025)	(0.026)	(1.154)	(1.158)	(1.081)
Constant	0.005***	0.004***	0.001	0.464***	0.425***	0.239**
	(0.001)	(0.001)	(0.002)	(0.106)	(0.113)	(0.101)
Obs	191	191	191	191	191	191

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 2, the coefficient of news has been multiplied by 100. 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 firms fixed effects. Standard errors are presented in parentheses and are corrected for heteroskedasticity 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 Non-Voting Premium
Negative News Score	0.002***		0.003***	0.002*	0.002***	0.002***	0.002***
	(0.001)		(0.000)	(0.001)	(0.001)	(0.001)	(0.001)
News Intensity		0.036***					
		(0.010)					
Board Turnover						-0.081	
						(0.182)	
Cash to Asset Ratio						0.429	
						(0.539)	
Log Firm Market Value						0.260***	
						(0.039)	
Leverage						0.061	
						(0.083)	
Age						0.014	
						(0.013)	
Family Firm						-0.113	
						(0.123)	
Liquidity Voting minus Liquidity Non-Voting	-16.607***	-16.605***	-4.338***	-4.996***	-16.930***	-19.588***	-20.198***
	(1.320)	(1.320)	(0.568)	(0.988)	(1.363)	(2.053)	(2.212)
Dividend Voting minus Dividend Non-Voting	0.344	0.344	1.178***	0.720	0.134	0.267	3.060***
	(0.352)	(0.352)	(0.284)	(0.495)	(0.376)	(0.324)	(0.581)
Acquisition Factor	0.003***	0.003***	0.005***	0.002	0.003***	0.006***	0.003***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Market Return	0.331***	0.349***	0.500***	-0.071	0.369***	0.479***	0.264***
	(0.081)	(0.082)	(0.066)	(0.113)	(0.089)	(0.090)	(0.091)
Small-minus-Big	0.488***	0.472***	0.777***	-0.101	0.502***	0.787***	0.445***

	(0.148)	(0.147)	(0.107)	(0.155)	(0.162)	(0.142)	(0.160)
High-minus-Low	-0.404***	-0.372**	-0.673***	0.132	-0.443***	-0.509***	-0.423**
	(0.147)	(0.148)	(0.114)	(0.228)	(0.161)	(0.149)	(0.172)
Leverage						0.061	
						(0.083)	
Constant	0.341***	0.339***	0.212***	0.016	0.368***	-1.803***	0.001
	(0.096)	(0.096)	(0.069)	(0.173)	(0.105)	(0.356)	(0.113)
Firms_FE	No	No	Yes	No	No	No	No
Year_FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs	39126	39126	39126	1048	35528	30042	34830
R2	.168	.168	.107	.393	.173	.261	.172

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 heteroskedasticity and clustered at the firm level. ***, **, and * denote statistical significance at the 1, 5, and 10%, respectively.

	(1)	(2)	(3)	(4)
Negative News Score	0.002***	0.002**	0.001**	-0.007***
	(0.001)	(0.001)	(0.001)	(0.003)
Acquisition Target*Negative News Score	-0.030*			
	(0.016)			
Liquidity Voting minus Liquidity Non-Voting*Negative News Score		-0.046		
		(0.104)		
Illiquid Stock*Negative News Score			0.644***	
			(0.167)	
Returns Volatility*Negative News Score				0.055**
				(0.025)
Acquisition Target	0.429**			
	(0.170)			
Returns Volatility				-1.938***
				(0.589)
Illiquid Stock			-11.657***	
			(1.749)	
Liquidity Voting minus Liquidity Non-Voting	-16.588***	-16.367***	-13.118***	-16.317***
	(1.321)	(1.398)	(1.391)	(1.447)
Dividend Voting minus Dividend Non-Voting	0.365	0.344	0.056	0.708*
	(0.354)	(0.352)	(0.341)	(0.429)
Acquisition Factor	0.003***	0.003***	0.002*	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)
Market Return	0.327***	0.329***	0.256***	0.380***
	(0.081)	(0.081)	(0.081)	(0.098)
Small-minus-Big	0.484***	0.487***	0.352**	0.467***
	(0.148)	(0.148)	(0.146)	(0.176)
High-minus-Low	-0.412***	-0.405***	-0.243	-0.247
	(0.147)	(0.148)	(0.152)	(0.158)
Constant	0.339***	0.342***	0.753***	0.684***
	(0.096)	(0.096)	(0.118)	(0.143)
Year_FE	Yes	Yes	Yes	Yes
Obs	39126	39126	38890	27676
R2	.168	.168	.203	.0497

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. The dependent variable is the difference in returns between a portfolio of voting shares and a portfolio of non-voting shares. Portfolio returns are value weighted in all columns but column 2 where returns are equally weighted. 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) VW Returns	(2) EW Returns	(3) VW Returns	(4) VW Returns
Voting Premium	-0.128***	-0.112***		
	(0.025)	(0.025)		
Negative News Score			-0.002*	
			(0.001)	
News Intensity				-0.001***
				(0.000)
Acquisition Factor	0.004***	0.004***	0.002***	0.003***
	(0.001)	(0.001)	(0.001)	(0.001)
Bond index return	-0.007	0.075	0.038	0.021
	(0.146)	(0.118)	(0.149)	(0.146)
Inflation	-0.755*	-0.293	-0.939**	-1.036**
	(0.454)	(0.440)	(0.472)	(0.467)
Market Return	0.146	0.296	0.127	0.128
	(0.202)	(0.186)	(0.225)	(0.223)
Small-minus-Big	0.249	0.282	0.083	0.211
	(0.397)	(0.398)	(0.445)	(0.444)
High-minus-Low	0.541*	0.287	0.472	0.443
	(0.325)	(0.310)	(0.373)	(0.380)
Constant	0.035	0.010	0.014	0.028
	(0.028)	(0.025)	(0.027)	(0.026)
Obs	191	191	191	191

Internet Appendix: Companies in the sample and their share classes

A. Companies with limited-voting ordinary shares or participating preference shares

Automatic Telephone & Electric Company, Limited
Aveling-Barford Limited
Beaverbrook Newspapers Limited
Bentley Engineering Group Limited (The).
Brady (G.) & Co. Limited
Bridgewater (G. & T.) Limited
British Celanese Limited
Brooke, Bond & Co., Limited
Chubb & Son Limited
Cohen (A.) & Co., Limited
Decca Limited
Express Dairy Company, Limited
Folkes (John) Hefo Limited
Grand Metropolitan Hotels (Scotland) Limited
Harris (W. J.) & Co., Limited
Henderson (P. C.) Limited
Holroyd (John) & Company Limited.
Homfray & Company Limited
Hook (C. Townsend) and Company, Limited.
House of Fraser Limited
Hudson (Robert) Limited.
Hulton Press Limited
Illingworth, Morris & Company, Limited
Loyds Retailers Limited
Mecca Limited
Morgan Crucible Company Limited (The).
Morris & Blakey Wall Papers Limited
Mount Charlotte Investments Limited
Parker-Knoll Limited
Perkins (Dorothy) Llimited
Pye Limited
Rank Organisation Limited (The)
Ranks Hovis McDougall Limited
Rest Assured Limited
Samuel (H.) Limited
Sears Holdings Limited
Sharpe (W. N.) Limited
Tillotson & Son, Limited
Twentieth Century Cinemas Limited
Ultra Electric (Holdings) Limited
United Caterers, Limited
Wades Departmental Stores Limited
Walker (James) Goldsmith & Silversmith Limited
Warner Holidays Limited
Warren (James) & Company, Limited
Wolsey, Limited

B. Companies with preference shares

Aaronson Bros. Limited
Agar, Cross & Company, Limited
Albright & Wilson Limited
Allen (J. J.), Limited
Allied Industrial Services Limited
Amalgamated Industrials Limited
Anchor Chemical Company Limited (The).
Angus (George) & Company, Limited
Aplin & Barrett Limited
Ascherberg, Hopwood & Crew, Limited
Ashworth (John) & Co. (Timber) Limited
Asquith Machine Tool Corporation Limited
Associated British Engineering Limited
Associated British Picture Corporation Limited
Associated Commercial Vehicles Limited
Associated Electrical Industries Limited
Associated Engineering Limited
Atkinson Lorries (Holdings) Limited
Automatic Telephone & Electric Company, Limited
Automotive Products Associated Limited
Aveling-Barford Limited
Averys Limited
B H D Engineers Limited
BTR Industries Limited
Bakelite Limited
Balstone, Cooke & Rayonese Limited
Bardolin Limited
Barker (John) And Company, Limited
Barnes (James), Limited
Bath And Portland Group Limited (The)
Beaverbrook Newspapers Limited
Belliss & Morcom Limited
Bentalls Limited
Bentley Engineering Group Limited (The).
Berger, Jenson & Nicholson Limited
Berry (J.) & Sons Limited
Bestwood Company Limited (The).
Bibby (J.) & Sons Limited
Bigwood (Joshua) & Son Limited
Birfield Limited
Blundell-Permoglaze Limited
Blythe (William) And Co. Limited
Boosey & Hawkes Limited
Bourne & Hollingsworth (Holdings) Limited
Bovril, Limited
Bowater-Eburite Limited
Bradford Dyers' Association Limited
Braid Group Limited
Bridgewater (G. & T.) Limited
Brilliant Signs Limited
Bristol Aeroplane Company, Limited
Bristol Stadium Limited
British Aluminium Company, Limited
British Celanese Limited
British Coated Board & Paper Mills Limited
British Home Stores Limited
British Industrial Plastics Limited
British Match Corporation Limited
British Paints (Holdings) Limited
British Printing Corporation Limited (The)
British Ropes Limited
British Sisalkraft Limited
British Syphon Company, Limited
British Timken Limited
British United Shoe Machinery Company, Limited
British Xylonite Company Limited (THE)
Brittains, Limited
Brocklehurst-Whiston Amalgamated Limited
Brooke, Bond & Co., Limited
Brown (John) And Company, Limited
Buckingham (J. H.) & Compy. Limited
Buist (Charles G. S.) Limited
Button (Alfred) and Sons, Limited
Cadbury Schweppes Limited
Caffyns, Limited
Calders Limited
Calico Printers' Association, Limited (The)
Caribonum Trust Limited
Carr (John) (Doncaster) Limited
Carrier Engineering Company Limited
Carrington and Dewhurst Limited
Carters Tested Seeds Limited
Chambers Wharf and Cold Stores Limited
Chivers & Sons, Limited
Chubb & Son Limited
Churchill & Sim Limited
Clayton Dewandre Holdings Limited
Clifford Motor Components, Limited
Cole (E. K.), Limited
Cook (James W.) & Company, Limited
Courtaulds, Limited
Courtney, Pope Limited
Cow (P. B.) & Company, Limited
Crittall Manufacturing Company, Limited
Crofts Engineers (Holdings) Limited
Crompton Parkinson Limited
Cronite Foundry Company Limited
Cropper (James) & Company Limited
Crowley, Russell & Company Limited
Crown Cork Company, Limited (The)
Crowther & Nicholson Limited
Crystalate Limited
Currys, Limited
Dallas (John E.) & Sons Limited
De La Rue Company Limited (THE)
Decca Limited
Delta Metal Company, Limited
Denison (Edward) (Yeadon) Limited
Denny (Henry) & Sons, Limited
Dickinson (John) & Co., Limited
Downing (G. H.) & Company Limited
Drake & Mount, Limited
Drey, Simpson & Co. Limited
Dreyfus & Company, Limited
Dubarry Perfumery Company, Limited
Dudley & Company Limited
Dunster (John J.) & Son Limited
Duport Limited
Eastwoods Limited
Edge Tool Industries Limited
Ellams Duplicator Company Limited
Elson & Robbins, Limited
Enfield Cables Limited
English Calico Limited
English China Clays, Limited
English Electric Company, Limited (The).
Ericsson Telephones, Limited
Eugene Limited
Evans (Outsizes) Limited
Express Dairy Company, Limited
Fairdale Textiles Limited
Farley's Infant Food, Limited
Faulkner Greene & Company Limited
Financial News, Limited
Fine Spinners And Doublers, Limited
Fisons Limited
Fleming & British American Optical Industries Limited
Fluidrive Engineering Company Limited
Ford (Louis G.) Limited
Ford Motor Company Limited
Foseco Minsep Limited
Foster Brothers Clothing Company Limited
Galloway (John) & Company Limited
Garrard Engineering And Manufacturing company, Limited
Gestetner Limited
Gill & Duffus Limited
Glenfield & Kennedy Holdings Limited
Glossop (W. & J.) Limited
Godfrey (Sir George) and Partners (Holdings) Limited
Goode Durrant & Murray (Consolidated) Limited
Grainger & Smith, Limited
Grand Metropolitan Hotels (Scotland) Limited
Grant Bros. Limited
Greaves & Thomas Limited
Greengate and Irwell Rubber company, Limited
Griffiths Hughes Proprietaries Limited
Gunner (R.) Limited
H.P. Sauce Limited
Hadfield (J. J.) Limited
Hall (L.) (Edmonton) Limited
Hall Harding Limited.
Handley Page Limited
Hanson (Saml.) & Son Limited
Harrison & Sons, Limited
Harrisons & Crosfield, Limited
Hartmann Fibre Company, Limited (The)
Harvey & Sons Limited
Harvey's Belgravia Foods Limited
Hawker Siddeley Group Limited
Hinde (Fras.) & Sons Limited
Hoffman Manufacturing Company, Limited (The)
Holyrood Knitwear Limited
Homfray & Company Limited
Hook (C. Townsend) and Company, Limited.
Hoover Limited.
Hoskins & Horton Limited
House of Fraser Limited
Hovis Limited
Hoyle (Joseph) & Son Limited
Ilford Limited
Illingworth, Morris & Company, Limited
Illustrated Newspapers, Limited
Imperial Chemical Industries Limited
Ingle (W. L.), Limited
Initial Services Limited
International Computers And Tabulators Limited
International Publishing Corporation Limited
International Tea Company's Stores, Limited (The).
Jentique Limited
Jewson & Sons, Limited
Johnson & Slater Limited
Johnson (Richard) & Nephew, Limited

Johnson and Phillips, Limited
Johnson, Gibbons Limited
Johnson, Matthey & Co. Limited.
Jones (Samuel) & Co. (Holdings) Limited
K Shoes Limited
Kaufmann (H) Limited
Kayser Bondor Limited
Keelavite Hydraulics Limited
Kelsall & Kemp, Limited
Kier (J. L.) & Company, Limited
Kinloch (Provision Merchants) Limited
Lambert Howarth Group Limited
Lamson Industries Limited
Lancashire Cotton Corporation Limited
Lancashire Dynamo Holdings Limited
Langdon (J.) & Sons Limited.
Lewis's Investment Trust Limited
Liebig's Extract of Meat Company, Limited
Lines Bros. Limited
Lister (R. A.) & Company, Limited
Lloyd's Packing Warehouses (Holdings) Limited
London And Northern Securities Limited
London Brick Company Limited
London Electric Wire Company and Smith, Limited [The]
Low & Bonar Limited
Loyds Retailers Limited
Macarthys Pharmaceuticals Limited
Macro Refrigerators Limited
Makin (J. & J.) Paper Mills Limited
Mallinson (William) & Denny Mott Limited
Manbre & Garton, Limited
Manchester Garages, Limited
Manganese Bronze Holdings Limited
Maple & Company, Limited
Marshalls Universal Limited
Martonair International Limited
Mason (Henry) (Shipley), Limited
Mather & Platt, Limited
McCorquodale & Company Limited
Mecca Limited
Mellowes & Company, Limited
Merritt and Hatcher Limited
Metal Industries Limited
Midland Industries Limited
Mitchell Construction Holdings Limited
Mitchell Cotts Group Limited
Monk (A.) & Company, Limited
Monsanto Chemicals Limited
Morgan Crucible Company Limited (The).
Morley (I. & R.) Limited
Morris (Herbert), Limited
Moseley (David) & Sons Limited
Murex Limited
National Canning Company, Limited
Naylor (T. & A.) Limited
Needlers, Limited
Newnes (George), Limited
Newton, Chambers & Company, Limited
Norcros Limited
Nurdin & Peacock Limited
Olympia Limited
Parkinson (Sir Lindsay) & Co. Limited
Parsons (C. A.) & Company, Limited
Patons & Baldwins, Limited
Pearson (S) & Son Limited
Pegler-Hattersley Limited
Perkins (Dorothy) Llimited
Peterborough Motors Limited
Pharaoh Gane & Company, Limited
Phoenix Telephone and Electric Holdings Limited
Pinchin, Johnson & Associates, Limited
Plessey Company Limited (The)
Powell Duffryn Limited
Pressed Steel Company Limited
Prestwich (J. A.) Industries Limited
Priestman Brothers, Limited
Pye Limited
Pyrene Company, Limited (The)
Qualcast, Limited
Quality Cleaners Limited
Radiation Limited
Radio Rentals Limited
Raleigh Industries Limited
Rank Organisation Limited (The)
Ranks Hovis McDougall Limited
Reckitt & Colman Holding Limited
Redfearn National Glass Limited
Rediffusion Limited
Reeves (F.J.) Limited
Reichhold Chemicals Limited
Renold Limited
Reyrolle Parsons Limited
Rogers (R. H. & S.), Limited
Rose (L.) & Co., Limited
Rotaprint Limited
Rowe Brothers & Co. Limited
Rowntree-Mackintosh (Ireland) Limited
Ruston & Hornsby, Limited
S. & U. Stores Limited
Sagar (W. & J.) Limited
Salts (Saltaire) Limited
Samuel (H.) Limited
Scottish Cables Limited
Scottish Heritable Trust, Limited (The)
Sears Holdings Limited
Seddon Diesel Vehicles Limited
Selincourt & Sons, Limited
Sharpe (W. N.) Limited
Shaw (Francis) And Company Limited
Sheffield Twist Drill And Steel Company Limited
Showerings, Vine Products & Whiteways Limited
Smethwick Drop Forgings Limited
Smith & Wellstood, Limited
Spear & Jackson Limited
Spicers Limited
Spillers Limited
Spratt's Patent Limited
Square Grip Reinforcement Company (London) Limited (the)
Staveley Industries Limited
Steetley Company Limited (The)
Sterling Industries Limited
Stimpson-Perkins Limited
Stoneware Limited
Stroud, Riley & Co., Limited
Sunday Pictorial Newspapers (1920), Limited
Symes (A.E.) Limited
Thompson (John) Limited
Tilley Lamp Company Limited
Tillotson & Son, Limited
Tootal Limited
Tozer Kemsley & MillBourn (Holdings) Limited
Transparent Paper Limited
Trust Houses Limited
Tuck (Raphael) & Sons, Limited
Turner & Newall, Limited
Turner Manufacturing Co Limited
Tyzack (W.), Sons & Turner Limited
Unigate Limited
United Biscuits Limited
United City Merchants Limited
United Glass Limited
United Molasses Company, Limited (The)
Universal Grinding Wheel Company, Limited
Vab Products Limited
Villiers Engineering Company Limited (The)
Viyella International Limited
Wade Potteries Limited
Walker (James) Goldsmith & Silversmith Limited
Wall Paper Manufacturers, Limited
Wallis & Company (Costumiers) Limited
Walsall Conduits Limited
Warner Holidays Limited
Warren (James) & Company, Limited
Weber, Smith & Hoare, Limited
Welch, Margetson And Company Limited
West Riding Worsted And Woollen Mills, Limited
Westover Garage, Limited
White, Tomkins And Courage, Limited
Whitecroft, Limited
Whiteley (B. S. & W.) Limited
Whites (Timothy) & Taylors Limited
Whiteside (H. S.) & Co., Limited
Whitworth And Mitchell Textorial Limited
Wiggins , Teape & Co. Limited
Wild (Thomas C.) & Sons, Limited
Williams Furniture Limited
Williams Hudson, Limited
Willows Francis Limited
Wilmot-Breeden (Holdings) Limited
Winterbotham, Strachan And Playne, Limited
Winterbottom Book Cloth Company, Limited
Wolf Electric Tools (Holdings) Limited
Wolsey, Limited
Wood, Rozelaar & Wilkes, Limited
Woodall-Duckham Group Limited
Woolcombers, Limited
Wright's Biscuits Limited
Wright, Layman & Umney, Limited
Yardley And Company, Limited
Yorkshire Fine Woollen Spinners Limited
Zwanenberg Associated Food Companies Limited