ecgi

Changing Corporate Governance Norms: Evidence from Dual Class Shares in the U.K.

Fabio Braggion
Tilburg University

Mariassunta Giannetti
Stockholm School of Economics,
CEPR and ECGI

This paper can be downloaded without charge from:
http://ssrn.com/abstract=2138949

www.ecgi.org/wp

Changing Corporate Governance Norms: Evidence from Dual Class Shares in the U.K.

Fabio Braggion
Mariassunta Giannetti

Abstract

In the U.K., between 1955 and 1970, dual class shares quickly lost popularity without any regulatory intervention. The decline in the use of dual class shares was positively correlated with the relative valuations of one-share-one-vote and dual class firms, which in turn were related to media pessimism on the use of dual class shares. Following periods with high relative valuations of one-share-one-vote, one-share-one-vote firms exhibited lower returns than dual class firms suggesting that the latter were undervalued. These and other results suggest that investor demand may lead firms to abandon dual class shares.

Fabio Braggion
Associate Professor of Finance
Tilburg University, Department of Finance
Warandelaan 2
5000 LE Tilburg, The Netherlands
phone: +31 13 466 8209, fax: +31 13 466 2875
e-mail: f.braggion@uvt.nl

Mariassunta Giannetti*
Professor of Finance
Stockholm School of Economics
Sveavagen 65
S-11383 Stockholm, Sweden
phone: +46 8 736 9607
e-mail: mariassunta.giannetti@hhs.se

*Corresponding Author

Changing Corporate Governance Norms: Evidence from 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 quickly lost popularity without any regulatory intervention. The decline in the use of dual class shares was positively correlated with the relative valuations of one-share-one-vote and dual class firms, which in turn were related to media pessimism on the use of dual class shares. Following periods with high relative valuations of one-share-one-vote, one-share-one-vote firms exhibited lower returns than dual class firms suggesting that the latter were undervalued. These and other results suggest that investor demand may lead firms to abandon dual class shares.
Keywords: Corporate Governance; Dual Class Shares; Investor Demand; Public Debate
JEL Codes: G3, G1, N24

1. Introduction

Corporate governance arrangements depend on laws and institutions (La Porta et al., 1998), but may also be affected by culture and norms of good governance (Dyck and Zingales, 2004; Stulz and Williamson, 2003). While existing literature mostly explores the effect of laws, this paper studies whether changing corporate governance norms may induce firms to supplant governance structures that do *not* harm and potentially enhance their performance.

Norms of strong corporate governance may affect investors' demand for dual class shares. If changes in demand drive apart prices, managers may change the governance structure according to the prevailing norm. This argument builds on a line of research recognizing that social dynamics may affect investor demand, lead to security mispricing (Shiller, 1984), and ultimately influence managers' rational decisions.[1] To the best of our knowledge, we are the first to explore how this mechanism may affect firms' corporate governance.

To achieve this objective, we focus on the London Stock Exchange (LSE) in the mid-1950s. Our unique setting has major advantages over the current period because norms of good governance were in the making. Following the 1948 Company Act, which increased disclosure and allowed for proxy voting, the LSE was transforming into a modern stock market, dominated by institutional investors (Cheffins, 2008; Franks et al., 2009). Such transformation was naturally accompanied by a debate on the principles based on which power had to be allocated within companies. We rely on the debate to capture changing norms of strong corporate governance.[2]

The LSE of the mid-1950s also allows for a richer empirical analysis than the current period because a relatively large sample of companies had listed voting and limited-voting

---

[1] Investor demand has been shown to affect corporate financing decisions (Baker and Wurgler, 2004 a and b and Polk and Sapienza, 2002) as well as merger waves (Rhodes-Kropf et al., 2005), and nominal share prices (Weld et al., 2009).
[2] Nowadays, investors look with diffidence at the stocks of firms with dual class shares (Giannetti and Simonov, 2006; Leuz et al., 2009; Li et al., 2008).

shares. In contrast, even though about 10% of US publicly traded companies have shares with multiple voting rights (Gompers et al., 2010), voting shares are often not traded in public markets.

Our analysis begins exploring the correlation between the relative valuation of one-share-one-vote and dual class firms and the proportion of publicly traded dual class firms. While the relative valuations proxies may have many possible determinants (Lease et al., 1984; Zingales, 1994), if shocks to the relative valuations reflect investor demand for one-share-one-vote, and managers cater to investor demand, we expect a *negative* correlation between the premium on one-share-one-vote and the proportion of publicly traded dual class firms.

If instead changes in the one-share-one-vote premium are driven by other factors, such as private benefits of control or voting shareholders' benefitting from extra payments in a takeover, we expect to observe *more* dual class firms when the premium is high. The positive correlation arises because an increase in the premium would be associated with an increase in the payoffs of voting shareholders, who, as a result, would rather maintain dual class share structures.[3]

We show that when alternative proxies for the one-share-one-vote premium are high, the proportion of dual-class firms in the market declines and dual-class firms are more likely to unify their shares into a single voting class. Firms are also more likely to issue limited-voting shares when the premium drops. This evidence is consistent with the catering hypothesis, but not with changes in the expected payoffs of voting shareholders.

Also, if firms abandon dual class shares just to cater to investor demand, we do not expect dual class firms' lower valuations to be associated with worse operating performance or different corporate policies. We find no evidence that dual class share structures are associated

---

[3] Hereafter, we refer to any monetary and non-monetary benefits enjoyed by voting shareholders, but not by limited-voting shareholders, as private benefits of control.

with weaker firm operating performance, different investment policies, worse corporate governance outcomes, or higher risk exposure.

Consistently with the idea that changes in the prevailing corporate governance norms lead to changes in investor demand, media pessimism on limited-voting shares, quantified using standard textual analysis techniques (Tetlock, 2007), is positively correlated with the proxies for the one-share-one-vote premium, even though no new material information about firms and their shares classes was revealed. We also explore cross-sectional differences in the exposure of a firm's relative valuations of voting and limited voting shares (voting premium) to media coverage to evaluate whether changes in relative valuations may be related to voting shareholders' expected payoffs. For instance, if media pessimism on limited-voting shares captured heightened concerns about firms' agency problems, we would expect its effect to be more pronounced for firms that lack reputational mechanisms to payout cash flows. Similarly, if media pessimism were related to concerns about uneven distribution of takeover gains, we would expect its effect to be more pronounced for firms that are takeover targets.

We find no evidence that media coverage may capture corporate governance concerns. Instead, media pessimism has a particularly strong effect on the voting premium of firms with illiquid and high volatility stocks. For such stocks, arbitrage is considered to be riskier (Barberis and Thaler, 2003) and therefore the relative valuations of voting and limited voting shares are more likely to reflect investor demand.

A final important piece of evidence provides additional support for the catering hypothesis. The difference in returns of voting and limited-voting shares is negatively related to their ex ante relative valuations and the negative coverage of dual class shares suggesting that voting shares are relatively overpriced when their relative valuation is high. Similarly, following

periods with high relative valuations of one-share-one-vote, one-share-one-vote firms exhibit lower returns than dual class firms suggesting that the latter were relatively undervalued. These predictability results are consistent with time-varying mispricing associated with the demand for limited-voting shares and confirm that changes in relative valuations are not explained by differences in the ex post returns accruing to voting and limited-voting shareholders or by the returns of firms with and without dual class shares.

Taken together, our results suggest that firms abandoned dual class shares to cater to investor demand and the new norms of corporate governance. While norms of strong corporate governance may have been affected by the fact that the emerging professionalism of share ownership decreased shareholders' marginal cost of monitoring, we find no evidence that during our sample period dual class shares were associated with weaker performance or worse corporate governance outcomes. The fact that during our sample period the proxies for the one-share-one-vote premium and media pessimism on dual class shares do not monotonically increase, but experience cycles further suggests that firms may have catered to uninformed investor demand.

Our paper is related to a large corporate governance literature exploring how dual class shares contribute to the maximization of shareholder value. Empirical evidence on the desirability of dual class shares is mixed (Adams and Ferreira, 2007). While we do not take a stand on the desirability of dual class shares, our results suggest that the costs of having dual class shares are affected by investor demand.

More closely related to us, Lease, et al. (1983, 1984) show that voting shares sell at a premium over limited-voting shares. Since most trades in voting stocks involve investors with no direct control over firm activities, and who cannot directly appropriate cash flows beyond contractually established dividends, a voting premium is believed to emerge if there are proxy

contexts or takeover threats (Hong, 2013; Kalay et al., 2014; Nenova, 2003; Zingales, 1994, 1995). Our results suggest that investor demand may also affect the voting premium.

Our paper is also connected to a strand of literature exploring the role of media in corporate governance. Media are generally viewed as disciplining managers and insiders (Dai et al., 2015; Dyck, Volchkova, and Zingales, 2008; Liu and McConnell, 2013;). However, Kuhnen and Niessen (2012) argue that negative media coverage of executive stock options may reduce the use of this form of compensation. Our paper also suggests an association between media coverage and corporate policies and that changes in corporate governance associated with media coverage are not necessarily optimal.

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

2.   The British Stock Market and the Debate on Limited-Voting Shares

In the U.K. of the 1950s, the stock market played an important role in the funding of public companies. Companies listed in the LSE had highly dispersed ownership (Braggion and Moore, 2011; Hannah and Foreman-Peck, 2011). Families owned minority stakes, but had sometimes maintained control with a disproportionate representation on the board and with dual class shares (Franks et al., 2005 and 2009). Limited-voting shares were widely used and did not raise any criticisms up to the first half of the 1950s. The creation of superior voting shares was generally associated with positive announcement effects (Ang and Megginson, 1989).

At the beginning of 1956, the LSE recommended that non-voting ordinary shares were explicitly designated as such (Times, February 1, 1956). The announcement also mentioned that

this was not a necessary condition for obtaining a listing and that shares with limited-voting rights were not recommended to report any explicit wording. Preference shares, which gave (limited-voting) shareholders right to a preferential dividend and in some instances to further dividend distribution (participating preference shares), were unaffected by this recommendation. No further regulatory interventions were undertaken. It is therefore surprising that by the end of the sixties limited-voting ordinary shares as well as preference shares had become much less popular, as shown in Figure 1.[4]

In what follows, we explore to what extent the decrease in popularity of dual class shares may have catered to a change in investor demand. A debate that developed over this period and that was ignited by institutional investors helps to understand investors' views on dual class shares.[5] 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.*"[6]

Over the next three years, there were numerous columns with negative coverage of limited-voting shares. The news mostly referred to institutional investors that expressed opinions against dual class shares in their annual meeting. For instance, 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*

---

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

[5] Institutional investors were sleeping giants and did not attempt to monitor or exercise control (Cheffins, 2008, p. 373).

[6] Most of the shares with limited-voting rights had no voting rights at all.

those who own the risk bearing capital should be entitled to share in the control of the company".

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

Starting from 1959, Institute of Directors, the Board of Trade, the Institute of Secretaries, and the LSE advocated in favor of dual class shares. For instance, on July 27, 1959, in a public statement, the LSE expressed support for shares with restricted voting rights, especially if they gave right to a preferential dividend. Dual class shares were also justified on the ground that nobody is obliged to buy limited-voting shares. Acceptance of dual class shares was reinstated by the Jenkins Committee, which in the summer 1960 argued that it may be desirable that control is retained by insiders, especially in small family firms.

The debate then subsided for a few years, but resumed in mid-1964 and remained lively in the second half of the 1960s, to then tone down during the 1970s. 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*". Considering this evidence, our sample period ends on December 31, 1970.

Since no corporate scandals or other events affecting the expected relative returns of voting and limited-voting shares occurred, the opinions reiterated by institutional investors may capture social dynamics. Besides reflecting the preferences of some institutional investors, these opinions may have affected retail investors' demand for voting shares. In what follows, we

provide some evidence that social dynamics, which Shiller (1984) argues may affect investor demand and ultimately stock prices, may have turned to favor securities with voting rights.

3. Data Sources and Sample Construction

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

We hand-collect stocks' voting rights from 1950 to 1970 for all firms listed in the sections "Commercial and Industrial" of the Stock Exchange Official Yearbook. The Stock Exchange Yearbook also allows us to identify firms issuing limited-voting shares and the ones unifying their shares classes into a single class of voting shares. Our sample includes 1,178 unique firms, of which 868 have dual class shares.

About 15% of the dual class firms in our sample issued limited-voting ordinary shares or participating preference shares. The rest of the dual class firms issued non-participating preference shares. Limited-voting shares either carried no voting rights or granted voting rights only in specific circumstances, such as the liquidation of the company or a significant delay in the payment of the preferential dividend. Importantly, about 12% of dual class firms in our sample had voting and limited-voting shares with identical cash flow rights. For the median dual class firm, the difference in cash flow rights between limited-voting and voting shares is 1% of the price of a limited-voting share.

We consider both limited-voting ordinary shares and preference shares in our analysis because the latter are generally treated as equity without voting rights even when they have no right to participate in further dividends distributions (see, for instance, Faccio and Lang (2002) and Franks et al., 2009).[7] Theoretically, this is the case because preference shares have two important features of equity contracts: The claims of preference shareholders are not redeemable (Fluck, 1998) and firms' inability to pay dividends does not trigger default. Since no market participant or regulator ever called for preference shares to be banned, the fact that our results are similarly strong for limited-voting ordinary shares and preference shares provides further support to the conclusion that investor demand for voting shares matter.

We hand-collect prices and dividends of limited-voting shares at monthly frequency from January 1950 to December 1970 from the LSE Daily Official List, available at the Guildhall Library in London. We also hand collected monthly prices and dividend of voting shares between 1950 and 1954 and obtain prices and dividends of ordinary voting shares at a monthly frequency starting from January 1955 from the LSPD.[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).

Finally, for some of our tests, we merge the information on share prices with the Cambridge/DTI Databank (Meeks and Wheeler, 1999), which provides financial statements and other firm-specific information for a subsample of publicly quoted companies. Table 1 provides variable definitions and descriptive statistics.

---

[7] A significant number of companies quoted in the LSE had preference shares carrying full voting rights. We do not include preference shares with full voting rights in our analysis.
[8] The LSPD also obtains the prices of voting shares from the LSE Daily Official List.

4. Investor Demand and Dual Share Structures

4.1 Measuring Relative Valuations

Our first relative valuation proxy, based on Baker and Wurgler (2004a), is the difference in the average market-to-book ratios of single and dual class firms (henceforth, the *One-share-one-vote Premium*). This proxy may vary with investor demand as well as with private benefits of control. Unfortunately, changes in the *One-share-one-vote Premium* may also capture changes in firm characteristics.

Ideally, we would like to measure the premium attributed to one-share-one-vote firms using differences in the market prices of identical firms with different share structures. To get closer to this ideal measurement, we use several alternative proxies. First, we construct a proxy based on the measures developed by Hoberg and Phillips (2010), Pastor and Veronesi (2003) and, Rhodes-Kropf et al. (2005), and used in much recent work on misvaluation. We first estimate a firm's valuation model pooling all firms and years in our sample and regressing a firm's market to book ratio on the firm's size, age, leverage, standard deviation of stock returns, dividend payout ratio, and industry dummies. We then use monthly data to predict the market to book ratio. For each firm, the valuation error in a month is the deviation of the firm's actual market valuation in a month from its predicted value. To obtain the relative valuation of single and dual class firms, we average the valuation error within each group of firms and take the difference between single and dual class firms. Since our empirical model specification is closest to Hoberg and Phillips (2010), we refer to this variable as *HP Relative Valuation*. This variable allows us to capture differences in the relative valuations controlling for firm characteristics.

Second, we define the *Voting Premium* 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. Since voting and limited voting shares occasionally have different cash flow rights, we correct the premium for the perpetuity of differences in cash flow rights as in Zingales (1994). [9]

Finally, to ensure that our findings are not driven by differences in contractual dividends, we also construct a second proxy for the voting premium, *Voting Premium—Same Cash Flows*, considering only firms whose limited-voting and voting shares confer rights to exactly the same dividends (Lease et al., 1983).

Since the voting premium proxies are defined only for firms that issue limited-voting shares, we take the average across all dual class firms in our sample. Conceptually, the voting premium captures differences in the value of shares of the same firm. In this respect, the voting premium may understate investor 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.

Based on all proxies, differences in valuations between single and dual class shares were close to zero up to the mid-1950s, with quarters in which firms' dual class shares (and limited-voting shares) appeared to be valued more than single class firms (and voting shares). All proxies spike by over 100% in the second half of the 1950s and remain elevated up to the beginning of the 1960s, when they drop by approximately 50%. The relative valuations of single class firms (and voting shares) increase again in the second half of the sixties and remain at high levels for the rest of the sample. In what follows, we explore whether these changes in relative valuations help explaining firms' decisions to have dual class shares.

---

[9] Following Zingales (1994), we use the following definition of the voting premium: $\frac{P_v - P_{nv}}{P_{nv}} - \frac{\varepsilon}{\rho P_{nv}}$, where P_v (P_{nv}) is the price of a voting (limited-voting) share, 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 between 1950 and 1970.

4.2. Relative Valuations and the Proportion of Dual Class Firms

Table 2 documents how the proportion of dual class firms is associated with the relative valuations of single and dual class firms. We aggregate data at the quarterly level to account that firms may need some time to change their share structures.[10]

Column 1 of Panel A in Table 2 shows that the proportion of firms with limited-voting shares drops when the *One-share-one-vote Premium* is high. This result is not only statistically but also economically significant: a one-standard-deviation change in the *One-share-one-vote Premium* is associated with a drop in the proportion of dual class firms of over 65% of a standard deviation. The negative correlation between proportion of dual class firms and relative valuations emerges also when we use the other proxies, mitigating concerns that we may be capturing differences in firm characteristics. In column 2 and column 3, a one-standard-deviation increase of *HP Relative Valuation* (*Voting Premium*) is associated with 60% (35%) of a one-standard-deviation drop in the proportion of dual class firms indicating that changes in firm characteristics are unlikely to drive our findings. Importantly, a one-standard-deviation change in *Voting Premium— Same Cash Flows* explains 45% of the standard deviation of the dependent variable. This suggests that, if anything, differences in cash flow rights between share classes of the same firm bias our coefficients downwards.

In the rest of Panel A, we test whether *HP Relative Valuation* can explain unifications and new issuances of limited-voting shares. In column 5, more firms unify their share classes when the relative valuation of single class firms is higher. A one-standard-deviation change in the measure of relative valuation explains nearly 35% of the standard deviation of the unifications. This result indicates that our findings are not driven by changes in sample composition. The fact that firms actively unify their share classes also indicates that the negative

---

[10] For doing so, we take the average of the relative valuations proxies over the quarter.

relation between one-share-one-vote premium and proportion of dual class firms is not due to the acquisition (and exit) of dual class firms.

We find a positive and statistically significant relationship between *HP Relative Valuation* unifications also when we restrict our attention to limited-voting ordinary shares (column 6). The result is also economically significant: a one-standard-deviation change in the relative valuation measure explains about 25% of the standard deviation of unifications.

In the same vein, in column 7, we consider the number of firms that issue limited-voting shares for the first time during a quarter. A one-standard-deviation increase in *HP Relative Valuation* is associated with a drop in the number of firms issuing limited-voting shares equivalent to about 26% of the standard deviation of the issuances. In column 8, we consider the number of firms that issue limited-voting ordinary shares, and again, we find a negative relationship with the relative valuation of single class firms. A one-standard-deviation change of the proxy explains about 20% of the standard deviation of the issuances.

Panel B of Table 2 evaluates the possibility that differences in firm characteristics or firm-specific shocks may be driving the correlation between use of dual class shares and the relative valuation proxies. First, we test whether the use of dual class shares depends on the number of firms with high amenity potential. Demsetz and Lehn (1985) suggest that non-monetary private benefits of control are particularly high for family firms and firms in the media industry. In column 1 of Panel B, an increase in the number of family firms, but not of firms in the media industry, appears to be correlated with a more pervasive use of dual class shares. While the absolute magnitude of the effect of *HP Relative Valuation* is reduced, we still find that a one-standard-deviation increase of *HP Relative Valuation* is associated with nearly a quarter of a standard deviation drop in the proportion of dual class firms. The results on unifications and

issuances (columns 4 and 7) are equally unaffected, albeit in column 7 the effect of *HP Relative Valuation* is no longer significant at conventional levels.

Another possible concern is that the one-share-one-vote premium proxies may be correlated with takeover activities. For instance, single class firms may have higher valuations if they have higher probability of experiencing value-enhancing takeovers or if limited-voting shareholders are not expected to benefit from takeover gains. To the extent that dual class firms are less likely to be acquired during takeovers waves and exit the sample, takeovers are unlikely to produce a negative correlation between our relative valuation proxies and the proportion of dual class shares. Nevertheless, we control for takeover activities using the number of acquired and delisted firms in the current and following three months. We use this time frame because Franks and Harris (1989) indicate that this was nearly the maximum amount of time lapsing between the announcement of an acquisition and its completion. Column 2 of Panel B shows that the association between *HP Relative Valuation* and the proportion of dual class firms remains qualitatively and quantitatively invariant. Controlling for takeover activities leaves unaltered also the relation between *HP Relative Valuation* and *Unifications* and *Issuances* in columns 5 and 8, respectively. These findings indicate the takeover waves are unlikely to play a role in our findings.

We also consider that firms may abandon dual class shares in order to establish a reputation for not expropriating minority shareholders and reduce their cost of capital. When firms need to raise capital, the desire to reduce the cost of capital may lead firms to unify their share classes. The cost of capital associated with dual class shares may be particularly high when our premium proxies increase. Therefore, if during these periods firms also issue equity, we may observe more unifications even if the premium is driven by private benefits of control. To

evaluate this possibility, we control for capital raising activities defined as the total amount of equity issued in the current and future year normalized by the total value of assets of firms quoted in the LSE. We find no evidence that capital raising activities affect our findings on the proportion of dual class firms (column 3), unifications (column 6), or issuances of limited-voting shares (column 9).

Table 3 considers firm level panel data and relates the probability of a firm having a one-share-one-vote share structure in a certain year with the *One-share-one-vote Premium* and the other relative valuations proxies. In column 1, we use all firms in the Commercial, Industrial, Iron and Steel sectors, as listed by the Stock Exchange Yearbook, and include firm fixed effects. As the one-share-one-vote premium increases, firms are more likely to switch to single class shares. In the rest of the table we control for firm characteristics by merging our hand-collected data with the Cambridge DTI database. Unfortunately, in this sample, we are unable to consider share unifications because we have accounting information on a restricted sample of firms.

In columns 2 to 6, we continue to find that as the relative valuation of one-share-one-vote firms increases, firms are more likely to have one-share-one-vote share structures. Interestingly, older firms are more likely to have single class share structures as is consistent with the intuition that concentrated control is more desirable in entrepreneurial firms. Media firms and family firms do not appear less likely to have one-share-one-vote share structures suggesting that the use of dual class shares during our sample period is unlikely to be driven by the amenity potential of control. We also do not find that dual class shares are associated with firm idiosyncratic and systematic risk. This is important for the interpretation of the return predictability tests in Subsection 5.3.

4.3 Relative Valuations and Corporate Policies

If firms abandon dual class shares just to cater to investor demand, dual class shares should not affect negatively firm operating performance and corporate policies. In Table 4, we find no evidence that firms with dual class shares have lower profitability or pursue different investment policies than other firms. Single class firms appear to have higher leverage possibly because they issue debt instead of limited-voting shares. Dual class firms do *not* appear to take more risk as if anything they have lower leverage and invest less as is consistent with the findings of McGuire et al. (2014). Moreover, both single and dual class firms have limited CEO and board turnover performance sensitivity indicating that corporate governance outcomes are unlikely to be associated with differences in firm valuations.

The fact that firms with dual class shares do not perform worse allows us to exclude a possible alternative explanation of the results in Table 2. The negative association between proportion of dual class firms and one-share-vote premium may arise if only firms with the highest private benefits of control have dual class shares when dual class shares are most pernicious, for instance, because they limit capital raising activities and corporate investment. Since dual class firms do not appear to perform worse and are able to invest to the same extent as other firms, we can exclude this explanation.

5. Positive Evidence on the Determinants of the Premium Proxies

5.1. Classifying the News Coverage of Dual Class Shares

We aim to explore whether the debate on dual class shares is related to the relative valuations of single and dual class firms. For this reason, we search the Times of London Digital Archive and the Financial Times Historical Archive for news regarding dual class shares using

the keywords "non-voting shares", "voteless shares", "restricted voting rights", and "limited-voting rights" from 1950 to 1970. The terminology "dual class shares" was not used at that time and yields no results. Our systematic news search yields 1,275 news from the Financial Times and 612 news from the Times of London, that is, a total of 1,887 news.[11]

We quantify the tone of the news on dual class shares similarly to Tetlock (2007). First, we read all news in chronological order and exclude any news related to specific companies. We focus on news that are opinions of public figures, such as institutional investors, the Board of Trade, or Members of Parliamentary Committees. Such news unequivocally reinstates known opinions on the desirability of dual shares and provides no new fundamental information.

After transforming the scanned news images into text using the ABBYY software, 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 positivity and negativity in each article by counting the number of words related to positive and negative emotions. The program's default dictionary contains 500 words measuring negative emotions and 405 words identifying positive emotions.

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

---

[11] To give a sense of the salience of the debate, we performed a similar search between 1998 and 2013. The search yields 458 news, notwithstanding the number of pages has increased dramatically. Furthermore, the news mostly concerns specific companies.

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

5.2 Media Coverage and Relative Valuations

5.2.1 Aggregate Evidence

Table 5 relates the monthly time series of *One-share-one-vote Premium*, *HP Relative Valuation*, *Voting Premium*, and *Voting Premium— Same Cash Flows*, all measured at the end of the month, to intensity and tone of the debate on dual class shares during the month. While we present results for all three measures of relative valuations, in what follows, we concentrate on the voting premium because by comparing the prices of voting and limited-voting shares for the same firm, our estimates are less likely to be affected by changes in firms' characteristics.

Since private benefits of control 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. We also consider that limited-voting securities, especially if benefiting from preferential treatment, may have features similar to debt. If the returns of fixed income securities were somewhat correlated with media pessimism on dual class shares, this could bias our findings. Hence, we control for inflation rate and aggregate returns of debentures, a popular fixed income security during this period, at yearly frequency from Coyle and Turner (2013).

Both proxies for the tone and the intensity of the debate appear to be positively associated to the relative valuation proxies. The *Voting Premium* is positively related to the *Negative News Score* suggesting that demand for limited-voting shares is low when the *Negative News Score* is high. Drops in the premium do not appear to be driven by potential legal claims by limited-voting shareholders as these should be more likely when media pessimism is stronger. Results are similar when we compute the voting premium only for firms whose voting and limited-voting shares have similar cash flow rights (column 8).

The effects are not only statistically, but also economically significant: In column 1 (5), a one-standard-deviation change in *Negative News Score* explains nearly 20% (13%) of the *One-share-one-vote Premium*'s (*Voting Premium*'s) standard deviation. The economic magnitudes are similar when we consider the polarization of the debate, using the proxy *News Intensity*. In column 6, a one-standard-deviation change in this variable explains about 12% of a standard deviation of the *Voting Premium*.

In columns 4, 7, and 8, we further take into account that, bidders could acquire a target purchasing only voting shares at a premium up to 1968. This could have affected the voting premium (Megginson, 1990). Therefore, we control for takeover activity using the number of acquired and delisted firms in the current and following three months. Acquisitions are positively associated with the one-share-one-vote premium in column 7. However, including this control leaves unaffected the effect of the *Negative News Score* suggesting that this captures swings in investor demand.

5.2.2 Firm Level Evidence

To obtain further insights on the mechanisms leading to the association between negative news coverage and relative valuations, we study the cross-sectional effects of the *Negative News Score* on the voting premium in a firm level analysis. This analysis is only possible for the voting premium, which provides a measure of relative valuation at the firm level.

Throughout Table 6, we control for differences in liquidity between voting and limited-voting shares of the same firm (Bailey, 1988). Differences in liquidity appear to be highly significant and indicate that the voting premium is smaller if voting shares are less liquid. We also include year fixed effects to capture that the volume of news may differ from year to year. The fixed effects also absorb the annual inflation and bond returns.

In column 1 of Panel A, we absorb time-invariant firm heterogeneity by including firm fixed effects. Our results are invariant suggesting that any firm attributes that are slow to change, such as ownership structure, are unlikely to explain our findings.

Some may argue that since the benefits of non-participating preference shares are capped, these securities are more similar to debt. To address such a concern, in columns 2 and 3, we consider the voting premium for limited-voting ordinary shares and participating preference shares in two different subsamples. *Negative News Score* 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. However, proposals for enfranchising limited-voting shareholders or banning future issues of limited-voting shares only entailed ordinary shares. Since limited-voting ordinary shares and preference shares were similarly affected by the debate, fears that regulations could have hurt limited-voting shareholders are unlikely to explain our findings. This test 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.

In column 4, we further control for firm heterogeneity. First, even if our premium proxy accounts for differences in cash flow rights between share classes, we control for differences in dividend yields of voting and limited-voting shares over the past five years. We also include controls for firm age; market capitalization; leverage; cash holdings; board turnover, a variable that we expect to be negatively correlated with entrenchment of control; a dummy that takes value equal to one for family firms; and a dummy that takes value equal to one for firms in the media industry. 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.

Column 5 confirms that none of our results are driven by differences in cash flow rights as our estimates are qualitatively invariant when we restrict the sample to firms whose voting and limited-voting shares have identical cash flow rights.

Panel B investigates the mechanisms through which media pessimism on dual class shares affects the voting premium by interacting *Negative News Score* with firm characteristics. In column 1, we revisit the possibility that the effect of *Negative News Score* on the voting premium is related to the takeover market. In this case, we would expect the effect of *Negative News Score* to be stronger for firms that are subject to takeovers, as identified by a dummy that takes value equal to one between the month of the announcement and the completion of the acquisition for any firm that becomes an acquisition target. We find no evidence that this is the

21

case confirming our earlier findings that media pessimism on dual class shares and firms' propensity to adopt one-share-one-vote are unrelated to the takeover market.

In columns 2, we test whether the relation between premium and media pessimism on dual class shares is more pronounced for firms that lack alternative reputational mechanisms to payout cash flows. Faccio et al. (2001) and La Porta et al. (2000) argue that firms can pay high dividends to allay investors' concerns of expropriation. We thus test whether the effect of negative media coverage on the voting premium is weaker for firms that have established a good reputation with their shareholders by having high payouts ratios, as measured by the moving average of the dividend payout ratios over the past five years. We find no evidence that this is the case.

In columns 3 and 4, the effect of negative news coverage on the voting premium is no different for media or family firms suggesting that the amenity potential of control is unrelated to our findings. Also, in column 5, the relation between *Voting Premium* and *Negative News Score* does not depend on the difference in liquidity between voting and limited-voting shares, indicating that different exposure to liquidity risk of voting and limited-voting shares cannot explain our findings.

If negative news coverage of dual class shares led the prices of voting and limited-voting shares to diverge in a way that is not warranted by fundamentals, we should observe that the effect of negative news coverage on the voting premium is larger for stocks that are riskier to arbitrage. Arbitrage risk is larger for firms with volatile returns or illiquid stocks (Barberis and Thaler, 2003). In column 6 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 7, the positive effect of negative news coverage on the voting premium appears to be driven by stocks with highly volatile returns.

These findings that the effect of the negative news score is larger for firms with high arbitrage costs, and does not differ for firms with different corporate governance, support the notion that changes in the voting premium following negative news coverage are related to investor demand.

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

This subsection presents a more direct test of whether changes in relative valuations capture uninformed investor demand. If the relative prices of voting and limited-voting shares were correct, we should observe that current prices do not predict the returns of voting and limited-voting shares. If instead months with negative news coverage and high voting premium were followed by systematically lower returns for voting shares than for limited-voting shares, voting shares would be revealed to be overvalued with respect to limited-voting shares.

Table 7 supports the latter hypothesis. In columns 1 to 3, the dependent variable is the average monthly return over a quarter of a value-weighted portfolio long voting shares and short limited-voting shares. In columns 4 to 6, the dependent variable is the average monthly return over a quarter of a value-weighted portfolio long one-share-one-vote firms and short dual class firms. Following months of high voting premium and more intense negative news coverage, we find that the voting shares (one-share-one-vote firms) portfolio has systematically lower returns than the limited-voting shares (dual class firms) portfolio. The results are similar for both proxies for negative news coverage (although in column 5 the effect of the *Negative News Score* is not statistically significant at conventional levels).

The effects are also large from an economic point of view. In column 1, a one-standard-deviation increase in the voting premium leads to about 2 percentage points lower monthly return for the portfolio of voting shares relative to limited-voting shares. In column 2, a one-standard-deviation increase in the *Negative News Score* decreases the monthly return of voting shares relative to limited-voting shares by 0.5 percentage points.

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

The predictable differences in returns suggest 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. As is consistent with the catering hypothesis, voting shares and firms with one-share-one-vote share structures appear relatively overvalued in periods with high voting premium and negative news coverage of dual class shares.

6. Conclusions

This paper shows that firms are more likely to abandon dual class share structures in periods in which one-share-one-vote firms have higher relative valuations. A heated public debate about the use of dual class shares appears to be an important determinant of single and dual class firms' relative valuations.

Our results suggest that investor demand may affect firm cost of capital and corporate governance, even if current arrangements are not harmful for shareholder value. This could

potentially explain why an increasing number of firms choose to go private and escape the limelight as well as the costs associated with public listings.

References

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

Ang, J., Megginson, W., 1989. Restricted voting shares, ownership structure, and the market value of dual-class firms. *Journal of Financial Research.* 12, 301–318.

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

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

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

Braggion, F., Moore, L., 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.

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

Dai, L., Parwada, J. T., Zhang, B., 2015. The Governance Effect of the Media's News Dissemination Role: Evidence from Insider Trading. *Journal of Accounting Research.* 53, 331-366.

Demsetz, H., Lehn, K., 1985. The Structure of Corporate Ownership: Causes and Consequences. *Journal of Political Economy.* 93, 1155–1177.

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

Dyck, A., Zingales, L., 2004. Private benefits of control: An international comparison. *Journal of Finance.* 59, 537–600.

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

Economist (The), various dates.

Faccio, M., Lang, L. H. P., Young, L., 2001. Dividends and Expropriation. *American Economic Review*. 91, 54-78.

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

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

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

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

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

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

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

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

Gompers, P. A., Ishii, J., Metrick, A., 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.

Hoberg, G., Prabhala, N. R., 2008. Disappearing Dividends, Catering, and Risk. *Review of Financial Studies*. 22, 79–116.

Hoberg, G., Phillips, G. M., 2010. Real and financial industry booms and busts. *Journal of Finance*. 65, 45-86.

Hong, H. A., 2013. Does Mandatory Adoption of International Financial Reporting Standards Decrease the Voting Premium for Dual-Class Shares? *The Accounting Review*. 88, 1289–1325.

Jensen, M. C., 1986. Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers. *American Economic Review*. 76, 323–329.

Kalay, A., Karakas, O., Pant, S., 2014. The Market Value of Corporate Votes: Theory and Evidence from Option Prices. *Journal of Finance*. 69, 1235-1271.

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

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R. W., 1998. Law and Finance. *Journal of Political Economy*. 106, 1113–1155.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R. W., 2000. Agency Problems and Dividend Policy Around the World. *Journal of Finance*. 55, 1-33.

Lease, R. C., McConnell, J. J., Mikkelson, W. H., 1983. The market value of control in publicly-traded corporations. *Journal of Financial Economics*. 11, 439-471.

Lease, R. C., McConnell, J. J., Mikkelson, W. H., 1984. The market value of differential voting rights in closely held corporations. *Journal of Business*. 57, 443-467.

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

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

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

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

McGuire, S. T., Wang, D., Wilson, R. J., 2014. Dual Class Ownership and Tax Avoidance. *The Accounting Review*.89, 1487-1516.

Meeks, G., Wheeler, J., 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*.

Megginson, W., 1990. Restricted voting stock, acquisition premiums, and the market value of corporate control. *Financial Review*. 25, 175–198.

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.

Pastor, L., Veronesi, P., 2003. Stock Valuation and Learning about Profitability. *Journal of Finance.* 65, 1-44.

Pennebaker, J. W, Chung C. K., Ireland, M., Gonzales A., Boot, R. J., 2007. The Development and Psychometric Properties of LIWC 2007. Mimeo. University of Texas at Austin and the University of Auckland, New Zealand.

Polk, C., Sapienza, P., 2009, The Stock Market and Corporate Investment: A Test of Catering Theory. *Review of Financial Studies.* 22, 187-217.

Rhodes-Kropf, M., Robinson, D., Viswanathan, S., 2005. Valuation waves and merger activity: The empirical evidence. *Journal of Financial Economics.* 77, 561– 603

Shiller, R. J, 1984. Stock Prices and Social Dynamics. *Brookings Papers on Economic Activity.* 1984, 457-510.

Stulz, R. M., Williamson, R., 2003. Culture, openness, and finance. *Journal of Financial Economics.* 70, 313–349.

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.

Weld, W., Michaely, R., Thaler, R., and Benartzi, S., 2009. The nominal share price puzzle. *Journal of Economic Perspectives.* 23, 121–142.

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.

Table 1: Descriptive Statistics and Variable Definitions

Panel A. Quarterly Sample Variables

Variables	Definition	Mean	Median	Sd. Dev.	N
Issuances – Full Sample	Number of one-share-one-vote firms issuing limited-voting shares in a quarter.	2.65	2	1.95	84
Issuances – Ordinary Limited-Voting	Number of one-share-one-vote firms issuing limited-voting ordinary shares in a quarter.	1.06	1	1.29	84
Proportion of Dual Class Firms	Number of dual class firms in a quarter, divided by the total number of firms in the same quarter.	0.604	0.610	0.046	84
Unifications – Full Sample	Number of firms that unify their shares into a single class of voting shares during a quarter.	2.46	2	2.16	84
Unifications – Ordinary Non-Voting	Number of firms that unify their limited-voting ordinary shares into a single class of voting shares during a quarter.	0.57	0	0.75	84
Capital Raising	The ratio of total amount of ordinary equity issued in the current and next year divided by the total assets of firms quoted in the LSE.	0.003	0.003	0.002	80

Panel B. Firm-Year Sample Variables

Variables	Definition	Mean	Median	Sd. Dev.	N
Age	Firm age, defined as the current year minus the firm's year of birth, provided by the Cambridge DTI databank.	7.957	5.500	7.486	9894
Board Turnover	The proportion of a firm's directors that are replaced or dropped during two years.	0.148	0.125	0.168	2054
CEO Turnover	A dummy variable that equals one if the firm's CEO is replaced during two years, and zero otherwise.	0.330	0.000	0.470	1281
Family Firm	A dummy variable that equals one if a firm is a family firm, and zero otherwise. Family firms are defined as firms whose names contains the expressions "& brothers", "& sons" " & nephews" or the name of an individual.	0.203	0.000	0.402	9894
Investment	Expenditures (less receipts) in tangible (var37) and intangible assets (var38) plus trade investments and investments in subsidiaries (var39), divided by book value of assets at the beginning of the year.	0.067	0.043	0.133	9738
Leverage	Long-term liabilities (var8 in the Cambridge DTI databank) plus bank debt and overdrafts (var9 in	0.389	0.125	0.673	9894

	the Cambridge DTI databank), divided by total capital and reserves.				
Media Firm	A dummy variable that equals one if the firm belongs to the media industry, and zero otherwise.	0.017	0	0.128	9894
One-Share-One-Vote	A dummy variable that equals one if the firm has a one-share-one-vote share structure, and zero otherwise.	0.173	0.000	0.378	9894
ROA	Total profits (var66 in the Cambridge DTI databank), divided by total capital and reserves (var60 in the Cambridge DTI databank) plus total liabilities (var61 in the Cambridge DTI databank).	0.136	0.140	0.079	9894
Return	The firm's annual stock return, as reported by the London Share Price Database.	0.008	0.006	0.027	5319
Size	The firm's book value of assets (in thousand Pounds).	16.646	2.737	80.480	9894
Idiosyncratic Risk	The standard deviation of the residuals from a regression of the monthly excess voting stock returns (defined as raw returns less the Bank of England rate) on the market return minus the Bank of England rate.	0.016	0.016	0.003	6765
Systematic Risk	The standard deviation of the predicted value of regression used to define idiosyncratic risk.	0.103	0.083	0.367	6765

Panel C. Firm-Month Sample Variables

Variables	Definition	Mean	Median	Sd. Dev.	N
Acquisition Target	A dummy variable that equals one between a firm's acquisition announcement and completion, and zero otherwise.	0.006	0.000	0.079	67935
Cash to Asset Ratio	Cash (var21 in the Cambridge DTI databank) plus marketable securities (var19 in the Cambridge DTI databank), divided by the book value of assets.	0.088	0.055	0.096	59590
Dividend Payout	The arithmetic average over the past 5 years of the ratio between ordinary dividends paid by a firm (var55 in the Cambridge DTI databank) and the firm's operating profits (var50 in the Cambridge DTI databank).	0.17	0.165	0.071	48383
Dividend Voting minus Dividend Non-Voting	Difference of the annual dividends (expressed as a percentage of the par value of shares) paid by voting and limited-voting shares.	0.035	0.020	0.200	67395

Variables	Definition	Mean	Median	Sd. Dev.	N
Voting Premium (Firm)	The price of a voting share issued by a firm minus the price of the limited-voting share issued by the same firm, divided by the price of the limited-voting share.	0.441	0.044	1.489	52542
Illiquid Stock	Sum of the bid-ask spread of voting and limited-voting shares.	0.041	0.033	0.029	52207
Bid-Ask Spread Voting Minus Bid-Ask spread Non-Voting	Difference between the bid-ask spread of voting and limited-voting shares.	-0.001	-0.005	0.035	52542
Market Value	Total market value of the firm's ordinary shares, as reported by the London Share Price Database (in thousand Pounds).	16.454	4.000	66.284	42732
Returns Volatility	Sum of the standard deviation (computed over five years) of the returns of voting and limited-voting shares.	0.223	0.127	0.714	57835

Panel D. Monthly Sample Variables

Variables	Definition	Mean	Median	Sd. Dev.	N
Acquisition Factor	The number of acquired and delisted firms in the current and following three months.	17.729	16.000	8.710	192
Family Firms	Number of "Industrial and Commercial" Family Firms quoted in the LSE each year. Family firms are defined as firms whose names contains the expressions "& brothers", "& sons" " & nephews" or the name of an individual.	490	506	78.72	192
HP Relative Valuation	Difference between the valuation measures of one-share-one-vote firms and dual class firms. The valuation measures are computed according to Hoberg and Phillips (2010) and defined as the difference between firm's actual and predicted market to book ratio. The predicted market to book ratio is the predicted value of a regression where the dependent variable is a firm's market to book ratio and the regressors are firm's size, age, leverage, standard deviation of its stock returns, the dividend payout ratio, and industry dummies.	0.250	0.291	0.236	192
Media Firms	Number of firms in the media industry quoted in the LSE.	62	62	3.418	192
Negative News Score	The sum of the LIWC negative emotions scores of each news article on dual class shares	5.171	3.695	4.893	192

	published in a certain month.				
News Intensity	The sum of the LIWC negative and positive emotions scores of each news article on dual class shares published in a certain month.	41.61	35.02	29.34	192
One-Share-One-Vote Premium	Average market to book ratio of the one-share-one-vote firms minus average market to book ratio of dual class firms.	0.22	0.25	0.239	192
One-share-one Vote Returns minus Dual Class Returns	Difference in average monthly returns between a value weighted portfolio of one-share-one-vote firms and a value weighted portfolio of limited-voting shares.	0.002	0.003	0.033	191
Voting Premium	Average across dual class firms of the price of a voting share issued by a firm minus the price of the limited-voting share issued by the same firm divided by the price of the limited-voting share.	0.451	0.436	0.228	192
Voting Shares Returns minus Limited-Voting Shares Returns	Difference in average monthly returns between a value weighted portfolio of voting shares and a value weighted portfolio of non-voting shares.	0.009	0.003	0.068	192

Table 2
The proportion of Dual Class Firms and the Relative Prices
Panel A: Baseline Regressions

Panel A presents time series regressions at quarterly frequency. In columns 1 to 4, the dependent variable is the proportion of dual class firms. In columns 5 (6), the dependent variable is the number of firms that unify all their share classes (their ordinary limited-voting shares) into a single class. In columns 7 (8), the dependent variable is the number of firms that issue limited-voting shares (ordinary limited-voting shares) for the first time. 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.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Proportion of Dual Class Firms				Unifications		Issuances	
					Full Sample	Ordinary Limited-Voting	Full Sample	Ordinary Limited-Voting
One-share-one-vote Premium	-0.102***							
	(0.019)							
HP Relative Valuation		-0.094***			2.763***	0.631**	-1.705**	-0.867*
		(0.017)			(0.808)	(0.242)	(0.665)	(0.533)
Voting Premium			-0.059**					
			(0.027)					
Voting Premium— Same Cash Flows				-0.251***				
				(0.072)				
Constant	0.617***	0.617***	0.627***	0.630***	2.079***	0.483***	2.892***	1.180***
	(0.005)	(0.006)	(0.012)	(0.008)	(0.246)	(0.081)	(0.265)	(0.193)
Obs	84	84	84	84	84	84	84	84
R2	0.47	0.40	0.12	0.19	0.15	0.07	0.08	0.05

Panel B: Controlling for Amenity Potential, Takeovers, and Capital Raising Activities

Panel B presents time series regressions at quarterly frequency. In columns 1 to 3, the dependent variable is the proportion of dual class firms. In columns 4 to 6, the dependent variable is the number of firms that unify their share classes into a single one-share-one-vote class. In columns 7 to 9, the dependent variable is the number of firms that issue limited-voting shares for the first time. 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.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Proportion of Dual Class Firms			Unifications			Issuances		
HP Relative	-0.053***	-0.065***	-0.093***	1.706**	1.786**	2.961***	-1.369	-2.039***	-1.626**
Valuation	(0.016)	(0.017)	(0.019)	(0.842)	(0.856)	(0.823)	(0.831)	(0.679)	(0.698)
Media Firms	-0.003			0.091			0.042		
	(0.002)			(0.064)			(0.078)		
Family Firms	0.000***			-0.011**			0.001		
	(0.000)			(0.004)			(0.003)		
Acquisition		-0.003***			0.086**			0.018	
Factor		(0.000)			(0.034)			(0.023)	
Capital Raising			-4.825***			156.202			142.572
			(1.514)			(112.877)			(87.611)
Constant	0.611***	0.639***	0.635***	1.976	1.348***	1.596***	-0.403	2.733***	2.449***
	(0.108)	(0.007)	(0.008)	(4.015)	(0.326)	(0.327)	(4.448)	(0.366)	(0.402)
Obs	84	84	80	84	84	80	84	84	80
R2	0.68	0.59	0.49	0.24	0.25	0.18	0.09	0.08	0.11

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 of one if the firm has a single share structure and zero otherwise. Standard errors corrected for heteroscedasticity and clustered at the firm level are presented in parenthesis. ***, **, and * denote statistical significance at the 1, 5, and 10% level, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
			Probability of Single Share Structures			
One-share-one-vote Premium (1 year lag)	0.0051*** (0.001)	0.013*** (0.004)				
HP Relative Valuation (1 year lag)			0.102*** (0.023)			
Voting Premium (1 year lag)				0.122*** (0.033)		
Voting Premium Same Cash Flows (1 Year Lag)					1.417*** (0.247)	1.687*** (0.268)
Systematic Risk		2.950 (5.862)	4.003 (5.882)	-0.268 (6.039)		1.129 (5.560)
Idiosyncratic Risk		-0.005 (0.004)	-0.004 (0.004)	-0.005 (0.004)		-0.003 (0.004)
Log Age		0.147*** (0.033)	0.146*** (0.033)	0.160*** (0.032)	0.088*** (0.020)	0.120*** (0.034)
Log Size		-0.018 (0.011)	-0.017 (0.011)	-0.017 (0.011)	-0.015* (0.009)	-0.019* (0.011)
Media Firm		0.049 (0.135)	0.047 (0.136)	0.042 (0.137)	0.066 (0.111)	0.051 (0.136)
Family Firm		-0.004 (0.038)	-0.004 (0.038)	-0.005 (0.038)	-0.003 (0.028)	-0.004 (0.038)
Leverage		0.036 (0.024)	0.038 (0.024)	0.044* (0.024)	0.035* (0.019)	0.041* (0.024)
ROA		-0.178 (0.169)	-0.169 (0.169)	-0.182 (0.170)	-0.047 (0.119)	-0.161 (0.169)
Constant		-0.028 (0.098)	-0.022 (0.098)	-0.059 (0.094)	0.035 (0.073)	-0.007 (0.096)
Firm FE	Yes	No	No	No	No	No
Obs	57419	5838	5838	5838	8873	5838
R2	.792	.11	.11	.11	.125	.116

Table 4
Share Structure and Firm Performance

The unit of observation is the firm year. The sample includes both firms with and without dual class shares. The dependent variable is indicated on top of each column. All specifications include 41 industry fixed effects and year fixed effects whose coefficients are not reported. Standard errors corrected for heteroscedasticity and clustered at the firm level are presented in parenthesis. ***, **, and * denote statistical significance at the 1, 5, and 10%, respectively.

	(1) ROA	(2) Investment	(3) Leverage	(4) Board Turnover	(5) CEO Turnover
One-Share-One-Vote	-0.005	0.002	0.114**	0.009	0.024
	(0.005)	(0.005)	(0.049)	(0.009)	(0.028)
One-Share-One-Vote *Firm Return				-0.112	1.496
				(0.366)	(1.081)
Log Age	-0.035***	-0.025***	-0.005	0.032***	-0.106***
	(0.003)	(0.007)	(0.024)	(0.008)	(0.027)
Log Size	0.004***	0.012***	0.100***	0.014***	0.056***
	(0.001)	(0.001)	(0.017)	(0.003)	(0.010)
Family Firm	-0.005	-0.007**	0.007	-0.023**	-0.019
	(0.005)	(0.004)	(0.041)	(0.010)	(0.036)
Firm Return				0.162	-0.356
				(0.205)	(0.621)
Constant	0.173***	0.015	-0.553***	-0.064	-0.004
	(0.013)	(0.013)	(0.122)	(0.043)	(0.165)
Industry FE	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes
Obs	9894	9738	9894	1960	1280
R2	.144	.0512	.175	.0916	.103

Table 5
News Coverage and Relative Valuations

The table presents time series regressions at a monthly frequency. The dependent variable is indicated on top of each column. The independent variable News Intensity in column 2 and column 6 is scaled 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) One-Share-One-Vote Premium	(2) HP Relative Valuation	(3)	(4)	(5) Voting Premium	(6)	(7)	(8) Voting Premium-Same Cash Flows
Negative News Score	0.013***	0.008*		0.008*	0.007*		0.007*	0.004**
	(0.004)	(0.005)		(0.005)	(0.004)		(0.004)	(0.002)
News Intensity			0.159*			0.144*		
			(0.085)			(0.081)		
Acquisition Factor				-0.002			0.007**	0.001
				(0.003)			(0.003)	(0.001)
Bond Index Return	-0.839	-0.835	-0.783	-0.965	-1.186*	-1.142*	-0.784	0.543***
	(0.707)	(0.902)	(0.899)	(0.972)	(0.643)	(0.643)	(0.590)	(0.194)
Annual Inflation	0.494	-1.621	-1.286	-2.467	-4.918*	-4.644*	-2.260	0.078
	(2.348)	(2.707)	(2.668)	(2.393)	(2.696)	(2.729)	(2.763)	(0.953)
Market Return	0.345	-0.277	-0.210	-0.181	-0.118	-0.058	-0.395	-0.779**
	(0.543)	(0.581)	(0.564)	(0.634)	(0.713)	(0.715)	(0.668)	(0.316)
Small-minus-Big	0.328	-0.908	-0.993	-0.851	1.159	1.083	0.984	-1.208**
	(0.795)	(0.761)	(0.759)	(0.759)	(0.859)	(0.869)	(0.840)	(0.491)
High-minus-Low	0.261	0.729	0.883	0.727	-1.460	-1.325	-1.401	0.087
	(1.025)	(1.065)	(1.067)	(1.063)	(1.044)	(1.059)	(1.004)	(0.427)
Media Firms	-0.049***	-0.031***	-0.031***	-0.032***	-0.019	-0.019*	-0.016	0.001
	(0.009)	(0.010)	(0.010)	(0.009)	(0.012)	(0.011)	(0.011)	(0.004)
Family Firms	-0.001	-0.002**	-0.002**	-0.002***	0.000	0.000	0.001	-0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)
Constant	3.576***	3.165***	3.112***	3.370***	1.724***	1.683***	1.082*	0.243
	(0.511)	(0.609)	(0.602)	(0.612)	(0.542)	(0.535)	(0.575)	(0.160)
Obs	191	191	191	191	191	191	191	191
R2	0.51	0.46	0.47	0.47	0.13	0.14	0.17	0.23

Table 6
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, we consider the voting premium only for the subsample of firms with ordinary limited-voting and participating preference shares. In column 3, we consider the voting premium only for the subsample of firms with preference shares. In column 5, we consider the voting premium only for the subsample of firms for which voting and limited-voting shares have the same cash flow rights. All models include year fixed effects, a constant, and Fama-French factors as indicated at the end of the table, but coefficients are not reported. The model in column 1 also includes firm fixed effects. Standard errors are presented in parentheses and are corrected for heteroscedasticity and clustered at the firm level. ***, **, and * denote statistical significance at the 1, 5, and 10%, respectively.

	(1)	(2) Excluding Preference Shares	(3) Only Preference Shares	(4)	(5) Same Cash Flow Rights
Negative News Score	0.003***	0.001***	0.002***	0.002***	0.001**
	(0.000)	(0.001)	(0.001)	(0.001)	(0.000)
Board Turnover				0.126	
				(0.252)	
Cash to Asset Ratio				0.536	
				(0.689)	
Log Firm Market Value				0.365***	
				(0.049)	
Leverage				0.067	
				(0.105)	
Age				0.026	
				(0.017)	
Family Firm				0.139	
				(0.202)	
Media Firm				-0.371**	
				(0.188)	
Bid-Ask Spread Voting Minus Bid-Ask spread Non-Voting	-4.352***	-2.497***	-20.418***	-24.362***	-0.562**
	(0.509)	(0.805)	(1.553)	(2.434)	(0.248)
Dividend Voting minus Non-Voting (5 years average)				0.571*	
				(0.315)	
Acquisition Factor	0.004***	-0.000	0.004***	0.005***	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)
Firms FE	Yes	No	No	No	No
Year FE	Yes	Yes	Yes	Yes	Yes
Fama-French	Yes	Yes	Yes	Yes	Yes
Obs	42801	8551	38383	28601	7549
R2	.0798	.0773	.156	.276	.0314

39

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*. All models include year fixed effects, a constant and Fama-French factors as indicated at the end of the table, but coefficients are not reported. Standard errors are presented in parentheses and are corrected for heteroscedasticity and clustered at the firm level. ***, **, and * denote statistical significance at the 1, 5, and 10%, respectively.

|	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Negative News Score	0.002***	0.007**	0.002***	0.003***	0.003***	0.001**	0.001
	(0.001)	(0.004)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Acquisition Target*Negative News Score	-0.010						
	(0.061)						
Dividend Payout *Negative News Score		-0.032					
		(0.021)					
Media Firm*Negative News Score			-0.002				
			(0.006)				
Family Firm*Negative News Score				-0.005			
				(0.003)			
Bid-Ask Spread Voting minus Bid-Ask Spread Non-Voting*Negative News Score					0.214		
					(0.141)		
Illiquid Stock *Negative News Score						0.733***	
						(0.133)	
Returns Volatility*Negative News Score							0.007*
							(0.004)
Bid-Ask Spread Voting Minus Bid-Ask spread Non-Voting	-17.48***	-18.77***	-17.33***	-17.46***	-18.69***	-13.45***	-17.48***
	(1.462)	(1.521)	(1.451)	(1.469)	(1.572)	(1.237)	(1.460)
Acquisition Factor	0.003***	0.003***	0.003***	0.003***	0.003***	0.000	0.003***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Acquisition Target	0.162						
	(0.480)						
Dividend Payout		-0.144					
		(0.769)					
Media Firm			-1.023***				
			(0.207)				
Family Firm				-0.166			
				(0.160)			
Illiquid Stock						-17.03***	
						(1.990)	
Returns Volatility							-0.059
							(0.037)
Year_FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fama-French	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Obs	42801	41946	42801	42589	42801	42801	42757
R2	.141	.148	.147	.143	.141	.202	.141

Table 7
The Informativeness of the Voting Premium and the News Coverage about Future Returns

The table presents time series regressions at monthly frequency. In columns 1 to 3, the dependent variable is the difference in monthly returns between a portfolio of voting shares and a portfolio of non-voting shares issued by the same firm, whereas in columns 4 to 6, the dependent variable is the difference of the returns of single class firms minus the returns of the limited-voting shares issued by dual class firms. The return of the portfolio long voting shares and short limited-voting shares is computed as voting returns minus non-voting returns considering only dual class firms. For each dual class firm and in each quarter, we take the difference between the average returns of single class voting shares and limited voting shares. We then take the value weighted average of these values across firms for each month in our sample. The portfolio long single class firms and short dual class firms is computed at monthly difference between the weighted average quarterly returns of single class firms and the weighted average quarterly returns of limited-voting shares issued by dual class firms. The independent variable News Intensity in column 3 and column 6 is scaled 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)
	Voting Shares Returns minus Limited-Voting Shares Returns			One-share-one Vote Returns minus Dual Class Returns		
Voting-Premium	-0.082***			-0.059***		
	(0.020)			(0.015)		
Negative News Score		-0.002*			-0.000	
		(0.001)			(0.001)	
News Intensity			-0.061***			-0.015*
			(0.018)			(0.008)
Acquisition Factor	0.003***	0.002**	0.003***	0.001*	0.000	0.001
	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)
Bond Index Return	0.093	0.148	0.138	0.144*	0.190**	0.187**
	(0.152)	(0.161)	(0.160)	(0.080)	(0.079)	(0.079)
Annual Inflation	-0.557	-0.481	-0.559	-0.395	-0.262	-0.295
	(0.494)	(0.548)	(0.541)	(0.299)	(0.325)	(0.326)
Market Return	0.155	0.178	0.139	-0.080	-0.055	-0.066
	(0.143)	(0.147)	(0.145)	(0.084)	(0.102)	(0.102)
Small-minus-Big	0.283	0.207	0.235	-0.072	-0.131	-0.124
	(0.172)	(0.184)	(0.179)	(0.171)	(0.183)	(0.181)
High-minus-Low	0.531**	0.623**	0.559**	0.054	0.133	0.114
	(0.266)	(0.268)	(0.263)	(0.127)	(0.139)	(0.134)
Media Firms	0.000	0.000	0.000	-0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Family Firms	0.000	0.001	0.001	0.001	0.002	0.002
	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
Constant	-0.042	-0.102	-0.093	-0.039	-0.101	-0.095
	(0.124)	(0.128)	(0.125)	(0.075)	(0.082)	(0.081)
Obs	191	191	191	191	191	191
R2	0.25	0.20	0.23	0.26	0.10	0.12

Figure 1
Firms with Limited-Voting Shares in the LSE

The figure portrays the yearly time series of the percentage of firms, quoted in the LSE, which have outstanding shares with limited voting rights.
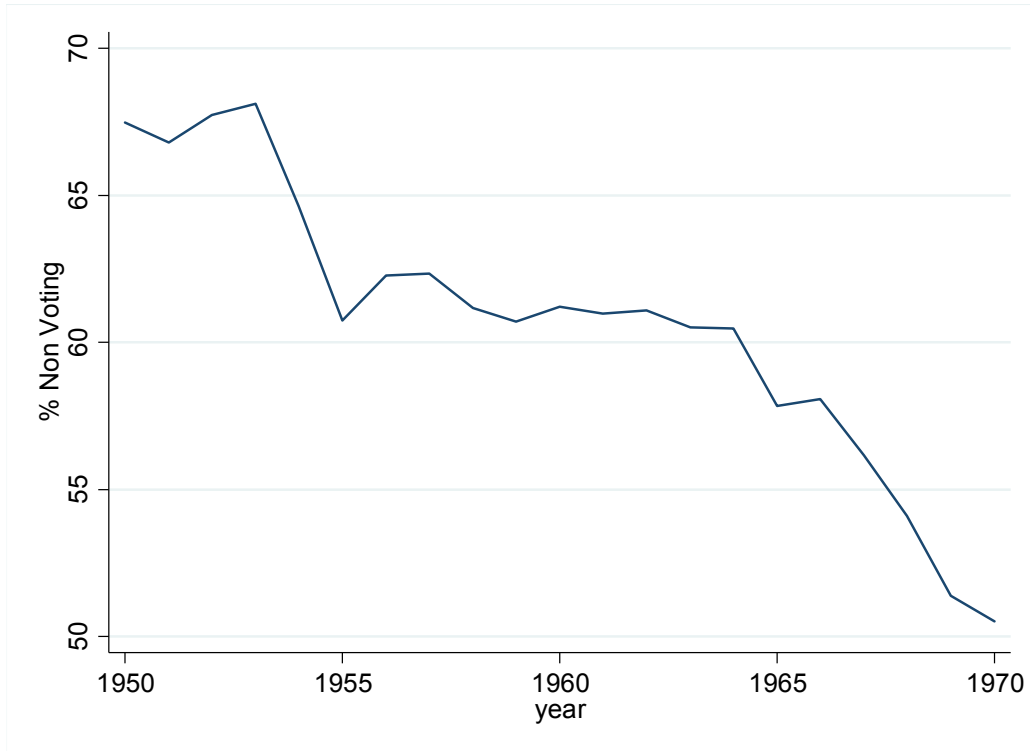
about ECGI

The European Corporate Governance Institute has been established to improve *corporate governance through fostering independent scientific research and related activities.*

The ECGI produces and disseminates high quality research while remaining close to the concerns and interests of corporate, financial and public policy makers. It draws on the expertise of scholars from numerous countries and bring together a critical mass of expertise and interest to bear on this important subject.

The views expressed in this working paper are those of the authors, not those of the ECGI or its members.

www.ecgi.org

Electronic Access to the Working Paper Series

The full set of ECGI working papers can be accessed through the Institute's Web-site (www.ecgi.org/wp) or SSRN:

Finance Paper Series	http://www.ssrn.com/link/ECGI-Finance.html
Law Paper Series	http://www.ssrn.com/link/ECGI-Law.html

www.ecgi.org\wp