What drives the unification of multiple voting class shares?

Abstract

Deviation from one share - one vote by issuing superior voting class shares is common around the world. This paper explores the reasons why an increasing number of firms in continental Europe are deciding to unify their shares into a single class, and the consequences of this restructuring. The main factor affecting the probability of unification is the need to raise the share value. The probability of unification is positively related with new equity issues, number of acquisitions and industry growth opportunities – situations when the gains from increased share value are particularly high. The paper also shows that higher value of control rights (for example, high separation between control and cash flow rights) significantly reduces the likelihood of unification.

JEL Classification: G32; G34

Key words: Corporate Governance; Dual class; One share - one vote

1. Introduction

Firms with dual-class shares[1] are rather common in Europe (Faccio and Lang, 2002), and in many countries around the world, including the United States. A growing literature emphasizes that the asymmetry between cash flow and voting rights created by dual-class ownership allows the controlling parties to receive a disproportionate amount of corporate benefits (so-called private benefits[2]) (see e.g., Grossman and Hart, 1988; Harris and Raviv, 1988). As a result, corporate valuation can decrease, cost of capital can increase, and a firm can face investment constraints (see e.g., La Porta et al., 1997, 2002; Claessens et al., 2002; Cronqvist and Nilsson, 2003). On the other hand, there is a fair amount of theoretical and empirical work showing that, under certain conditions, dual-class shares can benefit shareholders (see e.g., DeAngelo and DeAngelo, 1985; Fischel, 1987; Burkart et al., 1998; Dimitrov and Jain, 2003).

Shleifer and Wolfenzon (2002) show theoretically that firms with weaker shareholder protection have lower valuations because investors take into account that some of the profits can be diverted. If market participants believe that profit diversion is more prevalent in dual-class firms than in single-class firms, they will pay less for the former. We can call it a "dual-class" equilibrium: controlling shareholders enjoy the private benefits, and minority shareholders pay for what they get – the expected cash flow

[1] Throughout the paper, *dual-class shares* means that the firm has more than one share class (except American Depository Receipts) with different voting rights. There can be more than two share classes, but all the analysis can be easily generalized to such cases.

[2] Examples of such benefits are the power to elect the board members and the CEO, the power to build business empires, the ability to consume perquisites at the expense of the firm, and the ability to transfer assets to private corporate entities.

after the extraction of private benefits. This begs the question of why, suddenly, some dual-class companies choose to deviate from this "equilibrium".

This papers studies the determinants of the decision to unify the shares with different voting rights into a single share class. Throughout the paper, I refer to this event as the *unification*. The factors driving the probability of unification are inferred both from ex ante and ex post characteristics of the companies that unified their shares. The main prediction is that the goal of the unification is to raise the company's share price. The share price is expected to increase after the unification for several reasons. First, the unification is a commitment to reduce the potential profit diversion. Second, the liquidity should go up (for example, if only one share class was traded before the unification), which may have a positive effect on firm value. Finally, the unification improves investor recognition. Shares become available to a wider pool of investors, which according to Merton (1987) may improve the share value.

The determinants of the unification are explored using a panel data set of 493 publicly traded firms in seven European countries (Denmark, Finland, Germany, Italy, Norway, Sweden, and Switzerland) where dual-class share structures are widely used. A total of 108 of the firms unified the dual-class shares in the period 1996-2002. I call these firms the *event group*. The other 385 firms remained dual-class within the same period. I call these firms the *control group*.

I find that the probability of unification is positively related with a planned new equity issue (seasoned equity offering, SEO). The data show that the event firms are more active in raising new equity. Moreover, the SEOs tend to occur in the same year as the unification. If a firm plans to raise new equity, the likelihood of unification increases by 3

% a year. More than one third (36 %) of the event firms issued equity in the same year when they unified the dual-class shares. I also find that the firms that unify their shares are more active in acquiring other companies. Higher acquisition activity suggests that the firm may want to use stock to pay for other companies' shares. The interpretation of these results is that low share value is not much of a concern, the minority shareholders pay a fair price taking into account the potential expropriation, unless the firm wants to do any transactions with stock.

The likelihood of the unification decreases substantially if the firm's controlling shareholders enjoy high private benefits of control. I show that all the variables that proxy for the level of private benefits have the expected signs and are significant. In particular, the event firms are characterized by: a) a smaller difference between the votes and equity held by the largest shareholder, b) a lower voting premium (the price difference between high and low voting shares), c) a more frequent presence of a financial investor among the largest shareholders, and d) a higher number of firms cross-listed in the U.S. Moreover, the importance of the new equity issues as a determinant of the unification is linked to the private benefits of control argument. The expansion of equity capital is likely to dilute the control, hence the value of control is expected to decrease, and the controlling shareholders are more likely to accept the unification.

The prediction that the unification is intended to increase the share price can be tested alternatively from the ex post consequences of the unification. The results suggest that firms indeed reach their goal of increasing the market value, and the effect is rather persistent. The difference between the firm's market-to-book ratio and the respective average ratio of single class firms in the same industry jumps from around –0.5 to 0 in the

year of the unification. In other words, the ex-dual-class firm achieves the same value as an average single-class firm in the industry. Moreover, it keeps moving up, reaching 0.4 (significantly different from zero) one year after the unification, and then drops back to 0 in the two subsequent years. The value effect remains robust after controlling for sales growth and operating performance. Other ex post consequences of the unification are higher sales growth, higher capital expenditure, and lower leverage.

This paper relates to a broader literature on dual-class shares: the value of control measured by the voting premium (Bergström and Rydqvist 1990, 1992; Nenova, 2003), the IPO under-pricing in dual-class firms (Smart and Zutter, 2003), the dual-class share introductions, the switch from a single to dual-class share structure (Partch, 1987; Jarrel and Poulsen, 1988; Millon-Cornett and Vetsuypens, 1989), and the effect of certain policy changes on dual-class firms (Smith and Amoako-Adu, 1995; Robinson et al., 1996; Hoffmann-Burchardi, 1999; Bennedsen and Nielsen, 2002; Berglöf and Burkart, 2003).

This is not the first paper to study the unification of dual-class shares. Amoako-Adu and Smith (2001) find that the most common factors leading 56 firms on the Toronto Stock Exchange to eliminate dual class equity were to meet the terms of a debt restructuring agreement, to facilitate the sale of a control block, and to increase institutional appeal for stock prior to a seasoned offering. These factors are derived from the statements made by the companies. Using data on 67 Israeli stock unifications, Hauser and Lauterbach (2003) estimate the value of voting rights from compensation paid on high voting shares for giving up some of the votes. All the Israeli unifications soared after the Tel-Aviv Stock Exchange introduced a new regulation (in 1989) which

banned new issues of inferior-voting shares. With this regulation, firms that wanted to raise new equity were effectively forced to unify the dual-class shares.

The paper that is closest to this one in its study of the effects of voluntary dual-class share unifications is Dittmann and Ulbricht (2003). Using data on 89 dual-class shares in Germany, Dittmann and Ulbricht find that a company is more likely to abolish the dual-class structure if the expected future growth is high, if the firm is large, or if the largest block of voting shares is small. The data used in this paper differ from the German data in several respects. First, this paper studies seven countries, allowing some cross-country comparisons. Second, a wider pool of control firms allows to find more precise matches for the event firms, and to detect the differences in firm characteristics. Third, I use a sample of shareholder approved unifications (in German data, out of 29 announced unifications, 4 companies eventually did not unify their shares). Finally, and most importantly, this study explores not only the determinants of the unification but also the ex post consequences of it. To my knowledge, this is the first paper that explores firm characteristics after the unification, and explicitly documents the effect on share value beyond a short term announcement effect.

The paper proceeds as follows. Section 2 describes the data. Based on the theoretical arguments and previous findings, Section 3 presents several testable hypotheses. Section 4 analyzes the ex ante determinants of the unification decision. Section 5 studies the ex post consequences of the unification. Section 6 discusses some alternative, less formal tests of the hypotheses, and Section 7 concludes.

2. Data

2.1. Sample

The main sample for empirical investigation consists of 493 companies in seven European countries (Denmark, Finland, Germany, Italy, Norway, Sweden, and Switzerland), in which deviation from one share - one vote is allowed and widely used. The seven European countries use different types of dual voting class shares (see Appendix A). Companies in Denmark, Finland, and Sweden use dual-class share system in which, for example, one share class has one vote per share, and the other – ten votes per share. In Norway, the restricted share class usually carries no voting rights. The most common restricted share class in Germany is preference shares (*Vorzugsaktien*) which carry no (or limited) voting rights, but has priority for dividends. In Italy, companies can issue nonvoting savings shares (*azioni di risparmio*), and preferred shares that carry limited or no voting rights. Companies in Switzerland can issue one or more classes of shares (registered (*namen*) or bearer (*inhaber*)) with one vote but different nominal value per share. In all sample countries, both share classes are treated equally for tax purposes, i.e., there is no tax advantage on low voting shares as, for example, is the case of bank issued trust preferred stock in the U.S.

A sample firm complies with the following criteria: The firm is present in *Moody's/ Mergent International* Company Database (1996-2002 Manuals), is not a commercial bank or credit institution (two-digit SIC code 60 and 61), had a dual class share structure at the end of 1995, and is still listed on the stock exchange at the end of 2002. The sample construction is presented in Panel A of Table 1. Out of 601 firms that satisfied all the criteria above except the last one, the listing at the end of 2002, for

various reasons we drop 108 firms. Ten percent of firms were taken over or merged with another firm. Four percent of firms were delisted because the ownership became too concentrated (no or very little free float). Other four percent of firms were dropped due to data unavailability. It leaves us 493 firms (82 %). Out of this sample, 108 firms (22 %) now have single share class (*event* group), and 385 firms (78 %) still have dual-class shares (*control* group). If we compare the number of unifications with the total initial dual-class firm sample (including the firms that dropped out during 1996-2002), the event group represents 18 %. These numbers show that the unification of share classes is an important event among the dual-class shares and the market in whole.

Panel B of Table 1 tracks the initial sample of dual-class firms by country. The lowest unification activity has been in Sweden, where only five percent of the initial sample (7 out of 136 firms) switched to one share - one vote. In Denmark, the respective figure is 11 % (10 out of 88 firms). The highest unification activity has been in Norway, Germany, and Switzerland (30 %, 29 %, and 25 %, respectively). It is interesting to note that Sweden and Denmark have the highest fraction of mergers and takeovers among dual-class firms. In Sweden, 18 % of the initial sample of dual-class firms (25 out of 136 firms) merged or were taken over during 1996-2002. In Denmark, the respective number is 16 %. Panel C of Table 1 shows that the number of unifications has been increasing over sample years – from 8 events per year in 1996 to 23 in 2000 and 2001. The highest number of unifications is observed in Germany (41 firm) and Switzerland (26 firms).

Panel A of Table 2 shows that the fraction of dual-class firms among all firms has decreased since 1995, but it is still substantial at the end of 2001. The largest fraction of dual-class firms is in Sweden (46 %), and the lowest in Norway (7 %) and Germany (11

%). We should note that there are large and important market players among the dual-class firms. The event group consists of mainly large and medium size companies, including such famous names as, for example, ABB, Lufthansa, and Nokia. The control group includes, for example, BMW, Carlsberg, Ericsson, and Fiat.

Panel B of Table 2 presents evidence that the fraction of dual-class firms among newly listed domestic companies has been steadily decreasing from 22 % in 1996 to only 4 % in 2002. Sweden appears as a striking outlier; 71 % of all new dual-class listings in seven sample countries during 1996-2002 happened in Sweden.

2.2. Summary Statistics

Table 3 contains summary statistics for 3451 firm-years – 493 companies and seven years (1996-2002). The number of observations vary due to data availability constraints. The first group until the dividing line presents variables with annual data, while the second group shows data that are assumed constant over sample years. All the variable definitions are provided in Appendix B.

The main data sources used in this study are as follows. Financial data is from *Worldscope* database. Information on different share class characteristics (voting power, dividend rights, listing, etc.) comes from *Moody's/ Mergent International* Company Database, *Datastream*, company annual reports, and *Lexis-Nexis*. Ownership data are from Faccio and Lang (2002) and company annual reports. Data source for acquisitions is *Securities Data Corporation Platinum* database.

Panel A of Table 3 shows that the median firm in the whole sample has a market-to-book (MTB) ratio of 1.53, an industry adjusted market-to-book ratio of –0.98, a size (log of sales) of 5.54, a return on assets of 5 %, a return on equity of 10 %, a debt to

capital ratio of 24 %, capital expenditures of 19 % of net property, plant, and equipment, and annual sales growth of 6 %. The industry MTB is the average MTB for publicly traded single share class firms in the seven sample countries in the same industry (measured by two-digit SIC code) in each year. In terms of ownership structure, the median firm in the sample has the largest shareholder with 40 % of votes and 24 % of equity. Forty percent of all firms have only one of the share classes listed on the stock exchange, 11 % of firms have their shares cross-listed in the U.S., 41 % of firms have a family as the largest shareholder, 11 % of firms have a financial institution as the largest shareholder, and 42 % of firms have a second shareholder with at least 10 % of votes.

In Panel B and Panel C of Table 3, the summary statistics are presented separately for the event group, and the control group. In Panel B, the statistical significance of the univariate analysis between the event group and the control group variables is shown. The firms that switched to a single share class compared to other dual-class firms are characterized by higher market-to-book ratios, larger size, lower relative trading days, higher number and size of new equity issues, and higher number of acquisitions.

3. Determinants and consequences of unification: discussion and hypotheses

In this section, different theories and findings about dual-class shares are summarized to form a set of testable predictions about the variables affecting the probability of unification (ex ante effects) and the likely consequences of it (ex post effects). This way of differentiating between ex ante and ex post effects is borrowed from Pagano et al. (1998) who study the question of why companies go public.

3.1. Stylized facts about dual-class shares

Consider a firm with two classes of shares – high voting shares and low voting shares. The two share classes, as well as the dual-class firms vs. single-class firms may differ with respect to the three main factors: 1) security benefits, 2) liquidity, and 3) control benefits. In many firms (e.g., in Scandinavia), both share classes carry the same dividend and liquidation rights, i.e., the shares differ only with respect to voting rights. While in other firms (e.g., as set by law in Germany and Italy), the low voting shares have preferential rights with respect to dividends. In my sample, about 40 % of firms actually paid higher dividends on low voting shares than on high voting shares. When security benefits differ, other things equal, the high voting shares have a lower price than low voting shares. When compared with single share class firms, there is evidence that security benefits in dual-class firms should be lower because of lower share valuations (Shleifer and Wolfenzon, 2002; Claessens et al., 2002). Dual-class structures can be seen as an anti-takeover measure that helps managers or controlling shareholders to extract rents that are not shared with other shareholders. Hence, the market may assign lower valuations on these firms than on similar single-class firms. This finding is supported by the data in our sample. From Table 3 we see that the average INDUSTRY ADJUSTED MTB, the difference between the dual-class firm's MTB and the average MTB in the single-class firms in the same industry, is significantly negative. The lower valuations can also reflect the fact that dual-class firms may forgo a positive growth opportunity when it arises. Wurgler (2000) shows that better shareholder protection increases the efficiency of capital allocation, i.e., there is higher correlation between investment opportunities and actual investments.

The liquidity of high and low voting shares may differ due to foreign ownership restrictions (e.g., at some point, on registered shares in Switzerland), block holdings (large part of high voting shares can be held in a block and are not traded), or an unlisted share class (i.e., only one of the shares is listed on the stock exchange). Table 3 offers some evidence. Turnover ratio of low voting shares is on average (median) 6.4 (2.3) times higher than on high voting shares. Number of days the share is traded is on average (median) 2.4 (1.0) times higher for low voting shares than for high voting shares. These ratios are estimated using firms in which both share classes are listed (60 % of all firms in our sample). When comparing with single-class firms, there is some evidence that dual-class firms have a smaller investor base (Giannetti and Simonov, 2002). Using Swedish data, Giannetti and Simonov show that certain investor groups are reluctant to hold stocks in companies in which the extraction of private benefits is expected to be larger. Moreover, the investor base could be narrower because dual-class structures are unavailable to certain investor groups (e.g., investment funds) due to legal restrictions.

The valuations of high and low voting shares differ if there is some value attached to the voting rights. The value of voting rights can represent the expected premium that an outside raider would offer to acquire control over firm's decisions (Lease, McConnell, and Mikkelson, 1983; Stulz, 1988; DeAngelo and DeAngelo, 1985). When there is a takeover attempt, a higher price could be paid for a high voting share because it carries more votes. Without institutional restrictions (on equal treatment of both share classes), the raider is willing to pay "per vote" and not "per share". The value of voting rights is commonly measured by a voting premium (e.g., Levy, 1983; Zingales, 1994, 1995). Table 3 shows that the average (median) voting premium in our sample is 16 (5) %,

which is significantly different from zero. When comparing with single-class firms, several authors have argued that private benefits are higher in firms with dual-class shares (DeAngelo and DeAngelo, 1985; Grossman and Hart, 1988). Higher separation between ownership (fraction of capital) and control (fraction of votes) can create the wrong incentives, when those in control become entrenched at the expense of minority shareholders[3]. The private benefits can take the form of excess salaries, beneficial transfer pricing to controlling shareholders' privately held firms, subsidized personal loans, etc. Alternatively, Holmen and Högfeldt (2003) claim that in Sweden private benefits of control are arising from status, prestige, and social recognition rather than from expropriation of minority shareholders, and thus are not value destroying.

3.2. Main disadvantage of unification: loss of control

The main disadvantage of the unification from the controlling shareholders' point of view is the loss of control. Previous studies have shown (Faccio and Lang, 2002; Claessens et al., 2002), and the data in this study confirm that the controlling shareholders use the benefits of dual-class structure by investing in high voting shares, and having lower capital participation relative to the voting power. The average (median) difference between the votes and equity stake in our sample is 13 (9) %. The highest difference is 67 %: the largest shareholder holds all votes, but only 33 % of equity capital. Obviously, the

[3] One should note that dual-class share structure is just one of the ways to create separation between control rights and cash flow rights. There are also pyramids and cross-holdings of companies (Bebchuk et al., 2000). However, dual-class shares is the most common method in Europe. From Faccio and Lang (2002) data set we can estimate that on average 32 % of firms in the seven countries used in this study have dual-class shares, compared with 20 % of firms using pyramids and 2 % – cross-holdings.

unification can substantially decrease the voting power of the controlling shareholder, because after the unification the voting rights are just equal to the equity rights.

We should expect that a controlling shareholder with lower value of control and lower private benefits is more likely to accept the unification. Measuring the private benefits of control is not trivial. Claessens et al. (2002) show that high separation between ownership and control can be a sign of entrenchment. The prediction would be that the wedge between control rights and equity rights is lower in firms that abandon dual-class share system. Voting premium is another way of measuring the value of control. We should expect a negative correlation between the probability of unification and the voting premium. The type of the owner, e.g., a family vs. financial investor, can matter, too. Financial investors can have lower incentives for private benefit extraction (see e.g., McConnell and Servaes, 1990), and they can be less concerned about the "free" control benefits, namely status, prestige, and social recognition. Reese and Weisbach (2002) and Doidge (2003) argue that cross-listing in the U.S. is a bonding mechanism that improves the protection afforded to minority investors and decreases the private benefits of control[4]. Following this reasoning, we should expect that the dual-class firms which are cross-listed in the U.S., other things equal, are more likely to unify their shares.

The private benefits could also decrease because of changes in corporate governance legislation. Over the sample period (1996-2002) the corporate governance regulations have improved[5]. As shareholder protection improves, the controlling party's

[4] There is, however, a countervailing argument by Siegel (2003), who suggests that cross-listing in the U.S. is a reputational bonding rather than a legal bonding. When it comes to implementation, American governance rules affecting U.S. listed foreign firms are much stricter in formal writing than in practice.

[5] See a summary of regulatory issues related to dual-class shares in Appendix A.

easiness to extract private benefits could decrease. This is obviously one of the reasons for higher incidence of unifications in the last few years (see Panel C of Table 1), as well as for overall decrease in the fraction of dual-class firms (Table 2). However, in neither of the sample countries the regulatory changes related to dual-class shares have been such that make the switch to one share - one vote compulsory. The unification decision is still left at the discretion of the firm, and there are many firms that have remained dual-class.

The main question is what are the benefits that make firms (the controlling shareholders) to accept the unification. In the next sections, we focus on the advantages of unification. The discussion is directly linked to the stylized facts presented before, in particular, to the comparison between dual-class and single-class firms.

3.3. Increase share value

Dual-class firms can decide to unify the shares with an intention to increase the share price, by committing not to expropriate minority shareholders. One support for the commitment story is the fact that the controlling shareholders in several dual-class firms had the same fraction of votes and equity, i.e., they did not "use" the dual-class system, prior to the unification. One would presume that the market does not treat these firms as dual-class, and there should be no difference in valuation. The market, however, can discount the firm value because of the option to use the dual-class structure in the future. Therefore, the unification of share classes is an obvious commitment not to use the dual-class system also in the future. Main implication of this hypothesis, which can be tested using ex post data, is higher market valuation (MTB ratio) after the unification.

The question arises, Why suddenly firm cares about higher valuation? The chance to raise the share price should be particularly appealing for companies that plan to issue

new equity and to make acquisitions using stock. The stock price may not bother the controlling shareholders as long as there are no stock transactions to the "outside", e.g., the expansion is financed with cash or debt, but it becomes more of an issue when the firm has to approach the equity markets and/ or use the stock in acquisitions. We should expect that the likelihood of unification increases if a firm is issuing substantial amounts of new equity. This prediction is related to Ehrhardt and Nowak (2002) who find that the firms that issued dual-class shares at the IPO stage are less likely to return to capital markets for a seasoned equity offering.

Firms with better growth opportunities, in general, should have higher incentives to unify the shares. Even if a firm is not issuing new equity right after the unification, it may need to raise substantial amount of capital for investments and expansion in the future, for example to attract a strategic investor. Simplifying the share structure can make the process easier. Moreover, when the current controlling shareholders are cash constrained, in times of rapid expansion, the dilution of control is inevitable. As a result, the value of control decreases, and the controlling shareholders are more likely to accept the unification. As a proxy for firm's future growth opportunities, we use the average MTB of public single-class companies in the same two-digit SIC industry. The hypothesis that the unification is a way to ease the expansion can be tested using ex post data: firms that unified shares should increase their investment (measured by capital expenditure over property, plant and equipment), and the sales should rise.

A controlling shareholder could be tempted to boost the stock price before selling the shares to a new shareholder, assuming that the new shareholder is not interested (or

able) to extract private benefits and thus not ready to pay the full value of control. In this case, we should expect to see a change of controlling shareholder after the unification.

3.4. Increase share liquidity

Another potential reason to unify the share classes is to raise the liquidity of company's shares. The motives why firm needs to increase liquidity are similar to the motives why firm needs to raise stock price. In particular, liquidity becomes important when firm is expanding and has to attract new investors, to issue new equity, to make acquisitions using stock, or when the controlling shareholders want to sell their stakes.

3.5. Investor recognition

The dual-class firms can have a smaller investor base due to unavailability (or unfamiliarity) of dual share structure to certain investor groups. According to Merton's (1987) model, an increase in the relative size of the firm's investor base reduces the firm's cost of capital and increases the market valuation. When the firm's stock price and liquidity is important, the unification can help to increase the investor base and hence to raise the market valuation. Unlike in Giannetti and Simonov (2003), there is no clean way to test the hypothesis about the investor base in my data. One implication of this hypothesis, which can be tested using ex post data, is higher market-to-book ratio after the unification. High MTB can alternatively indicate that there is simply lower extraction of private benefits. It is hard to discriminate between these two hypotheses. The discussion about investor recognition is addressed in Section 6.

The unification can also act as a positive "free" advertisement for the company. The switch to one share - one vote is boldly regarded as a step towards improved

corporate governance, and normally gets significant media attention. This prediction is closely related to Demers and Lewellen (2003) who find that there are marketing benefits associated with IPO under-pricing. We should expect that firms with good growth opportunities and planned new equity issues are the ones that gain the most from positive publicity around the unification event.

3.6. Other issues

Zingales (1995) and Nenova (2003) have shown that preferential dividends for low voting shares reduces the value of control (the voting premium). One of the advantages of unification is that high voting share holders can receive higher dividends after the unification. We should expect a positive correlation between the probability of unification and the presence of preferential dividends on low voting shares.

In the event of unification, some firms can compensate the loss of control with additional stocks or cash. In my sample, there are 9 firms, predominantly in Italy and Norway, that offered some kind of compensation for high voting shareholders. The compensation would arguably make the unification more attractive to the controlling shareholders, but it can face strong opposition from the low voting shareholders. The low number of compensation cases does not allow us to make any statistically meaningful tests. Moreover, the decision about the compensation is of a second-order after the proposal to unify the shares has been made[6].

[6] There are exceptions, however. In Swedish company Ericsson, the talks on the issue of the compensation for high voting shareholders have taken nearly two years, and have seriously hindered the acceptance of the reform that would cut the difference in voting rights on high and low voting shares from 1,000-to-one to

In several dual-class firms, the high voting shares can be converted into the low voting shares. This option gives an extra benefit to high voting shareholders, and should decrease the incentives to give up these shares. In practice, it is not very common to use the conversion option. Nenova (2003) shows that the convertibility does not explain the price difference between dual-class shares. Suspecting that the conversion option has no effect on the unification decision, the data on share convertibility were not collected.

3.7. Hypotheses summarized

The main testable hypotheses about the ex ante determinants of the unification and the ex post consequences of the unification are as follows. The probability of unification should be higher in firms with: 1) low difference between control rights and equity rights held by the largest shareholder, 2) low voting premium, 3) financial investor as the largest shareholder, 4) cross-listing of shares in the U.S., 5) preferential dividends for low voting shares, 6) planned new equity issues, 7) planned acquisitions of other companies, and 8) high growth opportunities. These predictions are tested in the next section. The expected consequences after the unification are: 1) higher market-to-book ratio, 2) higher sales growth, 3) higher capital expenditure over property, plant and equipment, and 4) change of the controlling shareholder. These predictions are tested in Section 5.

10-to-one (*Financial Times*, February 19, 2004). Ericsson case does not classify as a unification according to the definition used in this paper, because the company still keeps the dual-class share system.

4. Ex-ante determinants of unification

In this section, the firm characteristics which increase the likelihood of unification are estimated. Section 4.1 presents the results using the panel data discrete choice model (probit). Alternative methods are presented as a robustness check in Section 4.2 and 4.3.

4.1. Main model

A pooled probit model of the probability of dual-class share unification is used (as in Pagano et al., 1998). On the basis of the discussion in previous section, I estimate:

$$Pr(Unify_{it}=1) = F(\alpha_1(Equity\ Issue_{it}) + \alpha_2(Acquisitions_{it}) + \alpha_3 SIZE_{it} + \alpha_4 INDUSTRY\ MTB_{it} + \alpha_5(Private\ benefits_i) + \alpha_6 YEAR_t + \alpha_7 COUNTRY_i), \quad (1)$$

where $Unify_{it}$ is a variable that equals 1 if the company *i* switched to a single-class share system in year *t* and 0 if it remained dual-class in this year (a firm is dropped from the sample after it unifies the shares), *F(.)* is the cumulative distribution function of a standard normal variable. Different specifications of the explanatory variables are described in the following paragraphs. The predicted signs of the variables were discussed in the previous section. The only explanatory variable that was not discussed is SIZE. The costs of keeping a controlling block are higher in large companies, which would predict positive relation between size and the likelihood of unification. On the other hand, having control of a big company has more positive effect on owner's social status, and hence lower incentives to give up the control. The prediction on the sign of the size variable is therefore unclear.

Table 4 reports the maximum likelihood estimates of the probit model, as well as the standard errors, using a fully robust variance-matrix estimator that allows for within-cluster (firm) correlation and heteroscedasticity. The robust estimator assumes for no

particular kind of within-cluster correlation nor a particular form of heteroscedasticity. This specification relaxes the independence assumption required by the probit estimator to being just the independence between the clusters (firms). This specification yields very similar results to random-effects regression (not reported), which controls for possible unobserved firm-specific effects.

The variables that measure the equity issue and acquisitions activity are contemporaneous because they proxy for the planned new equity issues and acquisitions. The reverse causality (from unification to new equity issues and acquisitions) is ruled out, because usually these decisions take time. It is not plausible to assume that the firm made a unification, observed a share price increase, and immediately (within a few months) decided to issue new equity and make acquisitions. It is quite common that the decisions about new equity issue and unification are taken at the same annual (or extraordinary) meeting. SIZE and INDUSTRY MTB are lagged one year in order to measure the situation before the unification. The variables that proxy for private benefits (e.g., ownership) are fixed; they measure the situation before the unification in the event firms and the average situation in the control firms in the period 1996-2002[7].

We hypothesized that controlling shareholders in a firm that expands through new equity issues and acquisitions are more likely to face control dilution and decrease in private benefits. Moreover, raising additional equity capital and acquiring new firms increases the importance of boosting the stock price. The results reported in Table 4 strongly confirm these predictions. Regression (1) shows that the probability of

[7] This is due to lack of data. Collecting past ownership data for 493 firms from 7 countries over 7 years is not very feasible.

unification significantly increases in the years when firm plans to issue new equity. A planned new equity issue raises the probability of unification by 2.9 % a year. Regression (2) reports that the size of new equity issue proceeds scaled by book value of equity significantly increases the likelihood of unification. A one standard deviation increase in EQUITY ISSUE PROCEEDS/ EQUITY raises the probability of unification by 0.8 % a year. Regression (3) reports the results of the acquisitions effect. A one standard deviation increase in ACQUISITIONS/ SIZE raises the likelihood of unification by 0.6 % a year. The data do not allow us to distinguish between the acquisitions with cash and stock. Higher acquisitions activity is expected to measure the fact that the firm may want to use stock in at least some of the acquisitions. In Regression (4) both, equity issues and acquisitions, effects are included in one model. The estimates remain highly significant.

All the regressions in Table 4 show that SIZE has a negative (but insignificant) effect on the probability of unification. INDUSTRY MTB which is a proxy for future growth opportunities has a positive relation with the probability of unification, as predicted (the coefficients are significant at the 10 % level in two out of five regressions).

All the proxies for the value of control and private benefits are significant and have the predicted signs. The most significant is a dummy variable that takes a value of 1 if the difference between the control and cash flow rights held by the largest shareholder is above the median separation in firms where control and cash flow rights differ (CONTROL EXCEEDS OWNERSHIP, HIGH). If the controlling shareholder moves from high separation between ownership and control to low separation, the likelihood of unification raises by 1.5 % a year. If the largest shareholder is a financial investor, the probability of unification increases by 2.3 % a year. This result can mean that the

financial investors have lower incentives for private benefit extraction. Alternatively, the financial investors are more concerned about the stock price of the companies they have invested in, as their performance is mostly valued by the return of investment made. As predicted, the U.S. cross-listing is positively related to the likelihood of unification. If US CROSS-LISTING DUMMY changes from zero to one, the odds of unification increase by 2.6 % a year. We do not differentiate between Level 1, 2, 3 and Rule 144A ADRs, but most of them are traded as Level 2 and Level 3 (capital raising issues that trade on the NYSE or NASDAQ). There are 19 cross-listed firms among the event group. All but 4 of them were cross-listed before the unification, 2 tapped the US market in the same year as the unification took place (a couple of months after it), and 2 firms cross-listed in the US one and two years after the unification. Coding these 4 firms as not cross-listed slightly reduces the significance of this variable (to the 10 % level).

Regression (5) shows the results when an interaction term between EQUITY ISSUE DUMMY and INDUSTRY MTB is included. This specification attempts to measure whether there is any effect of future growth opportunities if a firm is not planning to issue equity in the nearest future. The coefficient on INDUSTRY MTB is positive and significant at the 10 % level. It means that among firms that do not plan to issue equity in the nearest future, the presence of growth opportunities raises the likelihood of unification. For firms that did issue new equity, INDUSTRY MTB does not have any additional explanatory power. The sum of coefficients on the interaction term and INDUSTRY MTB is not different from zero (p-value 0.5).

Several alternative specifications are tested (not reported). If we include industry dummies instead of INDUSTRY MTB, the results on equity issues and acquisitions, as

well as on private benefits proxies do not change. Firm MTB is not significant when INDUSTRY MTB is included. This means that the positive effect of firm's MTB is driven by industry growth opportunities. Past SALES GROWTH and past CAPEX (as proxies for growth opportunities) are not significant, suggesting that the event firms are associated with high expected growth rather than high current growth. Excluding financial industry (SIC 62-67) does not change the results. Excluding years of lower unification activity (1996 and 1997) does not change the results. The proxies for firm's equity dependence as suggested by Kaplan and Zingales (1997) – LEVERAGE, CASH FLOW/ ASSETS, CASH BALANCE/ ASSETS, CASH DIVIDENDS/ ASSETS – are not significant. These variables have only indirect effect on unification as they have some power in explaining the likelihood of new equity issues. A firm with higher leverage and lower cash resources is not more likely to unify the shares unless it actually plans to issue new equity. MULTIPLE BLOCKHOLDER DUMMY has a negative effect on the probability of unification, and it is significant at the 10 % level in only one out of five regressions in Table 4. One may argue that preferred stock (with preferential dividend) is introduced for different reasons than pure multiple voting stock (with equal dividend rights). All regressions were re-run separately for firms that have preferential dividend on low voting shares and for firms that do not have them. The main results remain unchanged suggesting that firms with preferred stock for the purposes of this study (as well as for many previous studies) bear similar characteristics to other dual-class firms.

The pooled probit ignores the possible effect of unobserved firm-specific factors which might be correlated with the explanatory variables. For example, majority owner's family tradition to keep control might affect the resistance to issue new equity, the wish

to keep higher separation between votes and equity, as well as the resistance to abandon dual class shares. To control for these unobserved firm-specific effects, we also estimate fixed effects logit model (not reported). The advantage of this model is that it is possible to obtain a consistent estimator without any assumptions about how the unobserved firm effects are related to the explanatory variables. The disadvantage though is that we can only include the variables that vary over time at least for some firms. All the signs on the main time-varying variables, EQUITY ISSUE DUMMY, EQUITY ISSUE PROCEEDS/ EQUITY, ACQUISITIONS/ SIZE, and INDUSTRY MTB, remain as predicted. The new equity issues lose significance (p-value is 0.2), acquisitions remain significant (at the 1 % level), and industry growth opportunities are significant (at the 5 % level), too. The results suggest that keeping unobserved firm effects fixed, increase in respective industry's growth opportunities and acquisition activity raises the likelihood of unification. The reason why new equity issues variable loses significance in the within model is related to the previous result that even if a firm is not issuing equity in the current year, high growth opportunities increase the likelihood of unification. The firm may want to issue equity in the subsequent years (since the firm is dropped from the sample after the unification, we cannot capture the effect of future issues).

4.2. Robustness check: Cross-sectional analysis

Table 5 presents the results of a *probit model* on the probability to unify dual-class shares using average (cross-sectional) data on 493 firms. This model specification asks the question: What are the *average* characteristics of firms that unify their shares? In this model, time-varying variables are averaged according to the following algorithm. The equity issue and acquisitions variables are averaged over all the sample years 1996-

2002 to measure the average equity issuance and acquisitions activity in this period. SIZE and INDUSTRY MTB are averaged over two years prior to the unification for event firms, and over 1994-2001 for control firms. This way of averaging attempts to capture the situation in the dual-class firms prior to a potential unification. The results are largely the same if the averaging for event firms is done over 1994 to one year prior to the unification. The proxies for private benefits are not time-varying, so no averaging is needed. One variable is added if compared with the previous specifications, namely a dummy variable which takes a value of 1 if there has been at least one new equity issue in period 1996-2002. The average of EQUITY ISSUE (ADJUSTED) DUMMY is used instead of simple EQUITY ISSUE DUMMY to avoid overstating equity issuance activity if the firm does not report the proceeds from new equity issues in years when there have been no issues.

The results in Table 5 largely confirm my previous findings. All equity issue and acquisitions variables are significant. If a firm has made a seasoned equity offering at least once during 1996-2002, the probability of unification in this period increases by 17 %. A one standard deviation increase in EQUITY ISSUE PROCEEDS/ EQUITY (AVERAGE) raises the likelihood of unification by 5 %, and a one standard deviation increase in ACQUITIONS/ SIZE (AVERAGE) by 4 %. INDUSTRY MTB is highly significant, too (at the 1 % level), a one standard deviation increase in this variable raises the likelihood of unification by 7 %. Equity issues, acquisitions and industry MTB remain significant if they are included one by one (not reported). High separation between ownership and control remains negative and highly significant. The effect of financial investor and U.S. cross-listing is positive but less significant. The results suggest that the

firms that unified their shares in 1996-2002 were on average more active in issuing new equity and making acquisitions, and had substantially higher growth opportunities than other dual-class firms.

A source of concern both in cross-sectional model and panel data is that the equity issue and acquisitions variables are endogenous. It is difficult to find a good instrument for these variables to carry out the instrumental variables models or a bivariate probit. As a robustness, I did a test of endogeneity using continuous endogenous explanatory variables method (described in e.g., Wooldridge, 2002) treating EQUITY ISSUE DUMMY (AVERAGE) as an endogenous variable. I use LEVERAGE (AVERAGE) as an instrument for equity issues. Leverage is clearly correlated with new equity issues. High leverage is one of the reasons why companies need to approach the equity markets, and there is no evidence why it should be directly correlated with the unification decision. However, we can only rely on the results of this test if we believe that the average leverage is exogenous (one can argue that it is hard to change leverage quickly and dramatically). If one disagrees with this assumption, the following test does not make sense. So, for those who believe… In the first step, average EQUITY ISSUE DUMMY is regressed on INDUSTRY MTB, LEVERAGE, SIZE, and country dummies. Indeed, LEVERAGE has a significant positive impact on the new equity issues, and so does INDUSTRY MTB. In the second step, probit regression is estimated including the residuals from the first-step regression. The *t*-statistic on the residuals is a direct test of null hypothesis of endogeneity of the proceeds variable. The *t*-statistic is 0.68 (not significant). The average EQUITY ISSUE DUMMY remains significant.

4.3. Robustness check: Matching sample

One way to deal with the problem of endogeneity of equity issues and acquisitions variables is to construct a matching sample of firms, where the matching is based on the most likely suspects for endogeneity. I match firms on size, industry and market-to-book, and check whether there is still substantial difference in new equity issues and acquisitions (and other variables) between the event group and the control group.

The combination of Loughran and Ritter (1997) and Barber and Lyon (1997) matching algorithms is used to find the closest match for each event firm. The firms are matched on industry, size (log of sales), and market-to-book ratios. All 493 main sample dual-class firms are divided into 108 groups: 12 industries times 3 size categories times 3 MTB categories. The two-digit SIC codes are combined into 12 larger industry groups following Campbell (1996)[8]. Size and MTB categories are *High* (75^{th} percentile and upward), *Medium* (25^{th} to 75^{th} percentile), and *Low* (25^{th} percentile and downward). Market-to-book data at the end of the year preceding the unification is missing for seven event firms, which are therefore excluded. We proceed with finding the closest match for 101 event firm. The matching is done based on the firm characteristics at the end of the year preceding the unification. If there are more than one dual-class firm in the same group as the event firm, the firm with the closest MTB is chosen. If there is no matching

[8] Basic industry (SIC 10, 12, 14, 24, 26, 28, 33), Capital goods (SIC 34-35, 38), Construction (SIC 15-17, 32, 52), Consumer durables (SIC 25, 30, 36, 37, 39, 50, 55, 57), Financial/ real estate (excluding banks) (SIC 62-69), Food and tobacco (SIC 1, 20, 21, 54), Leisure (SIC 27, 58, 70, 78-79), Petroleum (SIC 13, 29), Services (SIC 72-73, 75-76, 80, 82, 87, 89), Textiles and trade (SIC 22-23, 31, 51, 53, 56, 59), Transportation (SIC 40-42, 44-45, 47), and Utilities (SIC 46, 48, 49).

firm in the same group (there are 3 such cases), the firm from the same industry with the closest MTB ratio from the next closest size category is taken.

Panel A of Table 6 reports the comparison of means of different variables in the two matched groups three, two, and one year prior to the unification. The table reports the *t*-Statistic of testing the equality of means. The results are largely the same if we use the *z*-Statistic testing the equality of distributions between the event firms and control firms using the Wilcoxon matched-pairs signed-rank test. The results provide strong support for the hypothesis that the value of control (private benefits) is lower in firms that decide to unify the shares. In particular, in the event firms, CONTROL EXCEEDS OWNERSHIP, HIGH is significantly lower (at the 1 % level), there are more firms with preferential dividends on low voting shares, and the VOTING PREMIUM three, two, and one year prior to the unification is significantly lower. Regarding the voting premium, one could argue that one year prior to the unification, the market expects the unification and therefore the voting premium goes down. It is though difficult to argue that the market predicts the unification already three years prior to the event. Therefore the significant difference in VOTING PREMIUM three years prior to unification should be a good proxy for private benefits of control associated with a particular controlling shareholder.

The results on the relative liquidity between the two share classes (measured by RELATIVE TURNOVER and RELATIVE TRADING DAYS) are inconclusive. There is not much difference between the event and control group. The interpretation is that the simple fact that the high voting shares trade significantly less frequently and in lower volumes than the low voting shares, and the fact that in 37 % of firms only one share class is traded is the reason for unification. By unifying, the firms can raise the trading

volume to at least the level of low voting shares, and can raise the trading activity by having more shares listed on the market.

The comparison between the matching sample strongly corroborates the finding that the firms that issue new equity and make acquisitions are the ones that are more likely to unify their shares (see Panel B of Table 6). The difference between the equity issue and acquisitions variables in year zero (the unification year) is statistically significant. Thirty six percent of event firms issued equity compared to only 19 % of the matched control firms, and average ACQUISITIONS/ SIZE was 0.23 in the event firms compared to 0.11 in the matched control firms.

The results show that the INDUSTRY ADJUSTED MTB prior to the unification is consistently higher in the event firms, but the difference is not significant. The event firms appear to pay lower cash dividends prior to the unification. Also cash flow is lower and the leverage higher (not significant). The only explanation for these results is the Kaplan and Zingales (1997) equity dependence story, namely the cash constraints raise the need for new equity capital and hence the likelihood of unification. Keeping growth opportunities constant, the event firms are the ones that are more dependent on equity capital. All the equity issue and acquisitions variables are consistently higher in the event group in all three years prior to the unification (though the difference is significant only at the 10 % level in two cases), again suggesting higher equity capital dependence.

The probit model regressions using the panel data of the matched 202 firms (not reported) provide qualitatively similar findings to the ones presented before. In particular, the new equity issues and acquisitions in the year of unification, and high separation between votes and equity remain highly significant. This result means that keeping

growth opportunities fixed, the firms that actually issue new equity, make acquisitions, and have lower value of control are more likely to unify their shares.

A rather novel methodology suggested for matching samples in financial studies is the propensity score algorithm. The algorithm has been proposed by Dehejia and Wahba (2002), and has been used in several recent studies (e.g., Villalonga, 2002; Hillion and Vermaelen, 2003). As a robustness check, I implement this method. The method involves the following steps:

1) *Estimating the propensity to unify*. The unification probability is modeled using the probit model on averages (cross-section): $P_i = PROB(D_i=1| X_i)$, for $i=1,..N$. X_i is a vector of characteristic observed for firm *i*. The characteristics are average SIZE, average INDUSTRY MTB, average LEVERAGE, CONTROL EXCEEDS OWNERSHIP, HIGH, FINANCIAL INVESTOR DUMMY, US CROSS-LISTING DUMMY, and COUNTRY. Averages are taken over years 1994-2001 for dual-class firms that did not unify, and over two years prior to the unification for firms that unified.

2) *Computing the propensity scores* for event and control group firms as the predicted values from the model of step 1.

3) *Matching each event firm to the control firm with the closest propensity score*. In this way, a sample of "nearest-match" control firms is created.

The idea of this specification is to test whether event firms issue more new equity and have more acquisitions once we control for all the other relevant characteristics, in particular, the industry growth opportunities and proxies for private benefits. The beauty of the method is that it allows to reduce the dimensionality of the matching problem.

Table 7 reports the results. It remains the case that the firms that unified their shares are characterized by higher level of new equity issues and acquisitions.

5. Ex-post consequences of unification

In this section two methods are used to estimate the possible consequences of the unification: a fixed-effects regression using dummy variables for the year of unification, and a comparison of variables between the event group and the matched control group. The discussion about changes of ownership after the unification is also presented here.

5.1. Fixed-effects

The consequences of unification are first estimated using fixed-effects regressions in which the effect of unification is captured by dummy variables for the year of the unification and the three subsequent years (as in Pagano et al., 1998):

$$y_{it}=\alpha+UNI_t+UNI_{t-1}+UNI_{t-2}+UNI_{t-3}+u_i+d_t+\varepsilon_{it}, \qquad (2)$$

where y_{it} is the variable of interest in firm i in year t, u_i and d_t are respectively a firm-specific and calendar year-specific effect, UNI_{t-j} are dummy variables equal to one if year $t-j$ was the year of the unification. In this model, a firm before the unification is used as a control for itself after the unification. The different variables can be affected not only by the unification decision but by some fundamental changes in the firm. To control for these fundamental effects, we include the most applicable control variables. The estimates of other variables are not reported, but are discussed where appropriate.

Table 8 presents the results. The INDUSTRY ADJUSTED MTB increases significantly in the year of unification and the two consecutive years. The joint test shows that the sum of coefficients for the two years after the unification is significantly positive

(at the 1 % level). The result remains significant when we control for lagged sales growth and return on equity. The result holds also when we include only firms that issued equity in the same year as the unification. This finding provides evidence that firms actually reach their goal of increasing the share value by switching to one share - one vote system.

LEVERAGE decreases significantly in the first and second year after the unification. CAPEX increases in all years following the unification, but the effect is not significant. SALES GROWTH increases significantly following the unification. The joint test shows that the sum of coefficients for the two and three years after the unification is significantly positive (at the 5 % level). The effect on operating performance is mixed; there is no change in ROA, while ROE slightly decreases (not significant). CASH FLOW/ ASSETS, CASH BALANCE/ ASSETS, and CASH DIVIDENDS/ ASSETS all increase after the unification, but the result is slightly significant only for cash dividends.

EQUITY ISSUE PROCEEDS/ EQUITY and ACQUISITIONS/ SIZE remain positive on the year of unification. The equity issues decrease in the year following the unification (not significant). It is not surprising since firms rarely issue new equity every year. If there has been an issue in the unification year, it is likely that the firm will not issue in the following year. The result suggests that if a firm has decided to issue new equity, the equity issue is timed together with the unification to mask the negative signal of a SEO. Previous research has shown that the SEOs are followed by lower market valuations (Loughran and Ritter, 1995; Levis, 1995) and performance (Loughran and Ritter, 1997). The unification, in turn, creates a positive publicity that the firm is improving its corporate governance. In firms that issued equity in the unification year,

INDUSTRY ADJUSTED MTB increases following the unification suggesting that the positive signal of the unification is stronger than the negative signal of a SEO.

5.2. Matching sample

Following the matching on industry, size, and market-to-book introduced in Section 4.3, we compare the financial ratios in the event group and the matched control group one to three years after the unification. The results are presented in Panel B of Table 6.

The comparison of means between the event firms and the matched control firms corroborates the result of increased market valuation after the unification. INDUSTRY ADJUSTED MTB in the event firms is higher in all three years after the unification. The difference is the highest (significant at the 5 % level) in the next year after the unification. Interestingly, the sign of the variable changes: average INDUSTRY ADJUSTED MTB becomes positive for event firms in the first and second year after the unification, while it remains negative for the control firms. The result confirms that the firms succeed in their aim to increase the market value by unifying shares.

Operating performance (ROA and ROE) in the years following the unification tends to be lower in the event group, but the result is not significant. The results on CAPEX and SALES GROWTH are mixed and not significant. Interestingly, once we keep growth opportunities fixed, the firms that unified their shares are not growing faster and investing more than similar firms that have kept the dual-class structure. LEVERAGE is lower in the event group following the unification. We may observe that the difference arises because of increased leverage in the control group and slightly decreased leverage in the event group. Given the fact that the control firms are the closest

matches by growth opportunities, it can be interpreted that the event firms have chosen to finance the growth with equity, while the control firms – with debt.

5.3. Ownership changes

Table 9 summarizes the changes in ownership structure after the unification in 71 event firm (where the data was available). This summary attempts to shed some light on the hypothesis that the unification is more likely if the controlling shareholder is planning to sell her stake, i.e., is eager to increase the share price before the sell-out.

Panel A of Table 9 shows that the controlling shareholder (before the unification) does not have a block of shares (10 % of total stock) after the unification in 28 % of cases (20 out of 71 firm). It is a weak support to the hypothesis that the controlling shareholder's willingness to sell out may be one of the reasons for unification. However, in most of the cases (66 %), the controlling shareholder keeps some control by holding at least 10 % of total stock. Therefore, it is hard to argue that the controlling shareholder's willingness to sell her stake is one of the main drivers for the unification.

In Panel B of Table 9, we observe that on average the controlling shareholder's voting power decreases from 39 % to 23 %, while the equity stake stays virtually the same. The decrease in voting power is mainly the consequence of the unification (the alignment of control and ownership stakes) rather than from selling the shares.

In sum, it is more plausible that the controlling shareholder is ready to accept the unification of shares because of the expected dilution of control arising from planned new equity issues, and not because she is planning to sell her shares.

6. Other evidence

An obvious question arises of what companies themselves are saying about the unification, why they do it. Table 10 presents a brief summary of statements made by several of the event companies. Explicit statements about the reasons for unification were found in about one-fifth of the event companies. The most common reasons mentioned by company representatives are classified into eight groups. Four of the reasons – increase liquidity, increase share value, pay for acquisitions using stock, and support growth – have already been discussed, and were strongly supported by formal tests in the previous two sections. For two of the reasons – financial flexibility and take-over defense – there is not much to comment. The statement about augmenting financial flexibility seems too general. The unification as a defense for take-over was mentioned only in the case of Nokia, and is not a very standard one since in most of the companies the share structure does not become dispersed after the unification (see Table 9). Here I would like to focus on the investor recognition argument.

The arguments for increasing investor recognition can be (subjectively) divided into "rational" and "behavioral" ones. The rational arguments, for example, (16) and (17), state that the dual-class shares are not available to certain investor groups (in particular, investment funds) due to legal restrictions. In the U.S. and other countries, certain investment funds are not allowed to invest in dual-class shares. This is clearly a rational argument for why the investor base is lower in the dual-class firms. The arguments summarized under the "behavioral" ones, (18) to (21), suggest that the company believes that the investor base is lower because the dual-class firms are not familiar to certain investor groups (mostly, foreign investors), which "do not understand this division of

shares". Statement (21) is very close to the idea that investors tend to invest in certain categories of shares (Barberis and Shleifer, 2003). In this case, the company believes that there is a disadvantage of being in the "Not Luxus category with two share classes". Statements (18) and (20) show that there are cases when the majority owner keeps effective control after the unification. In these cases, it is hard to argue that the level of private benefit extraction would change, and that investors would immediately assign a higher valuation on the share. Again it may suggest that the company thinks that it may benefit from simply moving out of the dual-class firm category.

Statement (21) points towards the *competition for capital* story. When there are more single-class shares around, a dual-class firm can find it more difficult to attract investors. This argument is also supported by the fact that we observe much less unifications in Sweden where there are still many dual-class firms and many dual-class IPOs (see Table 2). Swedish investors do not have choice between so many single-class firms; moreover, they are more familiar with such capital structures, hence invest in dual-class firms. As a result, Swedish dual-class firms may find it easier to raise capital without unification as they have less competition from the single-class issuers.

There are other arguments why we observe significantly less unifications and higher incidence of dual-class firm takeovers in Sweden. In particular, Holmen and Högfeldt (2003) argue that in Sweden strong founding family control may be pivotal for the firm as it brings entrepreneurial knowledge, social network, and the urge to keep prestige and social recognition for being a good "father/mother of the firm". Still this explanation is conditional on the fact that firm's market valuation is shaped by domestic

investors. For a foreign investor, it is presumably harder to distinguish which family cares about prestige and which cares about monetary benefits from diverting profit.

7. Conclusions

This paper argues that the unification of dual-class shares is carried out with an aim to increase the firm's share value. The data show that firms that unify their dual-class shares are more active in issuing new equity, make more acquisitions, and have higher industry growth opportunities – the firm characteristics that are associated with substantial gains from higher share value. The results hold after including various controls and they are robust to different methodologies. Further, the ex post analysis of the unification show that the firms reach their goal. The average market-to-book ratios that are constantly lower in dual-class firms jump to the average level of single-class firms in the same industry right after the unification.

An important precondition for the unification to happen is approval by the controlling shareholders. I find that higher value of control rights significantly reduces the probability of unification. In particular, the event firms have weaker separation between voting rights and cash flow rights, lower voting premium on high voting shares, stronger presence of a large financial investor, higher frequency of preferential dividends on low voting shares, and higher frequency of cross-listing in the U.S.

A survey of press releases and newspaper articles shows that many firms find it important to appeal to certain investor groups (particularly, foreign investors and investment funds), and perceive the unification as a tool to boost investor recognition. By timing the unification with a seasoned offering, the firms also seem to exploit the

marketing benefits of greater media attention. The positive publicity related to the switch to one share - one vote arguably is a good advertisement that raises investor recognition.

Consistent with Amoako-Adu and Smith (2001), I argue that the dual-class shares are temporary structures until the point when the firm needs new equity capital for further expansion and growth. For some firms it may take few years, for others it may never happen. By comparing dual-class firms with ex ante similar growth opportunities, the results show that there is no difference in ex post sales growth and capital expenditure between the firms that unified shares and those that stayed dual-class. There is a difference in how the two groups finance growth. The ones that unify are more equity capital dependent, and find it optimal to boost the stock price. The ones that stay dual-class finance growth with retained earnings or debt, and do not worry that the share price is lower than that of single-class firms in the industry. In sum, the paper suggests that all dual-class firms should *not* be forced by law to switch to one share - one vote. The firms that need to approach equity markets for capital will sooner or later be forced by the market to unify their shares.

Appendix A.

Voting arrangements

Country	Most common voting arrangement	Most characteristic switch	Regulatory and other issues related to dual-class shares
Denmark	High voting shares have 10 times the voting rights of low voting shares.	Abandoning multiple voting right shares.	One of the recommendations by the Nørby Committee's (which was set up in March 2001) report on Corporate Governance in Denmark is: "It is recommended that there is proportionality between capital investments and voting rights and that the board refrains from countering takeover bids on its own". The Copenhagen Stock Exchange has recommended the listed companies to relate to the Nørby Committee's recommendations for good corporate governance in their annual reports and accounts.
Finland	High voting shares have 10-20 times the voting rights of low voting shares.	Abandoning multiple voting right shares.	The change in the Companies Act (in effect from 1 September 1997) stipulates that a 2/3 majority is required in every share class for certain important corporate decisions to be made. This change effectively increased the capital needed to secure control.
Germany	Ordinary shares have one vote. Preference shares are nonvoting. Maximum allowable non-voting preference share capital is one half. Law prescribes a priority dividend for preference shares.	Changing preference shares into ordinary shares.	Stock market index compilers have been urging companies to standardize shares through abolishing preference shares in order to make indices more transparent and accurate. Following the re-evaluation of the Dax and M-Dax indices on June, 2002, only one type of share is permitted for inclusion in the index (i.e., either ordinary or preference share of the company). Preference shares are not allowed to be listed on Neuer Markt (established in 1997).
Italy	Ordinary shares have one vote. Savings shares are nonvoting. Non voting (and limited voting) capital may not exceed 50% of stock capital. Nonvoting shares (savings shares) are entitled to a minimum dividend equal to 5% of the par value.	Abandoning (non-voting right) savings shares and limited voting right shares.	In 1998, legal protection for investors was improved with the so called Draghi's law. If evaluated in terms of the index of shareholder protection developed by La Porta et al. (1998), the impact of this law was an improvement in shareholder protection from 1 to 5. The threshold to call a shareholder meeting was reduced to 10 %. The loopholes in the takeover law were corrected. Minority shareholders were given more rights to voice their opinions. See Aganin & Volpin (2003). Only ordinary shares are allowed to be listed on Nuovo Mercato (established in 1999).
Norway	A shares have one vote. B shares are nonvoting. Special government permission required for issuing dual-class shares.	Abandoning multiple voting right shares.	Eierforum is an informal group that represents the largest institutional investors in Norway. The group has produced guidelines for good shareholder accountability, which suggest that "The board should positively encourage all activities which strengthen liquidity in the company's shares, and should ensure that such activities are based on the principle of one share - one vote."
Sweden	High voting shares have 10 times the voting rights of low voting shares.	Abandoning multiple voting right shares.	There have been proposals since long to change the law that allows the differentiation between voting power of A and B shares. Since 1997, shares can be issued only at a maximum ratio of 1:10 votes (previously, up to 1:1000 was allowed).
Switzerland	Each share has one vote, but different classes are allowed to have different nominal value, i.e., in principle, different voting power.	Changing bearer shares (inhaber) into registered (namen), single nominal value shares.	The current trend toward converting bearer shares into registered shares has mainly two sources: an increasing awareness of the importance of investor relations and technological developments enabling companies to handle extensive shareholder registers in electronic form.

Appendix B.

Variable definitions

Variable	Description
Main sample:	Firms that a) are included in *Moody's/ Mergent International Companies* Manuals 1996-2002, b) are not commercial banks or credit institutions (two-digit SIC code 60 and 61), c) had a dual-class share structure at the end of 1995, d) at least one share class was listed at the end of 1995, e) are still listed on the stock exchange at the end of 2002, and…
Event group	… f) have only one share class at the end of 2002 (i.e., that unified share classes in the period 1996-2002).
Control group	… f) still have dual-class share structure at the end of 2002.
Unification year	The year when firm's shareholders approved the switch from dual-class to single-class shares.
Annual data:	Annual data for 1994-2002 is collected. All variables (unless specified otherwise) are Winsorized at the 1st and 99th percentile. *Source: Worldscope* (unless specified otherwise).
Industry MTB	Average market-to-book ratio of single-class firms in the respective industry. Industry is classified by the SIC two-digit code. All market-to-book ratios are Winsorized at the 1st and 99th percentile prior to taking industry averages. The pool of all single share class firms in the sample countries is taken from *Worldscope* August-2003 disk.
MTB	Firm's market value of equity over book value of equity.
Industry adjusted MTB	MTB minus Industry MTB.
Size	Natural logarithm of firm's sales.
ROA	Earnings before interest, taxes and depreciation (EBITDA) over total assets.
ROE	Net income over book value of shareholder's equity.
Leverage	Total debt over total capital (debt plus shareholder's equity).
CAPEX	Capital expenditures over one-year lagged net property, plant and equipment.
Cash flow/ Assets	Operating cash flow over one-year lagged total assets.
Cash balance/ Assets	Cash and cash equivalents (in the balance sheet) over total assets.
Cash dividends/ Assets	Total cash dividends distributed to shareholders over one-year lagged total assets.
Sales growth	The annual rate of growth of sales.
Voting premium	Price of high voting share minus Price of low voting share divided by Price of low voting share. The annual voting premium is obtained by averaging monthly voting premiums. *Source: Datastream.*
Relative turnover	The ratio of the turnover of low voting share to the turnover of high voting share. The annual relative turnover is obtained by averaging monthly relative turnover figures. *Source: Datastream.*
Relative trading days	The ratio of the number of days low voting class traded per year to the number of days high voting class traded per year. *Source: Datastream.*
Equity issue dummy	Equals one if the company issued new equity in that year; and zero if net equity issue proceeds are zero. (When net equity issue proceeds are not reported in the cash flow statement, the dummy variable is coded as *missing*.)
Equity issue (adjusted) dummy	Equals one if the company issued new equity in that year; and zero otherwise. (When net equity issue proceeds are not reported in the cash flow statement, the dummy variable is coded as *zero*.)
Equity issue proceeds/ Equity	Net equity issue proceeds (from the cash flow statement) over shareholder's equity at the end of previous year.
Acquisitions/ Size	Number of new firms acquired in a given year over firm size (log of sales). Repeated purchases, i.e., increasing existing ownership stake are not counted. *Source*: *SDC Platinum*.

Appendix B (Continued)

Fixed data:	
US cross-listing dummy	Equals one if company's shares (at least one class) is cross-listed in the US at the end of 1995 through an ADR (American Depository Receipt) program (not differentiating between various types of listing). *Sources: Datastream, Moody's/ Mergent Manuals.*
Both shares listed dummy	Equals one if all shares with different voting rights are listed on the stock exchange; and zero otherwise. *Sources: Datastream, Moody's/ Mergent Manuals.*
Dividend dummy	Equals one if low voting shares received higher dividend than high voting shares in at least one year during 1990 and 2001. Equals one half if low voting shares have a minimum dividend requirement set in the bylaws, but in practice both shares have received the same dividend since 1990 (e.g., because the dividend was above the minimum required). Equals zero if both shares have equal dividend rights. *Sources: Moody's/ Mergent Manuals, Datastream, annual reports, Lexis-Nexis*.
Ownership data:	For control group, the ownership data come from Faccio and Lang (2002), from the annual reports and *Worldscope* (for Denmark, which is not covered in Faccio and Lang). Faccio and Lang data is from 1996 for Germany, Italy, and Switzerland; from 1998 - for Sweden and Norway; and from 1999 - for Finland. For event group, the ownership data come from the annual reports one year prior to the unification, *Worldscope*, or *Lexis-Nexis*. The ownership data after the unification for event firms come from the annual reports and *Lexis-Nexis*.
Control	Fraction of the firm's voting rights owned by the largest shareholder (ranked by votes).
Ownership	Fraction of the firm's capital (cash flow) rights owned by the largest shareholder (ranked by votes).
Control minus Ownership	The difference between control rights and cash flow rights.
Control exceeds Ownership, high	Equals one if control rights (Control) are higher than cash flow rights (Ownership), and if this separation is higher than the median separation in corporations where control and ownership differ, and zero otherwise.
Family owner dummy	Equals one if the largest shareholder (ranked by votes) is a family (a private person or individuals with the same surname or a family trust); and zero otherwise.
Financial investor dummy	Equals one if the largest shareholder (ranked by votes) is a financial institution; and zero otherwise.
Multiple blockholder dummy	Equals one if the fraction of votes controlled by the second largest shareholder (ranked by votes) is more than ten percent; and zero otherwise.

References

Aganin, A., Volpin, P., 2003. History of corporate ownership in Italy. ECGI Working paper 17/2003.

Amoako-Adu, B., Smith, B.F., 2001. Dual class firms: capitalization, ownership structure and recapitalization back into single class. Journal of Banking and Finance 25, 1083-111.

Barber, B.M., Lyon, J.D., 1997. Firm size, book-to-market ratio, and security returns: a holdout sample of financial firms. Journal of Finance 52, 875-883.

Barberis, N., Shleifer, A., 2003. Style investing. Journal of Financial Economics 68, 161-199.

Bebchuk, L., Kraakman, R., Triantis, G., 2000. Stock pyramids, cross-ownership, dual class equity: the creation of agency costs of separating control from cash flow rights. In: Morck, R.K. (Ed.), Concentrated corporate ownership. University of Chicago Press, Chicago.

Bennedsen, M., Nielsen, K., 2002. The impact of a break-through rule on European firms. Unpublished working paper. Copenhagen Business School.

Berglöf, E., Burkart, M., 2003. European takeover regulation. Economic Policy 18 (Issue 36), 171-213.

Bergström, C., Rydqvist, K., 1990. Ownership of equity in dual-class firms. Journal of Banking and Finance 14, 255-69.

Burkart, M., Gromb, D., Panunzi, F., 1998. Why higher takeover premia protect minority shareholders. The Journal of Political Economy 106, 172-204.

Campbell, J.Y., 1996. Understanding risk and return. Journal of Political Economy 104, 298-345.

Claessens, S., Djankov, S., Fan, J., Lang, L, 2002. Disentangling the incentive and entrenchment effects of large shareholdings. Journal of Finance 57 (Issue 6), 2741-2771.

Cronqvist, H., Nilsson, M., 2003. Agency costs of controlling minority shareholders. Journal of Financial and Quantitative Analysis 38, 695-719.

DeAngelo, H., De Angelo, L., 1985. Managerial ownership of voting rights. Journal of Financial Economics 14, 33-69.

Dehejia, R.H., Wahba, S., 2002. Propensity score matching methods for non-experimental causal studies. Review of Economics and Statistics 84, 151-161.

Demers, E., Lewellen, K., 2003. The marketing role of IPOs: evidence from internet stocks. Journal of Financial Economics 68, 413-437.

Dimitrov, V., C. Jain, P.C., 2003. The effect of dual class recapitalization on long-run stock returns. Unpublished working paper. Available on SSRN.

Dittmann, I., Ulbricht, N., 2003. When do firms abolish dual-class stocks. Unpublished working paper. Available on SSRN.

Doidge, C., 2003. U.S. cross-listings and the private benefits of control: evidence from dual class firms. Journal of Financial Economics (forthcoming).

Ehrhardt, O., Nowak, E., 2002. Private benefits and minority shareholder expropriation – empirical evidence form IPOs of German family-owned firms. CFS Working Paper No. 2001/10.

Faccio, M., Lang, L.H.P., 2002. The ultimate ownership of western European corporations. Journal of Financial Economics 65 (Issue 3), 365-395.

Fischel, D.R., 1987. Organized exchanges and the regulation of dual class common stock. Chicago Law Review 54, 119-152.

Giannetti, M., Simonov, A., 2002. Which investors fear expropriation? Evidence from investors' stock picking. Unpublished working paper. Stockholm School of Economics.

Grossman, S., Hart, O., 1988. One share - one vote and the market for corporate control. Journal of Financial Economics 20, 175-202.

Harris, M., Raviv, A., 1988. Corporate control contests and capital structure. Journal of Financial Economics 20, 55-86.

Hauser, S., Lauterbach, B., 2003. The value of voting rights to majority shareholders: evidence from dual class stock unifications. Review of Financial Studies (forthcoming).

Hillion, P., Vermaelen, T., 2003. Death Spiral Convertibles. Journal of Financial Economics (forthcoming).

Hoffmann-Burchardi, U., 1999. Corporate governance rules and the value of control – a study of German dual-class shares. LSE Financial Markets Group Discussion Paper, No.315.

Holmen, M., Högfeldt, P., 2003. A law and finance analysis of initial public offerings. Journal of Financial Intermediation (forthcoming).

Jarell, G., Poulsen, A., 1988. Dual-class recapitalizations as anti-takeover mechanisms: the recent evidence. Journal of Financial Economics 20, 129-152.

Kaplan, S.N., Zingales, L., 1997. Do investment cash flow sensitivities provide useful measures of financing constraints. The Quarterly Journal of Economics 112, 169-215.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., Vishny, R.W., 1997. Legal determinants of external finance. Journal of Finance 52, 1131-1150.

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., 2002. Investor protection and corporate valuation. Journal of Finance 57, 1147-1170.

Lease, R., McConnell, J., Mikkelson, W., 1983. The market value of control on publicly traded corporations. Journal of Financial Economics 11, 439-71.

Levis, M., 1995. Seasoned equity offerings and the short and long-term performance of initial public offerings in the U.K.. European Financial Management 1, 125-146.

Levy, H. 1983. Economic evaluation of voting power of common stock. Journal of Finance 38, 79-93.

Loughran, T., Ritter, J.R., 1995. The new issues puzzle. Journal of Finance 50, 23-51.

Loughran, T., Ritter, J.R., 1997. The operating performance of firms conducting seasoned equity offerings. Journal of Finance 52, 1823-1850.

McConnell, J., Servaes, H., 1990. Additional evidence on equity ownership and corporate value. Journal of Financial Economics 27, 595-612.

Merton, R.C., 1987. A simple model of capital market equilibrium with incomplete information. Journal of Finance 42, 483-510.

Millon-Cornett, M., Vetsuypens, M., 1989. Voting rights and shareholder wealth: the issuance of limited voting common stock. Managerial and Decision Economics 10 (3), 175-88.

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

Pagano, M., Panetta, F., Zingales, L., 1998. Why do companies go public? An empirical analysis. Journal of Finance 53, 27-63.

Partch, M., 1987. The creation of a class of limited voting common stock and shareholder wealth. Journal of Financial Economics 18, 313-39.

Reese, W.A., Jr., Weisbach, M.S., 2002. Protection of minority shareholder interests, cross-listings in the United States, and subsequent equity offerings. Journal of Financial Economics 66, 65-104.

Robinson, C., Rumsey, J., White, A., 1996. Market efficiency in the valuation of corporate control: evidence from dual class equity. Canadian Journal of Administrative Sciences 13, 251-63.

Siegel, J., 2003. Can foreign firms bond themselves effectively by renting U.S. securities laws? Journal of Financial Economics (forthcoming).

Shleifer, A., Wolfenzon, D., 2002. Investor protection and equity markets. Journal of Financial Economics 66, 3-27.

Smart, S.B., Zutter, C.J., 2003. Control as a motivation for underpricing: a comparison of dual- and single-class IPOs. Journal of Financial Economics 69, 85-110.

Smith, B., Amoako-Adu, B., 1995. Relative prices of dual class shares. Journal of Financial and Quantitative Analysis 30 (2), 223-39.

Stulz, R., 1988. Managerial control of voting rights: financing policies and the market for corporate control. Journal of Financial Economics 20, 25-54.

Villalonga, B., 2002. Does diversification cause the “diversification discount”? Unpublished working paper. Harvard Business School.

Wooldridge, J.M., 2002. Econometric Analysis of Cross Section and Panel Data. The MIT Press.

Wurgler, J., 2000. Financial markets and the allocation of capital. Journal of Financial Economics 58, 187-214.

Zingales, L., 1994. The value of the voting right: a study of the Milan stock exchange experience. The Review of Financial Studies 7, 125-48.

Zingales, L., 1995. What determines the value of corporate control. Quarterly Journal of Economics 110, 1047-1073.

Table 1.

Sample characteristics

Panel A describes the procedure of constructing the main sample of 493 companies used in this paper. In Panel B, sample construction is subdivided by country. Panel C shows the distribution of number of companies that switched from dual-class to single-class shares in the period from 1996 to 2002, by years and countries.

Panel A: Sample construction

601	100%	Dual class firms (excluding banks and credit institutions, SIC2 60 and 61) available in Moody's/ Mergent manuals (1996-2002) which were listed on the stock exchange at the end of 1995.
- 63	10%	Merged or taken over during 1996-2002.
- 22	4%	Delisted by stock exchange order or voluntarily (because of too little free float) during 1996-2002.
- 7	1%	Delisted, not clear why.
- 8	1%	Not traceable.
- 8	1%	Data not available in *Worldscope*.
493	82%	Main sample. The firms that were still listed on the stock exchange at the end of 2002.
out of which:		
108	18%	Firms that unified their shares in 1996-2002 (event group).
385	64%	Firms that stayed dual-class throughout 1996-2002 (control group).

Panel B: Sample construction by country

	Event	Control	Merged or T/O	Delisted	Other	Total
Denmark	10	55	14	6	3	88
Finland	6	30	4	1	1	42
Germany	41	88	9	2	1	141
Italy	12	45	3	8	1	69
Norway	6	9	2	3	-	20
Sweden	7	99	25	3	2	136
Switzerland	26	59	6	6	8	105
Total	108	385	63	29	16	601

Panel C: Unifications by country and year

	1996	1997	1998	1999	2000	2001	2002	Total
Denmark	-	1	1	1	1	2	4	10
Finland	-	1	1	3	-	1	-	6
Germany	6	1	7	7	9	8	3	41
Italy	-	1	1	2	3	2	3	12
Norway	-	-	-	1	1	4	-	6
Sweden	-	-	1	-	3	2	1	7
Switzerland	2	3	6	3	6	4	2	26
Total	8	7	17	17	23	23	13	108

Table 2.

Dual-class firms in percent of total listed firms and domestic newly listed companies

Panel A shows the number of total firms (excluding banks and credit institutions, SIC2 60 and 61) and firms with dual-class shares available in *Moody's/ Mergent International Companies* 1996 (for end of 1995 data) and 2002 (for end of 2001 data) Manuals. Panel B shows the fraction of dual-class firms as percent of all domestic newly listed companies in each year from 1996 to 2002. The number of new dual-class listings is given in parentheses. The data for all countries but Germany come from the stock exchange web-sites and *Datastream*. The data for Germany was kindly provided by Olaf Ehrhardt.

Panel A: Fraction of dual-class firms in total listed firms, 1995 vs. 2001

	Total firms, end 1995	Dual firms, end 1995	Fraction of dual firms, end 1995	Total firms, end 2001	Dual firms, end 2001	Fraction of dual firms, end 2001	Percentage change in fraction (2001 vs. 1995)
Denmark	124	74	*59.7%*	123	45	*36.6%*	-39%
Finland	66	30	*45.5%*	92	22	*23.9%*	-47%
Germany	345	84	*24.3%*	740	85	*11.5%*	-53%
Italy	156	64	*41.0%*	81	28	*34.6%*	-16%
Norway	71	17	*23.9%*	121	9	*7.4%*	-69%
Sweden	142	87	*61.3%*	203	94	*46.3%*	-24%
Switzerland	197	92	*46.7%*	235	62	*26.4%*	-44%
Total	1101	452	*41.1%*	1595	345	*21.6%*	-47%

Panel B: Fraction (number) of dual-class firms in domestic newly listed companies, 1996-2002

	1996	1997	1998	1999	2000	2001	2002
Denmark	33% (2)	20% (1)	23% (3)	17% (1)	14% (1)	0% (0)	0% (0)
Finland	0% (0)	33% (4)	25% (3)	11% (3)	0% (0)	11% (1)	0% (0)
Germany	5% (1)	6% (2)	0% (0)	1% (1)	0% (0)	0% (0)	0% (0)
Italy	0% (0)	15% (2)	5% (1)	6% (2)	0% (0)	0% (0)	0% (0)
Norway	10% (2)	4% (2)	4% (1)	0% (0)	0% (0)	8% (1)	0% (0)
Sweden	59% (10)	42% (21)	50% (16)	45% (21)	28% (16)	32% (6)	29% (2)
Switzerland	50% (3)	8% (1)	0% (0)	0% (0)	0% (0)	0% (0)	0% (0)
Average	22% (18)	18% (33)	15% (24)	11% (28)	6% (17)	7% (8)	4% (2)

Table 3.

Summary statistics

In Panel A, the summary statistics refer to the firm-years of the whole sample of 493 companies, in Panel B – to the firm-years of companies that unified their shares in 1996-2002, and in Panel C – to the firm-years of companies that stayed dual-class throughout 1996-2002. *T*-Statistics and (two-sided) significance levels of testing the equality of means between the event group and the control group are presented. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels. Appendix B provides definitions for the variables.

Variable	Mean	Median	Std. Dev.	Min	Max	Obs.	*t*-statistic	Sig.
Panel A: The Whole Sample								
Industry MTB	2.93	2.80	1.33	0.74	13.86	3438		
MTB	2.43	1.53	2.91	0.27	28.26	3020		
Industry adjusted MTB	-0.57	-0.98	2.76	-12.49	25.10	3007		
Size	5.50	5.54	0.95	0.48	7.96	3145		
ROA	0.05	0.05	0.10	-0.61	0.50	3070		
ROE	0.09	0.10	0.28	-1.93	1.87	3039		
Leverage	0.25	0.24	0.18	0.00	0.82	3146		
CAPEX	0.33	0.19	0.54	0.00	4.39	2964		
Cash flow/ Assets	0.07	0.07	0.09	-0.59	0.39	2686		
Cash balance/ Assets	0.12	0.08	0.13	0.00	0.84	3149		
Cash dividends/ Assets	0.02	0.01	0.02	0.00	0.20	3078		
Sales growth	0.10	0.06	0.28	-0.50	1.32	3065		
Voting premium	0.16	0.05	0.33	-0.88	1.60	1186		
Relative turnover	6.41	2.28	13.53	0.03	130.45	1012		
Relative trading days	2.43	1.00	6.16	0.05	72.00	1027		
Equity issue dummy	0.23	0.00	0.42	0.00	1.00	2554		
Equity issue (adjusted) dummy	0.17	0.00	0.37	0.00	1.00	3451		
Equity issue proceeds/ Equity	0.06	0.00	0.25	0.00	1.84	2535		
Acquisitions/ Size	0.11	0.00	0.21	0.00	1.10	3145		
US cross-listing dummy	0.11	0.00	0.31	0.00	1.00	493		
Both shares listed dummy	0.60	1.00	0.49	0.00	1.00	467		
Dividend dummy	0.42	0.00	0.48	0.00	1.00	354		
Control	0.42	0.40	0.24	0.00	1.00	378		
Ownership	0.28	0.24	0.22	0.00	1.00	364		
Control minus Ownership	0.13	0.09	0.14	-0.40	0.67	363		
Control exceeds Ownership, high	0.39	0.00	0.49	0.00	1.00	363		
Family owner dummy	0.41	0.00	0.49	0.00	1.00	379		
Financial investor dummy	0.11	0.00	0.31	0.00	1.00	379		
Multiple blockholder dummy	0.42	0.00	0.49	0.00	1.00	363		
Panel B: Event group								
Industry MTB	3.03	2.83	1.35	0.74	9.76	744	2.400	**
MTB	2.97	1.87	3.43	0.33	28.26	680	5.524	***
Industry adjusted MTB	-0.25	-0.82	2.99	-8.31	23.82	668	3.408	***
Size	5.63	5.70	0.92	2.29	7.50	700	3.899	***
ROA	0.05	0.05	0.10	-0.61	0.50	688	1.159	
ROE	0.09	0.12	0.33	-1.93	1.87	680	0.403	
Leverage	0.25	0.24	0.18	0.00	0.82	701	0.107	
CAPEX	0.34	0.20	0.54	0.00	4.39	668	0.567	
Cash flow/ Assets	0.07	0.07	0.09	-0.38	0.39	615	1.669	*
Cash balance/ Assets	0.13	0.08	0.13	0.00	0.84	701	0.208	
Cash dividends/ Assets	0.02	0.01	0.02	0.00	0.17	685	0.402	
Sales growth	0.12	0.07	0.30	-0.50	1.32	687	1.321	

Table 3 (Continued)

Variable	Mean	Median	Std. Dev.	Min	Max	Obs.	*t*-statistic	Sig.
Panel B: Event group								
Voting premium	0.14	0.07	0.29	-0.63	1.49	207	-0.821	
Relative turnover	8.06	1.72	20.34	0.03	130.45	156	1.664	*
Relative trading days	1.29	1.00	1.07	0.06	7.65	156	-2.511	**
Equity issue dummy	0.29	0.00	0.45	0.00	1.00	593	4.447	***
Equity issue (adjusted) dummy	0.23	0.00	0.42	0.00	1.00	756	5.214	***
Equity issue proceeds/ Equity	0.10	0.00	0.33	0.00	1.84	588	3.986	***
Acquisitions/ Size	0.14	0.00	0.24	0.00	1.10	700	4.181	***
US cross-listing dummy	0.18	0.00	0.38	0.00	1.00	108	2.712	***
Both shares listed dummy	0.65	1.00	0.48	0.00	1.00	106	1.227	
Dividend dummy	0.52	0.50	0.47	0.00	1.00	94	2.334	**
Control	0.40	0.36	0.23	0.06	0.99	97	-0.860	
Ownership	0.26	0.22	0.19	0.00	0.93	83	-1.066	
Control minus Ownership	0.12	0.09	0.12	0.00	0.48	82	-0.917	
Control exceeds Ownership, high	0.29	0.00	0.46	0.00	1.00	82	-1.971	**
Family owner dummy	0.39	0.00	0.49	0.00	1.00	98	-0.617	
Financial investor dummy	0.19	0.00	0.40	0.00	1.00	98	3.207	***
Multiple blockholder dummy	0.39	0.00	0.49	0.00	1.00	83	-0.639	
Panel C: Control group								
Industry MTB	2.90	2.79	1.33	0.75	13.86	2694		
MTB	2.27	1.44	2.73	0.27	28.26	2340		
Industry adjusted MTB	-0.67	-1.04	2.69	-12.49	25.10	2339		
Size	5.47	5.49	0.96	0.48	7.96	2445		
ROA	0.05	0.05	0.10	-0.61	0.50	2382		
ROE	0.09	0.10	0.27	-1.93	1.87	2359		
Leverage	0.25	0.24	0.18	0.00	0.82	2445		
CAPEX	0.33	0.19	0.54	0.00	4.39	2296		
Cash flow/ Assets	0.06	0.07	0.09	-0.59	0.39	2071		
Cash balance/ Assets	0.12	0.08	0.13	0.00	0.84	2448		
Cash dividends/ Assets	0.02	0.01	0.02	0.00	0.20	2393		
Sales growth	0.10	0.06	0.27	-0.50	1.32	2378		
Voting premium	0.16	0.04	0.34	-0.88	1.60	979		
Relative turnover	6.10	2.33	11.87	0.03	130.45	856		
Relative trading days	2.63	1.01	6.65	0.05	72.00	871		
Equity issue dummy	0.20	0.00	0.40	0.00	1.00	1961		
Equity issue (adjusted) dummy	0.15	0.00	0.36	0.00	1.00	2695		
Equity issue proceeds/ Equity	0.05	0.00	0.22	0.00	1.84	1947		
Acquisitions/ Size	0.10	0.00	0.20	0.00	1.10	2445		
US cross-listing dummy	0.09	0.00	0.28	0.00	1.00	385		
Both shares listed dummy	0.58	1.00	0.49	0.00	1.00	361		
Dividend dummy	0.38	0.00	0.48	0.00	1.00	260		
Control	0.43	0.41	0.24	0.00	1.00	281		
Ownership	0.29	0.25	0.23	0.00	1.00	281		
Control minus Ownership	0.14	0.10	0.15	-0.40	0.67	281		
Control exceeds Ownership, high	0.41	0.00	0.49	0.00	1.00	281		
Family owner dummy	0.42	0.00	0.49	0.00	1.00	281		
Financial investor dummy	0.08	0.00	0.27	0.00	1.00	281		
Multiple blockholder dummy	0.43	0.00	0.50	0.00	1.00	280		

Table 4.

Ex-ante determinants of the unification (pooled probit)

The effect of the variables listed on the probability to unify dual-class shares is estimated by a pooled probit model:

$$Prob(\text{Unify}_{it}=1) = F(X_{it}\alpha),$$

where Unify_{it} is a variable that equals 1 if company *i* switched to a single-class share system in year *t* and 0 if it remained dual-class in this year (a firm is dropped from the sample after it unifies the shares), *F(.)* is the cumulative distribution function of a standard normal variable, α is a vector of coefficients, and X_{it} is a vector of explanatory variables (listed in the first column) observed for firm *i* in year *t*. The estimation method is maximum likelihood. EQUITY ISSUE DUMMY, EQUITY ISSUE PROCEEDS/ EQUITY, and ACQUISITIONS/ SIZE are contemporaneous. SIZE, and INDUSTRY MTB are lagged one year. Ownership and share characteristic variables – CONTROL EXCEEDS OWNERSHIP, HIGH, FINANCIAL INVESTOR DUMMY, and US CROSS-LISTING DUMMY – are fixed over years (ownership data for control firms is from 1996-1999, and for event firms – one or few years before unification). Detailed definitions for the variables are provided in Appendix B. The regressions also include a constant term, year dummies, and country dummies (not reported). Robust standard errors are in parentheses. The errors are corrected for clustering at the firm level: independence of errors between clusters (firms) is assumed, but the independence assumption is relaxed for within-cluster (firm) errors. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels.

Variable	(1)	(2)	(3)	(4)	(5)
Equity issue dummy	0.411***			0.404***	0.613**
	(0.135)			(0.135)	(0.324)
Equity issue proceeds/ Equity		0.545***			
		(0.188)			
Acquisitions/ Size			0.543**	0.495**	
			(0.233)	(0.252)	
Equity issue dummy * Industry MTB					-0.061
					(0.087)
Size	-0.098	-0.066	-0.063	-0.140*	-0.099
	(0.077)	(0.075)	(0.064)	(0.077)	(0.077)
Industry MTB	0.079*	0.073	0.051	0.066	0.105*
	(0.046)	(0.046)	(0.039)	(0.046)	(0.058)
Control exceeds Ownership, high	-0.292**	-0.284**	-0.292**	-0.308**	-0.288**
	(0.133)	(0.132)	(0.125)	(0.135)	(0.133)
Financial investor dummy	0.324*	0.370**	0.340**	0.321*	0.328**
	(0.171)	(0.172)	(0.163)	(0.173)	(0.171)
US cross-listing dummy	0.365**	0.421**	0.355**	0.328*	0.373**
	(0.174)	(0.169)	(0.170)	(0.179)	(0.173)
No. of observations	1805	1805	2123	1803	1805
Pseudo-R^2	0.117	0.113	0.097	0.124	0.118

Table 5.

Ex-ante determinants of the unification (averages)

The effect of the variables listed on the probability to unify dual-class shares is estimated by a probit model:

$$Prob(\text{Unify}_i=1) = F(X_i\alpha)$$

where Unify_i is a variable that equals 1 if company *i* switched to a single-class share system in period 1996-2002 and 0 if it remained dual-class in this period, *F(.)* is the cumulative distribution function of a standard normal variable, α is a vector of coefficients, and X_i is a vector of explanatory variables (listed in the first column) observed for firm *i*. The estimation method is maximum likelihood. In this specification, the focus is on cross-sectional variation between the main sample of firms. AT LEAST ONE EQUITY ISSUE, DUMMY is a dummy variable that takes a value of 1 if the firm has had at least one new equity issue in period 1996-2002. EQUITY ISSUE (ADJUSTED) DUMMY, EQUITY ISSUE PROCEEDS/ EQUITY, and ACQUISITIONS/ SIZE are averaged over 1996-2002. SIZE and INDUSTRY MTB are averaged over 1994 to 2001 for control group, and over two years prior to the unification for the event group. Detailed definitions for the variables are provided in Appendix B. The regressions also include a constant term, and country dummies (not reported). Robust standard errors are in parentheses *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels.

Variable	(1)	(2)	(3)	(4)	(5)
At least one equity issue, dummy	0.679***				
	(0.175)				
Equity issue (adjusted) dummy (average)		0.950***			0.913***
		(0.322)			(0.322)
Equity issue proceeds/ Equity (average)			0.527*		
			(0.297)		
Acquisitions/ Size (average)				0.849*	0.660
				(0.562)	(0.570)
Size (average)	-0.026	-0.001	0.035	0.006	-0.037
	(0.096)	(0.098)	(0.106)	(0.103)	(0.104)
Industry MTB (average)	0.293***	0.269***	0.271***	0.262***	0.261***
	(0.082)	(0.080)	(0.084)	(0.080)	(0.070)
Control exceeds Ownership, high	-0.527***	-0.525***	-0.527***	-0.517***	-0.529***
	(0.185)	(0.181)	(0.186)	(0.181)	(0.182)
Financial investor dummy	0.391	0.455*	0.556**	0.492**	0.466*
	(0.244)	(0.249)	(0.258)	(0.247)	(0.247)
US cross-listing dummy	0.346	0.292	0.452*	0.365	0.241
	(0.247)	(0.256)	(0.249)	(0.251)	(0.258)
No. of observations	357	357	337	357	357
Pseudo-R^2	0.172	0.154	0.151	0.138	0.157

Table 6.

Comparison of variables: event firms vs. matching control firms

The table reports mean ratios for 101 event firms which unified their shares in 1996-2002. Matching control firms are chosen by matching each event firm with a dual-class firm using the following algorithm. All 493 event and control firms are divided into 108 groups:12 industry groups (as defined by Campbell, 1996) times 3 size categories times 3 market-to-book (MTB) categories. Size and MTB categories are *High* (75^{th} percentile and upward), *Medium* (25^{th} to 75^{th} percentile), and *Low* (25^{th} percentile and downward). If there are more than one dual-class firm in the same group, the firm with the closest MTB is chosen. If there is no matching firms in the same group (there are 3 such cases), the firm from the same industry with the closest MTB ratio from the next closest size category is taken. *T*-Statistics and (two-sided) significance levels of testing the equality of means between the event group and the matched control group are presented. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels. Appendix B provides definitions for the variables.

Panel A: Ex-ante effects

	Event group means			Control group means			*T*-Statistic		
Year relative to unification	-3	-2	-1	-3	-2	-1	-3	-2	-1
Industry MTB	3.17	3.43	3.34	3.19	3.28	3.21	-0.11	0.76	0.63
MTB	2.80	3.11	3.03	2.45	2.54	2.41	0.97	1.39	1.41
Industry adjusted MTB	-0.49	-0.43	-0.56	-0.77	-0.76	-0.80	0.80	0.89	0.63
Size	5.58	5.58	5.62	5.56	5.48	5.47	0.13	0.78	1.17
ROA	0.05	0.06	0.07	0.06	0.07	0.06	-1.30	-0.82	0.62
ROE	0.10	0.09	0.13	0.13	0.14	0.14	-0.79	-1.13	-0.21
Leverage	0.27	0.26	0.25	0.27	0.25	0.24	0.22	0.50	0.52
CAPEX	0.32	0.35	0.31	0.34	0.34	0.30	-0.17	0.13	0.05
Cash flow/ Assets	0.07	0.07	0.07	0.07	0.08	0.07	-0.56	-0.99	-0.26
Cash balance/ Assets	0.11	0.12	0.13	0.11	0.12	0.11	0.08	-0.29	1.34
Cash dividends/ Assets	0.01	0.01	0.02	0.02	0.02	0.02	-2.35**	-1.53	-1.93*
Sales growth	0.10	0.10	0.11	0.14	0.12	0.11	-0.88	-0.50	-0.09
Voting premium	0.06	0.06	0.04	0.17	0.16	0.19	-1.86*	-1.75*	-2.68***
Relative turnover	7.34	9.99	8.16	5.31	3.99	4.91	0.55	1.28	0.93
Relative trading days	1.22	1.23	1.27	2.19	1.79	1.50	-1.88*	-1.84*	-0.91
Equity issue dummy	0.30	0.28	0.30	0.25	0.27	0.21	0.60	0.15	1.40
Equity issue (adjusted) dummy	0.21	0.22	0.26	0.17	0.22	0.18	0.72	0.00	1.36
Equity issue proceeds/ Equity	0.09	0.09	0.16	0.05	0.04	0.06	0.77	1.34	1.72*
Acquisitions/ Size	0.14	0.11	0.13	0.07	0.09	0.11	1.82*	0.50	0.64
		Mean	Obs.		Mean	Obs.		*T*-Statistic	
US cross-listing dummy		0.18	*101*		0.12	*101*		1.19	
Both shares listed dummy		0.63	*100*		0.65	*99*		-0.24	
Dividend dummy		0.53	*88*		0.31	*78*		3.02***	
Control		0.40	*91*		0.36	*79*		1.08	
Ownership		0.26	*78*		0.22	*79*		1.31	
Control minus Ownership		0.12	*77*		0.14	*79*		-1.18	
Control exceeds Ownership, high		0.29	*77*		0.52	*79*		-3.04***	
Family owner dummy		0.39	*92*		0.41	*79*		-0.18	
Financial investor dummy		0.17	*92*		0.18	*79*		-0.06	
Multiple blockholder dummy		0.38	*78*		0.51	*79*		-1.54	

Panel B: Ex-post effects

	Event group means				Control group means				*T*-Statistic			
Year relative to unification	0	+1	+2	+3	0	+1	+2	+3	0	+1	+2	+3
Industry MTB	3.00	2.76	2.69	2.83	3.00	2.95	2.76	2.67	0.01	-0.80	-0.36	0.53
MTB	3.08	3.40	2.86	2.77	2.58	2.40	2.29	1.88	0.89	1.67*	1.21	2.06**
Industry adjusted MTB	-0.04	0.42	0.05	-0.07	-0.45	-0.64	-0.61	-0.79	0.79	2.01**	1.35	1.48
Size	5.64	5.62	5.62	5.64	5.50	5.43	5.49	5.60	1.09	1.34	0.83	0.23
ROA	0.06	0.04	0.05	0.05	0.06	0.05	0.06	0.06	-0.41	-0.34	-0.42	-0.29
ROE	0.09	0.06	0.09	0.11	0.11	0.09	0.10	0.11	-0.52	-0.54	-0.22	-0.07
Leverage	0.26	0.24	0.24	0.23	0.25	0.29	0.29	0.28	0.17	-1.78*	-1.73*	-1.11
CAPEX	0.32	0.30	0.36	0.24	0.29	0.24	0.33	0.27	0.47	0.97	0.25	-0.37
Cash flow/ Assets	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.08	-0.09	0.36	0.68	-0.70
Cash balance/ Assets	0.13	0.14	0.14	0.13	0.11	0.12	0.11	0.10	1.55	0.77	1.35	1.05
Cash dividends/ Assets	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-1.38	-0.65	0.57	0.55
Sales growth	0.09	0.11	0.14	0.11	0.08	0.09	0.15	0.18	0.37	0.51	-0.15	-1.00
Equity issue dummy	0.36	0.24	0.23	0.26	0.19	0.13	0.18	0.24	2.66***	1.74*	0.62	0.20
Equity issue (adjusted) dummy	0.32	0.19	0.18	0.22	0.16	0.11	0.15	0.20	2.68***	1.46	0.46	0.26
Equity issue proceeds/ Equity	0.15	0.05	0.13	0.01	0.06	0.06	0.08	0.01	2.04**	-0.14	0.70	-0.69
Acquisitions/ Size	0.23	0.25	0.17	0.15	0.11	0.12	0.14	0.14	1.53	1.21	0.57	0.13

Table 7.

Equity issuance and acquisitions: event firms vs. matching control firms (matched on propensity score)

The table reports mean and median ratios for 76 event firms that unified their shares in 1996-2002. Matching control firms are chosen by matching each event firm with a dual-class firm using the propensity score algorithm. 1) Estimate the propensity to unify P_i, using the probit function $P_i = PROB(D_i=1| X_i)$, for $i=1,..N$. X_i is a vector of characteristic observed for firm *i*. The characteristics are average *Size*, average *Industry MTB*, average *Leverage*, *Control exceeds Ownership, high*, *Financial investor dummy*, *US cross-listing dummy,* and *Country dummy*. Averages are taken over years 1994-2001 for dual-class firms that did not unify, and over two years prior to unification for firms that unified. 2) Match each event firm to the dual-class firm with the closest propensity score to form a sample of nearest-match control firms. Column 3 presents *t*-statistics and (two-sided) significance levels of testing the equality of means between the event group and the matched control group. The last column presents *z*-statistics testing the equality of distributions between the event firms and the "nearest-match" control firms using the Wilcoxon matched-pairs signed-rank test. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels. Appendix B provides definitions for the variables.

	Event mean	"Nearest-match" control mean	*t*-statistic	Event median	"Nearest-match" control median	*z*-statistic
Acquisitions/ Size (average)	0.177	0.081	2.193**	0.098	0.072	2.307**
Equity issue proceeds/ Equity (average)	0.130	0.056	2.376**	0.012	0.000	2.882***
Equity issue (adjusted) dummy (average)	0.263	0.197	1.469	0.286	0.000	1.961*

Table 8.

Ex-post effects of unification

For each of the variables listed the following specification is estimated:

$$y_{it}=\alpha+UNI_t+UNI_{t-1}+UNI_{t-2}+UNI_{t-3}+u_i+d_t+\varepsilon_{it},$$

where u_i and d_t are respectively a firm-specific and calendar year-specific effect, UNI_{t-j} are dummy variables equal to one if year $t-j$ was the year of the unification. By using a fixed effect model each company before the unification is used as a control for itself after the unification. The table only reports the coefficients on the unification and post-unification dummy variables. Standard errors are reported in the parentheses. The second to last column reports the *p*-value of the hypothesis that the sum of the coefficients of Year-1 and Year-2 dummies are equal to zero. The last column reports the *p*-value of the hypothesis that the sum of the coefficients of all the three post-unification dummies is equal to zero. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels. Appendix B provides definitions for the variables.

	Year 0	Year -1	Year -2	Year -3	F-test (2 years)	F-test (3 years)
MTB	0.252	0.034	-0.146	-0.420	0.807	0.776
	(0.335)	(0.359)	(0.399)	(0.423)		
Industry adjusted MTB	0.632**	0.843**	0.473	-0.328	0.031	0.258
	(0.318)	(0.340)	(0.379)	(0.402)		
Size	0.015	0.028	-0.016	0.031	0.977	0.909
	(0.026)	(0.028)	(0.032)	(0.033)		
ROA	0.010	-0.006	0.005	-0.010	0.901	0.669
	(0.014)	(0.015)	(0.017)	(0.018)		
ROE	-0.010	-0.049	-0.024	-0.008	0.295	0.513
	(0.038)	(0.039)	(0.044)	(0.046)		
Leverage	0.000	-0.031**	-0.034**	0.011	0.009	0.033
	(0.013)	(0.014)	(0.015)	(0.016)		
CAPEX	0.053	0.019	0.115	0.000	0.265	0.438
	(0.062)	(0.067)	(0.074)	(0.079)		
Cash flow/ Assets	0.001	0.008	0.006	0.002	0.472	0.566
	(0.011)	(0.011)	(0.013)	(0.013)		
Cash balance/ Assets	0.009	0.011	0.003	-0.005	0.485	0.742
	(0.010)	(0.011)	(0.012)	(0.013)		
Cash dividends/ Assets	-0.004	0.003	0.006*	0.001	0.108	0.182
	(0.003)	(0.003)	(0.003)	(0.003)		
Sales growth	0.046	0.082*	0.079	0.085*	0.040	0.027
	(0.041)	(0.044)	(0.050)	(0.052)		
Equity issue proceeds/ Equity	0.017	-0.067	0.035	-0.095	0.619	0.211
	(0.039)	(0.042)	(0.046)	(0.048)		
Acquisitions/ Size	0.069**	0.043	0.026	-0.003	0.212	0.399
	(0.029)	(0.031)	(0.035)	(0.036)		

Table 9.

Ownership changes after the unification

The table shows the ownership dynamics for 71 firm that unified the dual-class shares in 1996-2002. Panel A presents a summary of the changes in the largest shareholder's voting power after the unification. The largest shareholder is defined as the shareholder with the highest number of votes before the unification. Panel B shows the average (and median) change in the largest shareholder's voting power after the unification.

Panel A		
Largest shareholder's (by votes, before unification) action:	Number of firms	Percent of firms
Keep or acquire majority control (more than 50% of votes)	13	18.3%
Lose majority control, but keep a block (more than 10% of votes)	4	5.6%
Lose majority control completely (less than 10% of votes)	6	8.5%
Keep control in 10%-50% range (before and after)	30	42.3%
Lose a block from 10%-50% range to less than 10% of votes	14	19.7%
Dispersed, less than 10% of votes (before and after)	4	5.6%
	71	100.0%

Panel B		
	Mean	Median
Largest shareholder's fraction of votes *before* unification, %	38.7	34.1
Largest shareholder's fraction of equity *before* unification, %	25.0	19.1
Largest shareholder's fraction of votes and equity *after* unification, %	22.8	21.3
Largest shareholder's change in votes (after minus before), %	-15.9	-12.8
Largest shareholder's change in votes, relative to votes held before	-41%	-38%

Table 10.

WHY UNIFY?	**#**	**Statements by companies and analysts (about the unification)**
Increase LIQUIDITY	(1)	- … enhance the liquidity of shares (ABB).
	(2)	- … resolve the problem concerning the liquidity of the shares (Amer Group).
	(3)	- … the amalgamation of shares has increased the level of trading in the company's shares (Rieber & Son).
	(4)	- … improve demand in international capital markets. … we expect increased share liquidity (Sudzucker).
	(5)	- … will further increase the liquidity of Company's shares (MLP).
	(6)	- … improve liquidity (HERLITZ).
	(7)	- … improved stock liquidity (Recordati).
Increase SHARE VALUE	(8)	- … positive impact on shareholder value… the share value is expected to increase (HERLITZ).
	(9)	- … the company will raise its capital over the next three years. "… we would prefer our share price to look better" [this was said 3 month before the unification] (Fag Kugelfischer Georg Schafer).
	(10)	- … improved market capitalization (Recordati).
	(11)	- … placement of Company's shares [right after the unification] was considered to be a success given the recent weakness of international markets and considering that during May some 70 initial public offerings were cancelled (Finmeccanica).
INVESTOR RECOGNITION (*"rational"*)	(12)	- …make it easier for outside investors to invest in the company. …a strong European investor would strengthen the company's position (DSV).
	(13)	- …attract a wider spread of domestic and foreign shareholders (PUMA).
	(14)	- … will satisfy Italian and foreign institutional investors (COFIDE).
	(15)	- … increase interest in Company's shares in the US (Amer Group).
	(16)	- … making shares more attractive particularly to institutional investors (MLP).
	(17)	- … the group will boost the interest of foreign investors in Company's shares to internationalize the shareholder structure. … also enables investment funds to then invest in Company's shares (Gerry Weber).
INVESTOR RECOGNITION (*"behavioral"*)	(18)	- …making the stock more attractive to international investors. Yet, while SAP's three founders, including the co- chief executive and supervisory board chairman, dilute their voting rights, effective control stays in their hands. (SAP).
	(19)	- In international capital markets one-share-one-vote system dominates. The non-voting preference shares are widely unknown abroad, and are loosing importance also in Germany (Sudzucker).
	(20)	- Founder families hold 63 per cent of the votes. After the transaction, they will hold 47 per cent of the votes (MLP).
	(21)	- The stock market – particularly, the foreign investors – do not understand this division of shares, and better buy clear and simple value. It is "downright grotesque" that Herlitz remains in this "Not Luxus" category with two share classes, while renowned companies (Fielmann, Metro, and Lufthansa) are abandoning preference shares. When one reads the stock quotes in the newspaper, Herlitz is soon to be the only company with two share classes. (HERLITZ).
Pay for ACQUISITIONS using stock	(22)	- It is very difficult to pay for a US acquisition with shares if your management owns a majority of the voting rights. (Merrill Lynch analyst)
	(23)	- …could increase its leeway to pay for acquisitions with shares (SAP).
	(24)	- … this will allow to handle acquisitions and strategic alliances by using shares in addition to debt financing (ABB).
	(25)	- German capital market law restricts preference shares that can be issued in proportion to ordinary shares, making it difficult for a company to increase its capital for an acquisition.
Support GROWTH	(26)	- …establishing basis for new, profitable growth (KVAERNER).
	(27)	- … will have increased freedom in procuring additional capital. Company is currently in a dynamic emergence phase (ASCOM).
	(28)	- … CEO expects the dynamic growth of the Company (Disetronic Holding).
	(29)	- … create good basis for the future international growth of the Company (MLP).
	(30)	- … to support future growth (Recordati).
FINANCIAL FLEXIBILITY	(31)	- … enhance financial flexibility (ABB).
	(32)	- … to be able to act flexibly (ASCOM).
	(33)	- … augment considerably Company's financial flexibility (Olivetti).
DEFEND TAKE-OVER	(34)	- … the move has been seen as a tactical maneuver meant to defend the Company against foreign attempts to take over. With the power shares gone, a 10 per cent vote in Nokia would now cost SEK 73bn (NOKIA).

Sources: Lexis-Nexis, company home-pages.