

**Expropriation through unification? Wealth effects of dual class share  
unifications in Italy**

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### **Abstract**

An increasing number of firms with dual class shares are deciding to unify their shares around the world. Though the return to one share-one vote system is usually considered good news for voting shareholders, the unification can give rise to a wealth transfer between the two classes of shares, especially in the presence of high voting premia and no form of compensation to voting shareholders. These conditions characterize most of Italian dual class unification (DCUs) made in the 1982-2005 period. Different from any other country, in Italian DCUs, voting shares earn significantly negative returns. Changes in firm's value are positively correlated with larger ownership of the largest and second largest shareholders, and negatively correlated with high voting premia and large fractions of non-voting equity, indicating greater potential for wealth transfer between controlling and non-controlling shareholders. We also provide more detailed, and more direct, evidence on five cases where the majority shareholder buys relevant blocks of non-voting shares, sells voting shares or approves stock option plans on non-voting shares a few months before the unification announcement.

**JEL Classification:** G32, G34

**Keywords:** Dual class shares; Unification; Expropriation; Insider trading; Equity structure

## 1. Introduction

In recent years, a growing body of literature has examined how controlling shareholders in companies with concentrated ownership expropriate wealth from minority shareholders. Johnson, La Porta, Lopez-de-Silanes, and Shleifer (2000), for example, discuss how controlling shareholders can tunnel resources away from minority shareholders by selling assets, goods, or services to the company through self-dealing transactions, by obtaining loans on preferential terms, or by transferring assets from the listed company to other companies under their control. Investigating how expropriation happens is important because as Stulz (2005) argues, the agency problems created when corporate insiders and rulers of sovereign states pursue their own interests ultimately may limit the economic growth and financial development of the country.

However, despite considerable anecdotal evidence, little direct systematic evidence is available on the specific transactions through which expropriation occurs. Most of the literature on expropriation has measured the expropriation of minority shareholders indirectly,<sup>1</sup> though a number of recent studies have examined connected transactions between listed companies and their controlling shareholders to directly measure the extent of expropriation of minority shareholders.<sup>2</sup> In this paper, we document a new method through which controlling shareholders can expropriate wealth from minority shareholders, one that has not previously been investigated. More specifically, we examine the wealth effects of a unique sample of 46 dual-class share unifications (DCUs) in Italy.

Dual class share structures allow controlling shareholders to separate their cash flow and ownership rights in a firm and maintain control even though their cash flow rights are relatively weak. Consequently, a reversion from a dual to a single class of shares, a share

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<sup>1</sup> Studies measuring the expropriation of minority shareholders indirectly use different proxies for the degree of expropriation, such as the legal system (La Porta, Lopez-de-Silanes, Shleifer, and Vishny, 1998; Johnson, La Porta, Lopez-de-Silanes, and Shleifer, 2000), the divergence between cash flow and control rights (Bertrand, Mehta, and Mullainathan, 2002), dividend payouts (Faccio, Lang and Young, 2001), and the premium paid by large private shareholders in order to acquire controlling stakes in state-owned enterprises privatized through mass voucher schemes (Atanasov, 2004).

<sup>2</sup> For example, La Porta, Lopez-de-Silanes, and Zamarripa (2003) examine lending by Mexican banks to firms controlled by the bank's owners and show that related loans carry lower interest rates compared to arm's length loans. Cheung, Rau, and Stouraitis (2004) examine connected transactions between Hong Kong listed companies and their controlling shareholders and find that, on average, firms earn significant negative excess returns both at the initial announcement and during the 12-month period following the announcement of connected transactions that are *a priori* likely to result in expropriation of minority shareholders.

unification, eliminates the wedge between voting and cash flow rights and thus may be beneficial to non-controlling voting shareholders. By design, stock unifications involving shares of differential voting rights will result in a dilution of the voting rights of superior voting shareholders and a corresponding strengthening of the voting rights of inferior or non-voting shareholders. Typically the empirical research has found that, to compensate the voting shareholders, voting shareholders are paid extraordinary dividends or new voting shares. Hauser and Lauterbach (2004), for example, document that in Israel, in 52% of share unifications, voting shareholders are assigned new voting shares to compensate for the dilution in their voting power. In the U.K., Ang and Megginson (1989) report that, in 45 of the 49 stock unifications in their sample, voting shareholders received an extraordinary dividend equal, on average, to 12% of the voting share's stock price. Overall, the extant research has also shown that on average, share unifications create value for voting shareholders. Voting shares in firms that announce share unifications earn positive excess returns on the announcement.

The Italian evidence we present differs sharply from prior results. Unlike in other countries, in Italy, voting shareholders are as a rule not compensated in stock unifications. Moreover, we document that voting shares in firms announcing DCUs earn significant negative excess returns in the announcement period, in contrast to the evidence from other countries. We submit that DCUs in Italy are used as devices to transfer wealth from non-controlling to controlling shareholders. We are able to provide circumstantial evidence for our larger sample to support this claim, and more direct evidence for a sub-sample of case studies to show how this wealth transfer takes place.

While the Italian experience may be unique in sheer scale - both the voting premium and the wealth effects for controlling shares are large compared to those documented in other countries - we argue that DCUs in any setting are subject to similar abuses. Part of the reason why the effects we document have not been previously reported is because the limited extant literature on DCUs has focused chiefly why companies choose to unify their share classes and the announcement price effects. The literature has not examined wealth transfers between non-controlling and controlling shareholders of the same class of shares (voting shares).

In this paper, we first present a simple model that describes the overall wealth effects of DCUs in a general setting. Within this framework, we show that a dual class unification can be a

form of expropriation of minority voting shareholders, particularly in the presence of a high voting premium and lax securities regulations and enforcement.

Our model is descriptive; we make no attempt to model equilibrium behavior of voting and non-voting shareholders. The main ingredients of our model are a set of controls to isolate the predicted price effect on voting and non-voting shares upon unification. When coupled with the ability of controlling shareholders to make the unification decision, and advance trading to capture advantageous post-unification positions by controlling shareholders, our model highlights the potential private gains available to controlling shareholders in our sample of DCUs. The model provides a predictive score of expected wealth transfer surrounding DCUs based on voting premium, relative number of non-voting shares, conversion ratios, conversion premium or refund, and forced vs. voluntary conversions. Our main finding is that after controlling for these factors, the predicted return from our model remains highly significant in explaining actual holding period returns surrounding the announcement of DCUs, supporting our assertion that DCUs can be engineered to transfer wealth from non-controlling to controlling shareholders. As described below, detailed data from five cases studies shed further light on the mechanism of wealth transfer around these events.

The Italian firms in our sample that announce DCUs are not different from their industry peers. They are characterized by the presence of a majority shareholder who owns more than 50% of votes and is typically a family. In at least 21 unifications (almost half of the whole population), the majority shareholder also owns a large block of non-voting shares before the unification decision, allowing him attenuate the dilution of his voting block.

We find that while non-voting shares earn significantly positive returns of 11.7% in the three day period surrounding the announcement date, voting shares earn significantly negative returns of -1.6% over the same period, and the overall firm value does not change significantly. The price reactions for the two classes of shares are consistent with the wealth-transfer framework developed in the paper. Non-controlling shareholders with voting shares are net losers in this model; controlling shareholders, and non-voting shareholders (collateral beneficiaries) benefit from the unification.

Interestingly, the change in the market value of the firm is negatively correlated with the pre-DCU voting premium (an indication of the prior extent of governance problems) and with the fraction of non-voting equity in the firm. These results indicate that the market reaction to DCUs

incorporates the potential for wealth transfer surrounding unifications. We also find significant abnormal trading volumes for non-voting shares over the three days preceding the announcement of the unification, consistent with the presence of insider trading activity before the event.

Finally, we also provide case studies for five DCUs where we have more detailed data. In these cases, a few months before the unification announcement, the majority shareholder typically buys large blocks of non-voting shares, approves stock option plans for non-voting shares and sells voting shares. Both the behavior of the controlling shareholders and the sharp drop of the voting share price at the announcement (ranging between -5% to -10%) are consistent with the hypothesis that dual class unifications can be a form of expropriation of wealth from minority shareholders. This new form of “tunneling” adds to the list of such activities described in Johnson, La Porta, Lopez-de-Silanes, and Shleifer (2000) and appears to be dealt quite leniently by the Italian regulators.

The rest of the paper is structured as follows. Section 2 discusses related literature on share class recapitalizations and unifications. Section 3 describes the institutional background, the main reasons for Italian stock unifications, and the types of stock unifications. We present a simple model of the wealth transfer effect in section 4. Section 5 reports results for empirical tests for our sample of 35 DCUs while Section 6 analyzes five case studies in detail. Section 7 concludes.

## **2. Related literature**

From the theoretical point of view, there is a large literature that analyzes the circumstances under which it is optimal to have only one class of share. Grossman and Hart (1988) and Harris and Raviv (1988) for example, show that the one share-one vote rule is an optimal corporate governance scheme in that better management teams are always elected in takeover bidding contests. In contrast, Burkart, Gromb, and Panunzi. (1998) show that issuing non-voting shares may be optimal because it leads to higher takeover probabilities or increases security benefits in competitive takeovers.

Faccio and Lang (2002) document that non-voting or limited voting shares are rarely used in Belgium, Portugal and Spain, while they are common in Italy, Germany, Switzerland and countries in northern Europe. The empirical evidence on the valuation effects of the creation of a

second class of shares with differential voting rights is mixed. Partch (1987) finds no evidence that current shareholders are harmed by the creation of limited voting common shares for firms in the U.S. Cornett and Vetsuypens (1989) examine the wealth effects of the announcement of an issue of stock with differential voting rights. They document that their sample of 70 U.S. firms earned positive abnormal returns when they announced a dual class recapitalization. Ang and Megginson (1989) Liljeblom and Rydqvist (1991) and Zingales (1991) find similar results in the U.K., Sweden, and Italy respectively. In contrast, Jarrell and Poulsen (1988) find significant negative excess returns for U.S. firms announcing dual-class recapitalizations. Jog and Riding (1986) find similar results in Canada.

While the creation of a second class of shares has been widely studied, there is a limited amount of research on stock unifications. Some of these papers document a recent trend towards share class unification in several countries, such as Canada (Amaoko-Adu and Smith, 2001) and across Europe (Pajuste, 2005), emphasizing the necessity for studying these unifications. As mentioned in the introduction however, most of this research examines why firms choose to unify their share classes.

Amoako-Adu and Smith (2001) conduct a longitudinal study of Canadian dual class firms over the fifteen year period following their IPOs. They find 56 cases of stock unifications in the 1979-1998 period. They report three main reasons why firms choose to re-capitalize into a single class of shares: they put into place a debt restructuring plan that requires elimination of dual class shares; they need to facilitate the sale of a control block and avoidance of coattail provisions<sup>3</sup>; or they need to increase liquidity and institutional investor appeal, especially before a seasoned equity offering.

Using a logistic analysis, Dittmann and Ulbricht (2004) examine a sample of 29 stock unifications in Germany and find that the probability of abolishing a dual class structure is higher for (i) firms that issue new equity in the same calendar year; (ii) larger firms; (iii) firms with a high proportion of voting shares; and (iv) firms where the largest block of voting shares is small. They interpret the strong correlation between a stock unification and subsequent equity offering as indicative of the presence of growth opportunities. In 29 of the 37 stock unifications from their 1990-2001 sample, Dittmann and Ulbricht (2004) find an average abnormal return in the

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<sup>3</sup> Coattail provisions are meant to provide equal treatment to all classes of shareholders upon a takeover involving an acquisition of at least 50% of the superior voting shares of a dual class company. Since August 1987, a coattail provision has been a listing requirement on the Toronto Stock Exchange under TSX Policy 624(l).

five days around the announcement (day -4 to day +1) of 9.9% for non-voting shares, 3.9% for voting shares, and 5.4% for the firm as a whole.

Pajuste (2005) estimates a logistic regression on the determinants of 108 coercive stock unifications from seven European countries (Denmark, Finland, Germany, Italy, Norway, Sweden and Switzerland) in the 1996-2002 period. She finds that the probability of a coercive stock unification is positively related to the issue of new equity, the number of acquisitions, and the presence of growth opportunities, and negatively related to the presence of a high voting premium.<sup>4</sup>

Ang and Megginson (1989) report that 49 of 152 U.K. listed firms with restricted voting shares in the 1955-1982 period decided to extend full voting rights to restricted voting shareholders. In 45 of these 49 operations, voting shareholders received an extraordinary dividend equal, on average, to 12.3% of the voting share stock price as a form of compensation for their surrender of special voting privileges.

Hauser and Lauterbach (2004) analyze 84 stock unifications in a sample of Israeli firms between 1990 and 2000, after a new regulation banned new issues of inferior voting shares at the Tel Aviv Stock Exchange. The typical Israel dual class shares structure involves a superior voting class (one share to one vote) and an inferior voting class (five shares to one vote). All stock unifications transformed inferior voting shares into superior voting ones. In 55% of their sample (46 out of 84 cases) voting shareholders were compensated for the loss in voting power through a new issue of superior voting shares distributed to superior vote shareholders free of charge. The authors use this compensation to infer the value of a voting right and find that the price of votes in unifications (as compensation for the vote dilution) is similar to the market price of votes. They find that family-controlled firms sell votes at higher prices and both stock classes respond positively to the unification announcement in a subsample of 44 observations.

Ehrhardt, Kuklinski and Nowak (2004) analyze 43 German unifications in the 1987-2003 period. They report a dilution of the controlling block of votes due to the unification (on average, from 56% to 45%), a significantly positive market reaction at the announcement for both the voting and non-voting shares (of about 4% each) and an increase in the stock's liquidity after the unification.

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<sup>4</sup> Pajuste (2005) examines twelve Italian share unifications in her sample. In contrast, our sample contains 26 stock unifications announced over the same period, 13 of which were coercive and 13 non-coercive.

The wealth effects of unifications are limited to announcement date price effects, and the focus in extant research has been on why companies choose to return to a one share-one vote equity structure. This paper in contrast, focuses on the potential for wealth transfers surrounding stock unifications. Italian unifications, characterized by high voting premia and no form of compensation for voting shareholders, provide a powerful setting to examine the wealth effects of unifications on different classes of shareholders. Our simple framework presented in section 4, the empirical evidence documented in section 5, and case studies presented in section 6 are consistent with the hypothesis that Italian stock unifications adversely affect the welfare of non-controlling shareholders. Ironically, such unifications have been warmly endorsed by the financial press.<sup>5</sup>

### 3. Italian non-voting shares

#### 3.1 Regulations governing Italian non-voting shares

Italian listed companies can issue non-voting shares for up to 50 percent of their equity capital. While these non-voting shares do not have any voting rights, the law which allowed their introduction (L. 216/1974) set some minimum privileges (which could be increased by amending the corporate charter). They include:

- a minimum dividend equal to five percent of par value;
- if a dividend is paid to voting shares, the dividend to non-voting shares has to be greater by an amount equal to two percent of the par value or more;
- in case dividends are not paid because of accounting losses, when dividends are paid again, non-voting shares have the right to receive up to two past unpaid minimum dividends in addition to the dividend of the current year;
- when accounting losses cancel out the company's equity, only voting shareholders must put new equity in the company;
- in case of bankruptcy, non-voting shares have a prior claim on the company's

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<sup>5</sup> For example, *Il Sole 24 Ore*, a prominent financial newspaper, described the CIR unification announcement as a "market friendly" operation. At the announcement of the unification, voting shares dropped in price by about 9% around the announcement date. Moreover, the CIR board approved three different stock options plans involving non voting shares some months before the announcement and the controlling majority shareholder had sold voting shares and bought non-voting shares few months before the announcement. (See *Il Sole 24 Ore*, September 14<sup>th</sup>, *Finanza e Mercati*, page 1).

assets.

In 1998, a new Italian financial code (D. lgs 58/1998) improved minority shareholder rights. As measured by La Porta et al. (1998), the protection index in Italy improved from below to above the continental European average. The new financial code also modified the legal framework governing non-voting shares. Among the major changes are the following:

- Corporate charters are free to define the rights of non-voting shares and no minimum rights are imposed by law. Notwithstanding this provision, all listed non-voting shares enjoy at least the minimum rights set by the earlier institutional code.
- When voting shareholders vote on proposals deemed harmful to non-voting shareholders, the decision must be approved by a special meeting of non-voting shareholders (as per rule 216) and at least 20% of the non-voting shares must approve the decision.

Notwithstanding the higher dividends they receive, non-voting shares usually trade at deep discounts from the price for the voting shares. This is largely due to the high value of the voting right. In Italy, Nenova (2003) computes this value at 29.4% of firm value based on the price difference between voting and non-voting shares in 1997. Similarly, Dyck and Zingales (2004) compute the value of the voting right at 36.9% of the firm's total market capitalization, computed from the higher price paid for controlling blocks of shares in Italy in the 1990-2000 period.

### *3.2 Why do Italian firms choose to unify their share classes?*

In this section, we discuss some of the reasons underlying why Italian firms choose to unify their share classes. The first set of two factors are common to share unifications in other countries while the second set is unique to Italy.

#### **3.2.1 Factors common to other countries**

Over the last decade, as in other countries, Italian firms have experienced increasing internationalization of their investor bases. This internationalization, together with institutional investors' preferences for a one share-one vote equity structure, may have caused some Italian firms to choose to unify their share classes. Amaoko-Adu and Smith (1995) argue that direct institutional pressure towards a more desirable one share-one vote structure is one of the main

reasons underlying Canadian unifications. Hauser and Lauterbach (2004) report that the trend towards unification in Israel was triggered by the Stock Exchange's decision to ban any new issue of limited voting stock in 1990. In Italy, in August 1998, Parmalat had to cancel a \$500 million non-voting share issue targeting US investors due to an adverse market reaction<sup>6</sup>. This attempt to create new non-voting shares was the last made by an Italian blue chip. The new awareness that stock market would reject the creation of new non-voting shares may have favored the conversion of the existing ones (as in Israel).

In addition, in order to be included in domestic or international stock indices, the two most common criteria are usually the firm's market capitalization and share turnover. Since a dual class unification increases both parameters, companies might find it easier to be listed on these indices following a share unification. As Dhillon and Johnson (1991) and Beneish and Whaley (1996) note, an inclusion in a major index, such as the S&P 500, increases the investor base, stock liquidity, and firm value. Equity indexes in Italy typically use only voting shares to compute turnover, and therefore we expect an increase in the DCU firm's weight in the index.

### **3.2.2 Factors unique to Italy**

First, in the aftermath of the European Monetary Union in 1999, Italian interest rates plunged to rates more in line with the average in the EMU countries. Unlike previous drops in interest rates, this sharp decrease (of more than 5% in 1998-1999) was structural, and affected the relative costs of debt and equity capital. Since non-voting shares involve a minimum dividend payment based on their par value, this decrease of interest rates resulted in dividend yields that often exceeded the company cost of debt, especially in the wake of market-wide depressed stock prices (as in 2001 and 2002) and large discounts on non-voting shares relative to voting shares. The higher dividend yield on non-voting shares may have favored some unification decisions. For example, Cofide decided to convert non-voting shares into voting shares in December 2001 when non-voting shares were trading below par and forcing the company to pay a minimum legal dividend yield equal to 5.7% on these shares.

Second, Italian firms, similar to most continental European firms, use the rights offering method in equity offerings, involving a longer execution period and an issue price below market

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<sup>6</sup> The Financial Times described the failed offering in an article beginning "Tired of milking cows? Try the shareholders". (See "Parmalat - Lex", *Financial Times*, 14 August 1998, page 16).

price<sup>7</sup>. The issue of new non-voting shares at prices below depressed market quotes could bind the company to paying an high minimum yield. This might provide an incentive for unification *prior* to the rights offering. This is probably the reason underlying at least one recent Italian stock unification (IFIL in 2003). This incentive is also consistent with the significant correlation between unifications and equity offerings found by Dittmann and Ulbricht (2004) for share unifications in Germany.

Third, when a non-voting share is trading at a high discount relative to voting shares, a dual class unification can be structured such that non-voting shareholders pay a cash premium to participate in a 1:1 conversion. When the majority shareholder does not own non-voting shares, such an operation is equivalent to raising new equity capital, with no financial involvement by the majority shareholder but a dilution of his control. For example, the Italian mobile phone company TIM proposed a unification where non-voting shares (quoted at €5.96 at the time of the announcement) could be converted into voting shares (quoted at €11.45) by paying a €3.70 cash premium. TIM was able to raise €5 billion as part of this unification.<sup>8</sup> After the unification, TIM's controlling block was diluted to 56%, down from 60% prior to the unification.<sup>9</sup>

Fourth, Italian takeover regulations, introduced in 1998, have reduced the threshold necessary to exercise control in two ways. When a bidder buys more than 30% of votes, he must launch a tender offer on *all* voting shares (coattail provision). In addition, the quorum to control extraordinary shareholders' meetings is now 66.67% of voting shares (from 50%). This means that a 34% voting block can stop any extraordinary meeting decision and thwart a hostile takeover. Thus, the twin effects of increasing minority shareholder protection as well as control value of blocks works in tandem to make unifications more palatable. Because of this new regulation, unifications which would previously have significantly diluted the controlling voting block, could now take place without threatening the controlling shareholder. For example, the Cofide unification diluted the majority shareholder block (Carlo De Benedetti & Figli S.a.p.a.) to

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<sup>7</sup> On average, new shares were pre-emptively offered at 42.1% of market price in the 1980-1994 period (Bigelli, 1998).

<sup>8</sup> To put this amount into perspective, it was sufficient to finance the entire investment in third generation mobile technology for TIM.

<sup>9</sup> In 2005, TIM's controlling shareholder (Telecom Italia) launched a tender offer for both TIM voting and non-voting minorities' shares before merging with TIM. The offered price (€5.6) was the same for both classes of shares and both were trading at almost the same values. Non-voting shareholders who converted their shares and kept them in their portfolio, probably regret having paid €3.70 for a worthless voting right.

34.7%, down from 43.2%.

Fifth, some of the unifications in Italy could have been driven by the privatization of state firms. The 1992 CIPE directives on future Italian privatization stated that future privatized dual class companies “*will favor solutions which allow conversion of non-voting shares into voting*”. Five of the 46 Italian unifications made in the 1982-2003 period were announced by privatized companies (Credit, Comit, Alitalia, Bnl, Finmeccanica), which followed the above guidelines.

Finally, for controlling shareholders, buying non-voting shares at a discount prior to the unification announcement provides a means of tunneling wealth from non-voting shareholders to themselves, at the very minimum affording them an opportunity to hedge against the negative wealth effect of unification on voting shares. In at least five of the 46 Italian unifications in our sample (Finpart, Cir, Alleanza, Ras, Banca Finnat), the majority shareholder had bought a block of non-voting shares a few months before the announcement of the unification. In section 5, we provide details on these five unifications, highlighting the expropriation of minority voting shareholders. The existing literature on dual class unifications has not examined the potential for such wealth expropriation.

#### **4. The total wealth effects of a stock unification**

To understand the mechanics of wealth effects in a dual class unification, it is easiest to examine a simple 1:1 conversion. When voting shares trade at a premium relative to non-voting shares, a unification announcement ought to bring about a convergence in the relative prices of the voting and non-voting shares as well. The magnitude of the price change for the voting and non-voting shares in this convergence should depend upon the relative amounts of voting and non-voting shares outstanding prior to the unification and on the fraction of non-voting shares that are offered for conversion. Additional adjustments are required when the unification is non-coercive, when cash payments are required from non-voting shareholders to convert to voting shares, and when the conversion ratio is not unity.

The simple framework developed below (based on Manne, 1964) accounts for these adjustments in calculating the wealth impact of unifications on different classes of shares. We only consider two classes of shares, although the framework can easily be expanded to

incorporate a third equity class. Time subscripts 0 and 1 denote the pre and post unification regimes.

We define the value of a non-voting share as the present value of its expected future dividends. We call this the *Cash Flow* right ( $CF_{nv,0}$ ) of the non-voting share. The value of a voting share is the sum of its cash flow right ( $CF_{v,0}$ ) and its *Voting Right* ( $VR_0$ ). In general, a voting share's cash flow right is lower than a non-voting share's cash flow right since non-voting shares are entitled to higher dividends as per the company charter.

A voting share's cash flow right can be expressed as:

$$CF_{v,0} = CF_{nv,0} - \Delta CF$$

where  $\Delta CF$  is the difference in the cash flow rights for a non-voting share and a voting share.

Assuming a risk-free discount rate for simplicity,  $\Delta CF$  can be estimated as the present value of a perpetuity whose cash flow is the statutory extra dividend payable to non-voting shares.

$$\Delta CF = \frac{M\% \times Par}{r_f}$$

where  $M\%$  = extra dividend payable to a non-voting share as a percentage of its par value;

$Par$  = par value;

$r_f$  = long-term risk-free rate.

The voting right of the voting shares can now be determined as the difference between the price of a voting share and its cash flow right:

$$VR_0 = P_{v,0} - CF_{v,0}$$

It is now possible to split the company's total market capitalization into two parts representing the total value of the cash flow rights and the value of the voting right:

$$TCF_0 = CF_{nv,0} \times N_{nv,0} + CF_{v,0} \times N_{v,0}$$

$$TVR_0 = VR_0 \times N_{v,0}$$

Where:

$TCF_0$  = Total cash flow rights to all shares before the unification announcement

$TVR_0$  = Value of voting rights before the unification announcement

$N_{nv,0}$  = number of non-voting shares before the unification announcement

$N_{v,0}$  = number of voting shares before the unification announcement

We now turn to stock unification characteristics. Let  $C$  denote the additional cash payment required from each non-voting share for conversion, and let  $A$  denote the acceptance rate, i.e. the percentage of non-voting shares that participate in the conversion (which is 1 in coercive unifications). The market value of the company's equity after the unification,  $V_1$ , is the sum of the total market capitalization before the unification announcement,  $V_0$ , and the increase in the market capitalization due to the required additional payments,  $\Delta V$ .

$$V_1 = V_0 + \Delta V$$

The increase in the company's market capitalization ( $\Delta V$ ) can be defined as the amount of the cash payments to the company net of some residual costs expressed as a percentage of the total amount raised ( $R\%$ ). The residual cost takes into consideration both transaction costs for the operation and the quota of the new funds that are expected to finance the majority shareholders' perquisites. Since such resources will not accrue to minority shareholders, they will not be reflected in the increase of the company's market capitalization. Given the unification characteristics and the estimate of the acceptance rate ( $A$ ) in a non-coercive unification (usually close to 90%), the increase in firm value can be expressed as:

$$\Delta V = N_{nv,0} \times A \times C \times (1 - R\%)$$

The model assumes that unification does not affect the overall firm's equity value except if additional cash payments are paid in. In practice, dual class unifications could raise firm's value through an increase in the stock's liquidity, the inclusion in a major stock index and a lower deviation from the one share-one vote principle.

In order to determine the value of the voting right after the unification, we first estimate the value of the *Total Voting Right* after the unification ( $TVR_1$ ). If cash payments are not required, the market capitalization remains the same and we can assume that the value of the

total voting right is unchanged.<sup>10</sup> If cash payments are required, market capitalization increases and the *Total Voting Right (TVR)* should rise as well.

The post operation *Total Voting Right (TVR<sub>1</sub>)* and *Total Cash Flow right (TCF<sub>1</sub>)* are obtained as follows.

$$TVR_1 = TVR_0 + \Delta TVR$$

$$TCF_1 = V_1 - TVR_1$$

The number of voting shares after the unification ( $N_{v,1}$ ) will equal the pre-unification number ( $N_{v,0}$ ) plus the expected number of non-voting shares submitted for conversion ( $N_{nv,0} \times A$ ).

$$N_{v,1} = N_{v,0} + N_{nv,0} \times A$$

In coercive unifications, the number of post operation non-voting shares ( $N_{nv,1}$ ) will equal to zero, while in non-coercive unifications, it will be equal to the pre-operation number ( $N_{nv,0}$ ) times the percentage of unsubmitted shares ( $1-A$ ):

$$N_{nv,1} = N_{nv,0} \times (1 - A)$$

Non-voting shares still outstanding after a voluntary unification, being entitled to higher dividends, will have a higher cash flow right than voting shares. The value of the cash flow rights for the voting shares is obtained as the post-operation total cash flow rights for the firm less the extra cash flow right ( $\Delta CF$ ) value of the post-unification non-voting shares. The residual amount can then be divided by the post-operation overall number of shares to obtain the value of the *cash flow* right for the voting shares:

$$CF_{v,1} = \frac{TCF_1 - \Delta CF \cdot N_{nv,1}}{N_{v,1} + N_{nv,1}}$$

The post-unification equilibrium prices for both the voting and non-voting shares are determined as follows:

$$P_{v,1} = CF_{v,1} + VR_1$$

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<sup>10</sup> In general, this would not be true if the unification gave rise to a different ownership structure and to a higher or lower probability of a takeover. However, in practice, Italian unifications have not changed the control exercised by the dominant pre-unification shareholder.

$$P_{mv,1} = CF_{mv,1} = CF_{v,1} + \Delta CF$$

Substituting from earlier equations, for a non-coercive 1:1 unification we get:

$$\begin{aligned} P_{v,1} &= \frac{V_1 - TVR_1 - \Delta CF \times N_{mv,1}}{N_{v,1} + N_{mv,1}} + \frac{TVR_1}{N_{v,1}} \\ &= \frac{(V_0 + \Delta V) - [TVR_0] - \Delta CF \cdot N_{mv,1}}{N_{v,0} + N_{mv,0} \times A + N_{mv,0} \times (1 - A)} + \frac{TVR_0}{N_{v,0} + N_{mv,0} \times A} \end{aligned}$$

The two components in the above expression are the value of the cash flow right and the voting right of a voting share respectively after the unification.<sup>11</sup> The new cash flow right of a voting share is obtained as the ratio of the total value of the new cash flow right to all shares and the new number of outstanding shares. The numerator is the new market capitalization minus the value of the new total voting right and minus the present value of the extra dividends payable to remaining non-voting shares.

The value of the new voting right is the ratio between the value of the new total voting right and the new number of voting shares, where the numerator is given by the previous total voting right ( $TVR_0$ ) plus its eventual increase due to a higher market capitalization when cash payments are required.

Table 1 describes the predictions of the model for a 1:1 coercive unification ( $A=1$ ) on the two classes of shares. The table reports simulations of wealth effects for several different levels of the voting premium and the fraction of the company's equity represented by non-voting shares. The reported returns document when voting shares earn negative excess returns due to the dilution of voting rights. Intuitively, the dilution effect becomes more important when the

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<sup>11</sup> For fractional conversion ratios or cash payment from non-voting shareholders, the formula modifies to:

$$\begin{aligned} P_{v,1} &= \frac{V_1 - TVR_1 - \Delta CF \cdot N_{mv,1}}{N_{v,1} + N_{mv,1}} + \frac{TVR_1}{N_{v,1}} \\ &= \frac{(V_0 + \Delta V) - [TVR_0 + f'(\Delta V)] - N_{mv,1} \cdot \Delta CF}{N_{v,0} + N_{mv,0} \cdot \frac{y}{x} A + N_{mv,0} \cdot (1 - A)} + \frac{TVR_0 + f'(\Delta V)}{N_{v,0} + N_{mv,0} \cdot \frac{y}{x} A} \end{aligned}$$

where  $f'$  is assumed linear in  $\Delta V$ .

voting shares have high values for their voting rights (higher price discounts for non-voting shares) and when there is large fraction of non-voting shares in the company's equity.

When non-voting shares represent only a small fraction of the firm's equity, the dilution of the voting rights is negligible. In this case, the return to the converted non-voting shares depends only on the level of the voting premium. For example, when voting shares trade at a 100% premium to the stock price for non-voting shares and the non-voting class represents only 1% of the total outstanding shares, a 1:1 coercive unification would increase the value of non-voting shares by almost 100% (99.0%) while voting shares would drop by a negligible -0.50%. With the same level of voting premium but with non-voting shares representing 50% of the outstanding equity, the dilution of the voting right is much larger. Consequently, the harm to voting shareholders increases: voting shares drop as much as -25% and non-voting shares appreciate by 50% to the new equilibrium price of a voting share. Using an easy example, if there are only two shares, one voting and one non voting, if the voting share trades at 2 euros and the non-voting share trades at 1 euro, the price of the non-voting share will rise and the price of the voting share will drop to the new equilibrium price of 1.50 euro each.

While it is straightforward to determine the wealth effects of a 1:1 coercive unification, the simple framework above allows us to infer the effects for more complicated cases, such as when the unification is not coercive, when there are three different classes of shares, when a cash payment is required, or when a conversion ratio is set.

## 5. Empirical evidence

### *5.1 Types and frequency of Italian stock unifications*

We search Mediobanca's "*Indici e Dati*" and *Il Sole 24 Ore* for announcements of stock unifications made by Italian listed companies from 1974 (when non-voting shares were introduced) till 2005. Overall, our sample consists of 41 different companies who undertook 46 DCUs<sup>12</sup>, 32 of which were made after 1998. Half of these 32 unifications in turn were announced in the 1998-2001 period, i.e. the year before and three years after the introduction of the Euro, which led to a sharp and permanent decrease of Italian interest rates.

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<sup>12</sup> Four companies went through one or two non-coercive unifications before concluding with either a final coercive unification or a delisting of the few outstanding non-voting shares.

Table 2 shows the yearly frequency (ordered by the shareholders' approval day) and the type of unification. Out of 46 unifications, 22 were coercive and structured in one of the following three ways:

- 1:1 coercive (18 cases): *One non-voting share is converted into a voting share without any additional payment.*<sup>13</sup>
- 1:1 coercive plus a cash refund (1 case): *One non-voting share is converted into one voting share and receives a cash payment.*<sup>14</sup>
- *Coercive option of choosing between a unification of  $y$  voting shares for  $x$  non-voting shares or a 1:1 unification with a cash payment* (4 cases): Non-voting shareholders choose between converting  $x$  non-voting shares into  $y$  voting shares or converting 1 non-voting share into 1 voting share with an additional payment.

*The other 24 non-coercive unifications are structured in the following ways:*

- 1:1 non-coercive (11 cases): *One non-voting share can be converted into one voting share without any additional payment.*
- 1:1 with a cash payment (7 cases): *One non-voting share can be converted into a voting share by paying an amount lower than the price differential. None of these seven unifications were coercive because of the cash payment required.*<sup>15</sup>
- *1:1 with conversion limit* (3 cases): One non-voting share can be converted into one voting share up to a conversion limit of 10% of the non-voting shares owned.
- *non-coercive option to choose between a unification of  $y$  voting shares for  $x$  non-voting shares or a 1:1 unification with a cash payment* (1 case).
- *$y$  voting shares for  $x$  nv shares* (2 cases):  $x$  non-voting shares can be converted into  $y$  voting shares.

## 5.2 Stated reasons for share unifications

Table 3 reports the list of stated reasons for the unification as declared in the company's press announcement or newspaper articles. Among them, the desire to improve attractiveness for

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<sup>13</sup> According to Dittmann and Ulbricht (2004), these are also the typical terms of German stock unifications.

<sup>14</sup> This anomalous term was used in only one unification (SNIA, 2002), when non-voting shares were trading at a premium to the voting shares.

<sup>15</sup> In German unifications, Dittmann and Ulbricht (2004) report two cases in which the required payment was equal to 2/3 of the price differential. None of the seven Italian unifications had such a provision and all required a fixed amount (lower than the price differential).

international investors, increase the stock's liquidity and simplify the equity structure are typical reasons also cited by firms on other markets (see Amoako-Adu and Smith, 2001, for Canada, Dittmann and Ulbricht, 2004, for Germany, and Pajuste, 2005, for other EU countries). However, unique to Italian firms, 4 firms in our sample report that the reason for the unification was "to raise cash to finance new investments".<sup>16</sup> Part of the cash raised came from the non-voting shareholders. In seven of the 46 Italian DCUs, a cash payment was required to convert a non-voting into one voting share. Also unique to Italy, 6 firms used coercive unifications after previous successful non-coercive unifications had decreased the liquidity or forced the delisting of non-voting shares. Finally, five firms unified their shares to comply with the Italian privatization guidelines, three firms unified their shares before entering a merger and three more before issuing new shares, as is typical of Canadian and German unifications.

### *5.3 Descriptive statistics for Italian DCU firms*

Table 4 Panel A reports financial characteristics for the sample of DCU firms (see the Appendix for construction of these variables). The panel reports data on firm leverage, profitability and growth prospects (proxied by the market-to-book ratio). Panels B reports data on mean- and median-adjusted abnormal financial characteristics. Across most financial characteristics, our sample firms seem to be similar to their industry peers. They have similar leverage ratios and their profitability and market-to-book measures are not significantly different from their industry peers.

Panel A of Table 5 reports the fractions of voting equity held by the largest shareholder, using the first available ownership data immediately before the share class unification. We obtain ownership data using *Il Taccuino dell'azionista* (period 1982-1995), the Italian Security and Exchange Commission (Consob) paper database (1995-1997) and online database (1998-2005). We distinguish between three types of ownership: family or individuals, government, and financial institutions (banks and insurance companies). The ownership structure of the typical firm announcing a DCU is highly concentrated. The largest shareholder owns, on average, 59.65% of the voting rights before the unification and is usually represented by a family (30 cases) rather than a financial institution (8 cases) or the Italian government (8 cases).

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<sup>16</sup> Though Pajuste (2005) does have data on Italian unifications, it does not include non-coercive unifications. Consequently this motivation is not documented in her paper, as all the unifications requiring a cash payment from the non-voting shareholders are non-coercive.

Since Italian non-voting shares are bearer shares, there is no official ownership data on them. In 8 cases (four of which are analyzed below), the financial press or the company's press release reports the percentage amount owned by the majority shareholder, with a mean holding of 41%. For all other unifications, we attempt to infer the largest shareholder's ownership of non-voting shares from ownership data on voting shares before and after the unification as well as from the unification characteristics (type of unification, acceptance rate, etc.). We restrict this procedure to cases when there is a relatively short period (6 months) before and after the unification date when ownership data is available from the Consob online database (available since 1998). This reduces the sample size to 33 observations.<sup>17</sup> For 11 observations, we cannot infer the ownership of non-voting shares since the unifications coincided with confounding events that may have affected the ownership of voting shares after the unification by the controlling shareholder (as a change of the controlling shareholder, a merger, an equity issue, or the firm's privatization). In 18 cases, using the characteristics of the unification and the ownership of the voting shares by the majority shareholder pre- and post unification, we can infer that the majority shareholder holds significant stakes of non-voting shares before announcing the unification. On average, non-voting share ownership is equal to 32.1% (median of 18.8%). The final row in Table 5 Panel B, reports the minimum of the inferred value and the publicly reported value for the ownership of non-voting shares. Using this conservative estimate, we can conclude that in 21 unification announcements, the largest shareholders owned significant stakes of non-voting shares, equal, on average, to 30.56%.

Table 6 reports other characteristics of Italian DCU firms. On average, non-voting shares represent 17.55% of total equity in Italian DCU firms. In non-coercive DCUs, on average, 83.79% (91% median) of the non-voting shareholders decided to convert their shares. One explanation for the acceptance rate not being 100% could be that the largest shareholders do not convert all their non-voting shares in order to control non-voting shareholders' meetings. Alternatively, perhaps some shareholders simply missed the announcement.

Three days before the announcement date of the DCU, the voting premium averaged 38.73% of the non-voting share's stock price. When differences in dividends (higher on non-voting shares) are taken into consideration, the value of the voting right averages 54.20% of non-voting

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<sup>17</sup> The longer the length of time between the pre- and post-unification dates when data on ownership of voting shares is available, the higher is the chance that majority shareholders traded voting shares between the two dates.

share's stock price. On average, the cumulative value of all voting rights represents a fraction of the total firm's equity value equal to 29.79%.

Based on pre-announcement market prices, the non-voting shares earned a minimum dividend yield of 1.83% at the mean level (1.11 at the median level). Current yield (based on last DPS) averaged 2.89%, while expected yield (based on next DPS) was slightly higher (2.91%) but 3% lower than the 10 year Italian Treasury-bond gross yield (except for five cases).

The ownership of non-voting shares by the majority shareholder is one reason why Italian unifications barely affect the fraction of total equity owned by the largest shareholder. When we compare the ownership structure pre- and post-unification, (see the Appendix for more details), Table 7 reports that the mean portion of total votes held by the largest shareholder is almost unaffected by the unification. On average, the fraction of ownership by the majority shareholder decreases from 55.85% before the unification to 54.24% after the unification. Median values increase slightly. These results contrast with the German evidence (Ehrhardt, Kuklinski, and Nowak, 2004) where unifications reduced the average voting equity held by the largest shareholder from 55.68% to 44.60%.

Following Faccio and Lang (2002), on the subset of firms where we have ownership data, we also compute after 1995 (since Consob ownership database is only available after 1995) the degree of separation of ownership from control before and after the unification, for each firm, as the ratio of cash flows' ownership (Ownership) and voting rights' ownership (Control). The stock unifications substantially reduce the separation of ownership from control. The mean (median) value for the Ownership/Control ratio increases from 0.762 (0.804) before the DCU to 0.873 (0.999).

#### *5.4 Announcement period returns around the announcement of a unification*

For every firm in the sample, we search the *Il Sole 24 Ore* financial newspaper for announcement dates. Market data information is obtained from the Italian Stock Exchange. Of the 46 sample firms, we are able to compute abnormal returns at the announcement date for 35

paired observations (voting and non voting shares).<sup>18</sup> Table 8 Panel A reports abnormal returns for voting and non-voting shares separately, as well the change in the market value of the firm, for several event windows surrounding the announcement of the unification. For non-voting shares, the mean (median) three-day announcement date return is +11.66% (6.75%), while the mean (median) five-day return is 12.50% (6.53%). These results are broadly in line with the positive announcement date wealth effects of unifications from other countries such as Germany (Dittmann and Ulbricht, 2004, Ehrhardt, Kuklinski, and Nowak, 2004) though they are much higher in magnitude. However, what is unique to Italy is the announcement date wealth impact on voting shares. The voting shares for German firms announcing DCUs earn positive abnormal returns, and the impact on the firm's market capitalization is positive. In contrast, our sample firms earn a three day market-adjusted return equal to -1.56% (median -1.25%) and a five-day announcement date return equal to -1.94% (median -0.60%) for the voting shares. The sharp difference from the German evidence could be due both to the higher average level of the Italian voting premium, which translates in a bigger dilution in the value of a voting right, and in the opportunistic behavior of the Italian majority shareholder described in the next section.

The overall change in the market value of the firm is insignificant (+0.16%), suggesting either that there are few opportunities for corporate governance improvements or that such improvements have little, if any, impact on firm value. The market reaction around the announcement is confirmed by the CARs computed for the wider event window (-1, +30), also reported in Table 3, as well as by the pattern in the CARs, graphically illustrated in Figure 1.

Both the decline in the value of the voting shares and the appreciation in the value of the non-voting shares are consistent with our results from the wealth transfer framework earlier in the paper. According to the framework, we should see an average drop of -3.40% for the voting shares and a revaluation of +18.30% for the non-voting shares (Table 8, Panel B). Based on a constant overall firm value, Italian unifications, on average, transferred about 2.5% of the ex-ante total equity value from voting shareholders to non-voting shareholders.

We then partition the event study subset between those observation for which we are able to determine that the largest shareholder was holding a large block of non-voting shares and all the other observation where it was not possible to report or infer non-voting ownership. Table 8

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<sup>18</sup> 11 observations were excluded due to a lack of the announcement date (4 cases); insufficient liquidity of the non-voting share (3 cases); non-voting shares not listed (1 case); voting shares not listed (2 cases); lack of the stock market price series (1 case in 1982).

Panel C shows that when non-voting ownership allows the largest shareholder to protect himself from the unification's wealth effect, voting shares significantly drop in the three days around the announcement (-3.71% on average) causing a corresponding reduction in overall firm value (-1.48% on average). In contrast, when the largest shareholder does not hold non-voting shares or investors cannot infer such information, the unification announcement produces an insignificant positive reaction both for the voting shares and the firm's market capitalization. To put this another way, when the largest shareholder owns a block of non-voting shares, the voting shareholders are more likely to believe this to be a form of expropriation, rather than an attempt to improve the equity structure.

### *5.5 Abnormal volumes around the announcement date*

For the subset of firms for which we carry out the event study in the previous section, we next compute abnormal daily volumes as the ratio of the daily volume to the normal volume determined from 30 days till 4 days before the announcement date. The ratio is graphically reported in Figure 2, which shows that at the announcement date daily volumes on non-voting and voting shares are respectively 11 times and 4 times higher the average pre-event period. The graph also shows that volumes were above average in the three days before the unification is announced. Ajinkya and Jain (1989) argue that prediction errors for raw volume measures are significantly positively skewed, with thin left tails and fat right tails, but natural log transformations of the volume measures are approximately normally distributed. We therefore use the log of the daily volumes to test for average abnormal volumes in the three days before the announcement date [-3;-1] compared with the pre-event period [-30;-4]. Results (reported in Table 9) indicate significant average abnormal volumes for both classes of shares, especially non-voting shares. This result is consistent with insider trading in both classes of shares before the announcement date.<sup>19</sup>

### *5.6 Regression analysis*

We estimate a set of OLS regressions using different dependent variables. Coefficient estimates are reported in Table 10. The several models allow us to explain the value changes for

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<sup>19</sup> Insider trading was not illegal in Italy till 1991. However, only one observation in our sample was announced before 1991.

voting and non-voting shares around the unification announcement, the differential return between the two classes of shares, the relative amount of wealth transfer between the two classes of equity, and the aggregate change in firm value.

We first describe the regression estimates for the CAR3-voting dependent variable. We find that CAR3\_voting is inversely related to the fraction of equity represented by non-voting shares. This is not surprising since the larger the fraction of pre-unification non-voting equity, the greater is the dilution of voting rights. We also find a negative relation between the largest and second largest blockholdings of voting shares and CAR3\_voting. This is consistent with the interpretation that very large voting shareholders find hedging against the unification-related dilution more difficult (average ownership is about 60%), and with a monitoring role exercised by the second largest shareholder.

We then examine the announcement effect on non-voting shares (CAR3\_NV, presented as model 2). As expected, we find that CAR3\_NV increases with pre-unification voting premia, and declines in the presence of any indirect form of compensation for the unification (such as a cash payment, a conversion ratio based on the market price, or any limits on the amount of nv-shares that can be converted). Ownership by the largest blockholder is inversely related to CAR3\_NV, implying that non-voting shares gains are declining in ownership by the largest blockholder.

Next we turn to the differential wealth impact on non-voting shares relative to voting shares associated with the unification announcement. In these regressions, we use DIFCAR3 as a dependent variable. We first find that the expected value of DIFCAR3 based on our model explains 82% of the variation in the actual DIFCAR3<sup>20</sup> (significant at the 0.01 level). We then regress the actual DIFCAR3 on several explanatory variables (model 3). Voting premium is again seen to be significantly positively related to DIFCAR3, as it determines the appreciation on non-voting shares and, hence, the return differential between the two classes of equity. The relative amount of non-voting equity does not appear to affect DIFCAR3, as high return differential can take place both when nv-shares are scarce and when they are abundant, as long as the voting premium is large. As in the earlier case, compensation to achieve conversion is negatively associated with DIFCAR3, as it reduces the appreciation of non-voting shares and the harm to voting shareholders.

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<sup>20</sup> These results are not reported in the interest of parsimony, but are available from the authors upon request.

In model 4 we regress the expected wealth transfer from our model on several variables (both from the model and others). Higher voting premia and larger fraction of non-voting are associated with significantly larger wealth transfer between the two classes of equity, as valuable voting rights get diluted on a much wider number of shares. Significantly lower wealth transfers result when direct or indirect compensation is involved, and also for higher ownership levels of the largest and second largest shareholders (though not statistically significant).

In model 5 and model 6, we examine the unification effect on firm value (CAR3-mkt-cap). In both models, the significantly positive coefficient estimates for voting premium indicate that wealth gains are greater where the potential for abuse by controlling shareholders was higher. Voting premium, in fact, is a proxy of private benefits and expected expropriations. A reduction in the wedge between ownership and control, and the more aligned interests of all shareholders after the unification, seem to produce more benefits for companies with more severe agency conflicts between majority and minority shareholders. However, unifications lead to significantly lower firm value when the fraction of non-voting equity converted into more valuable voting shares is higher. In the presence of high Italian voting premia, in fact, such unifications translate into wealth transfers and dilutions of voting rights. As shown in the next section on case studies, and consistent with our findings in Panel C of Table 5, in such situations, majority shareholders try to hedge the unification's negative effect by holding or buying large blocks of non-voting shares before the unification announcement. The general positive effect for such operations is therefore more than offset by expected misconduct in corporate governance: the unification is set so as to harm all minority voting shareholders, but not the majority shareholder who was able to set up a relevant non-voting ownership to hedge from the vote dilution. When nv-equity is small, instead, the wealth transfer is negligible, minority voting shareholders are not harmed and the overall reaction to the DCU announcement is dominated by the positive effects of a more efficient equity structure and more aligned interests.

As in previous models, ownership by the largest and second largest shareholders, being associated with more fair unifications, translates into more positive changes in firm's value. It is significant in model 5, but not in model 6. When we control for other variables (model 6), unifications involving direct or indirect compensation result in significantly positive changes in firm value, perhaps because they are identified as more fair unifications.

## 6. “Insider trading” and five case studies of tunneling through DCUs

When non-voting shares trade at a large discount relative to voting shares, as is often the case for Italian firms, a unification leads to significant positive returns for the non-voting shares, especially when it is structured on a 1.1 basis. A conversion premium is always offered either to increase the acceptance rate in non-coercive unifications or to obtain approval by the non-voting shareholders in coercive unifications. Note however that if non-voting shares represent a large fraction of total equity, the dilution of the value of a voting right will harm voting shareholders. Why then should a majority shareholder ever favor a DCU which harms himself and favors non-voting shareholders? One reason why he may choose to do so is because he buys a block of non-voting shares at a discount before the conversion. Though as we note previously, there is no official ownership data on non-voting shares, in 21 cases in our sample, we were able to infer that the majority shareholder owned large blocks (30.5% on average) of non-voting shares. In 8 of these cases, the ownership of non-voting shares’ was publicly reported by the newspaper article or the company’s press release. We were able to obtain detailed financial data on five of these 8 cases, which we report below as case studies.<sup>21</sup>

Interestingly, this opportunistic behavior of majority shareholders has attracted the attention of the Italian Security and Exchange Commission (Consob), which in an official communication on March 22<sup>nd</sup> 2001 stated: *“In recent years we have observed a significant increase of extraordinary operations involving non-voting shares issued by listed companies followed by their delisting. Such operations are sometimes decided by the same issuer (mergers, unifications) and some other times by the controlling shareholders of the listed companies (through public offerings)”*. In order to help investors to take correct investment decisions, *“the Italian regulator therefore asks the controlling shareholders to communicate publicly, in the ways and times indicated by art. 66 of rule 11971/1999, the execution of trades on non-voting shares made by anyone belonging to the controlling group, if, thanks to the above trades, the controlling group ends up owning non-voting shares representing a fraction of the firm’s equity greater than 2%, 5%, 7.5%, 10% and subsequent multiples of 5% or the same group reduces its stake below the above thresholds.”*

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<sup>21</sup> The other four cases of declared non-voting ownership by the majority shareholder were two family-owned companies (Finrex and Recordati) and two government-owned companies (Credit and Comit).

This directive by the Italian regulators to disclose non-voting shares' ownership is not however mandatory and can be ignored. After the 2001 Consob declaration, there have been 12 DCUs. In two of them the majority shareholder declared her ownership of non-voting shares (Alleanza and Banca Finnat) but we suspect that not everyone did. Using pre- and post-unification data on the ownership of voting shares, in fact, the largest shareholder should have owned blocks of non-voting shares in 6 other cases. Moreover, non-voting shares could be owned by a fiduciary company, as could be the case in the 1:1 coercive unification made in 2002 by Cofide, a holding company controlled by the De Benedetti family.<sup>22</sup>

In some of the unifications reported in this section, the Italian regulator opened an insider trading file to investigate the anomalous trading activity surrounding the unification announcement date, also documented in the paper. No file has been opened on the majority shareholder' trading activity on non-voting shares made few months before the unification announcement as it is difficult to prove that the unification decision had already been decided when the trading took place. The following operations described in the five case studies below, are therefore completely legal.

### **6.1 Case studies**

In this section, we report five case studies of dual class unifications where majority shareholders bought relevant stakes of non-voting shares some months before announcing the unification. The information is taken from articles published on *Il Sole 24 Ore*, the firms' financial statements, press releases and the Consob online ownership database.

#### ***Fin.part coercive 1 :1 unification***

Fin.part is a small financial company whose major assets are in the textile industry. The Fin.part unification was announced by the board on January 24<sup>th</sup> 2000. The unification involved a coercive 1:1 conversion of non-voting and preferred shares<sup>23</sup> into voting ones. Since both preferred and non-voting shares were traded at deep discounts from the voting shares and they represented about 40% of total equity, a 1:1 stock unification would have depressed the voting

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<sup>22</sup> The *Il Corriere della Sera* newspaper reports that "at the conversion date (in March 2002), nearly 70% of non-voting shares were held by Intermobiliare Fiduciaria, a fiduciary company belonging to a group close to De Benedetti, who is a board member of the Intermobiliare Bank". (See Penati, Alessandro, 2002, "Il Corriere della Sera, April 14, 2002, page).

<sup>23</sup> Italian preferred shares are generally non-voting, but can vote in the extraordinary meetings. They are entitled to higher dividends relative to common shares.

shares' stock price, as it actually did. Miravan Luxemburg, a company based in Luxembourg, controlled by the controlling shareholders of Fin.part had launched a voluntary tender offer on 100% of preferred and non-voting shares in July 1999 (6 months before the unification announcement). About 66% and 59% of preferred and non-voting shareholders tendered their shares. Volume was abnormally high in the three days immediately preceding the DCU announcement, suggesting some advance knowledge of the event.

From the tender offer prospectus, it is possible to determine that 54% of Miravan Luxemburg was controlled by Valcor. In turn, Valcor was controlled by two Italian industrial families. Overall, Valcor controlled Fin.part through the direct and indirect control of 33.3% of the voting shares (12.06% directly and 22% through Miravan Luxemburg). In other words, the controlling shareholder (Valcor), through a controlled company (Miravan Lux.) tried to buy all the preferred and non-voting shares through a tender offer. Six months later it converted them in the more valuable voting shares in a 1:1 coercive unification

The majority shareholders were certainly not harmed by the unification. The same cannot be said for the minority voting-shareholders. In the three-day announcement window, the price of voting shares declined by about -7% while the price of the non-voting shares rose by +26.80% (Figure 3 and Table 11). In our framework, the predicted increase in price for the non-voting share is 26.8% and the voting shares are predicted to decline by -17.42%. The smaller decline of the voting shares, can perhaps be explained by a sharp reduction of the ownership/control separation (non-voting and preferred shares were about 39% of all shares).

#### ***Banca Finnat Euramerica coercive 1:1 unification***

Banca Finnat Euramerica is a small Italian bank whose main business is private banking. On September 23<sup>rd</sup> 2003 its board launched a coercive 1:1 unification, whose details were reported on a company press release. The pre-announcement voting and non-voting stock price were respectively €0.3572 and €0.2920. Non-voting shares represented 40% of the company's total equity. The company press release also reported that the majority shareholder, an Italian family, directly and indirectly owned 81.71% of non-voting shares. The same press release states that *"the operation aims to simplify the company's equity structure and all shareholders will benefit."* Actually, the vote segment's dilution made minority voting-shareholders suffer a loss of -4.59% (-7.62% expected from the framework) while non-voting shareholders saw their shares rise by

+14.04% (+14.12% expected), as shown in Figure 3 and Table 11. Since the majority shareholder owned almost all non-voting shares before the unification, Banca Finnat is another case that illustrates how stock unifications can lead to a significant expropriation of minority voting shareholders.

### ***CIR coercive 1:1 unification***

CIR is a mid-cap financial company in the second tier of a pyramidal group controlled by the De Benedetti family. CIR's controlling company is Cofide (another financial listed company). After the company had bought back non-voting shares in the past and cancelled the corresponding equity on November 1998 and November 1999, on September 13<sup>th</sup> 2000 the board proposed a 1:1 coercive unification, which was approved on October 27<sup>th</sup>. Non-voting shares represented 22.5% of the firm's equity.

Three days before the announcement voting and non-voting stock prices were at €4.256 and €3.497 respectively. In the three days around the announcement date (-1+1), the voting shares dropped by -6.73%, more than the -4.01% expected, while non-voting shares gained +6.44%, less than the +16.82% expected (Figure 3 and Table 11). The worst than expected reaction on both classes of shares is perhaps due the decrease in valuation of the entire firm, whose market capitalization dropped by about 4%. Perhaps the way the unification was managed increased expectations of managerial misconduct in the future that more than offset the benefits offered by a return to a one share-one vote equity structure.

In this case, not only had the majority shareholder bought non-voting shares in advance of the unification announcement, but the board had assigned stock option plans on non-voting shares before the unification. A year prior to the unification (in 1999), a stock option plan based on non-voting shares was approved by the CIR's board of directors. The first exercise date was set on December 22<sup>nd</sup> 1999, followed by additional exercise dates on March 31<sup>st</sup>, June 30<sup>th</sup>, September 30<sup>th</sup>, and December 31<sup>st</sup> through the end of 2003. All board members exercised their stock options on the first exercise date, i.e. December 22<sup>nd</sup> 1999. The CEO (a member of the controlling family) exercised his stock options for 2 million shares on that date. On March 7<sup>th</sup>, 2000, six months before the unification announcement, the board approved a new stock option plan based on non-voting shares. The stock market decline in April 2000 (the collapse of the

Internet bubble) meant that these new options remained out-of-the-money<sup>24</sup>. As noted above, CIR is controlled by another financial company, Cofide, which is controlled by the De Benedetti family. “Il Sole 24 Ore” reported, on September 14th 2000, that during the months of April and May 2000, Cofide had bought CIR non-voting shares and sold CIR voting shares.<sup>25</sup> From the pre- and post-unification ownership data, we infer that Cofide owned about 20% of the non-voting shares of CIR.

#### ***R.a.s. 1999 non-coercive 1:1 unification with additional payment***

R.a.s., the second Italian insurance company, carried out two voluntary unifications: in 1994 and in 1999. Before the second unification, the R.a.s. controlling shareholder, Allianz A.G., increased the percentage of non-voting shares in its possession few months before the unification announcement. According to reports in *Il Sole 24 Ore*, (on July 30<sup>th</sup>1998), Allianz (who owns 51% of R.a.s. voting shares) increased its stake of R.a.s. non-voting shares to 43% of all non-voting shares over the preceding month (the inferred ownership in Table 6 is about 49%). Nearly eight months after, on March 25<sup>th</sup> 1999, the R.a.s. board announced a voluntary 1:1 unification with a required cash payment equal to €1.059. The declared reasons were the following: “...*in order to increase the security’s liquidity and market capitalization and be therefore included in the main market indexes*”. Two days before the announcement, voting shares were traded at 10 euros while non-voting shares at €7.29. Given these market prices, the discount at which non-voting shares were traded equaled 27%, and the required cash payment was set at about 39% of the price differential between the two classes of shares (€1.059/€2.1). As reported in Figure 3 and Table 11, in the three days around the announcement date (-1+1), the voting shares dropped by -4,05% (-4.90% expected) while non-voting shares gained +13.16% (+15.96% expected). More than 95% of non-voting shareholders accepted the offer to convert to voting shares.

#### ***Alleanza coercive 1:1 unification***

Alleanza Assicurazioni is the largest Italian life insurance company and is controlled by Generali, the first Italian insurance company and one of the largest in Europe. On September 25<sup>th</sup>, 2001 Generali declared that its group had increased ownership of Alleanza non-voting

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<sup>24</sup> CIR is a financial company and at that time was valued especially for its internet and media participations.

<sup>25</sup> See *Il Sole 24 Ore*, September 14th, 200, Finanza e Mercati, page 1.

shares to 6.0%. On October 1<sup>st</sup> 2001 another Generali press release stated that its non-voting shares stake had been further increased to 7.8%. Just 44 days after, on November 13<sup>th</sup> 2001, Alleanza's board announced a 1:1 coercive unification. Before the announcement, the market price for the voting and non-voting shares was respectively equal to €12.196 and €9.527.

According to the financial press, “*Maintaining the same overall market capitalization of the last trading date preceding the announcement, the price of a voting share should drop from 12.13 euro to 11.7 euro with a drop of 3.5%*”.<sup>26</sup> Our model predicts a drop of the voting shares equal to 3.72% (Table 11) based on the assumption of no cash raised through an equity issuance. In the three days around the announcement date the voting shares dropped by -7,78% while non-voting shares gained +17.12% (Figure 3 and Table 11).

The unification was approved in December by both the voting and non-voting shareholders. Before the approval, Generali kept increasing its stake in Alleanza non-voting shares, ending up with 10.25% of non-voting shares. Since the additional non-voting shares were purchased after the unification announcement, and shareholder approval would be a given event, it seems that Generali's actions were designed to mitigate the unification's dilution effect on Generali's controlling block of voting shares.<sup>27</sup>

## 7. Conclusions

Italian dual class unifications present a puzzle – their announcements are associated with price increases for non-voting shares and price declines for voting shares. Why do voting shareholders agree to such unifications? In this paper, we present a framework showing the price effect of unifications on voting as well as non-voting shares. Our main conclusion is that unifications, while appearing to be favoring non-controlling shareholders, are a lot more complex in execution. Using a comprehensive sample of 46 share class unifications in Italy, as well as five case studies, we provide *prima facie* evidence that unifications have been used by controlling shareholders to transfer wealth from non-controlling voting shareholders to themselves by purchasing non-voting shares ahead of the unification announcement.

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<sup>26</sup> See *Il Sole 24 Ore* on November 14<sup>th</sup>, 2001, page 1.

<sup>27</sup> The post unification percentage of Alleanza voting shares owned by Generali dropped to 47.3% (from 54.3%).

The extant literature on dual class unifications suggests that the main factors underlying the increasing trend towards the one share-one vote rule are the internationalization of the shareholder base, a preference for a unitary class structure by institutional shareholders and the increase of the market capitalization of the firm and liquidity making it easier for the firm to enter or remain in a major stock index. We argue, in addition, that the decision to return to a single class of stock can also be driven by domestic factors such as a sharp decrease in interest rates and corresponding higher cost of non-voting shares' minimum dividend yield, an opportunity to raise equity from non-voting shareholders when an additional payment is required, an opportunity for insider trading ahead of unification announcements and an expropriation of minority voting shareholders.

The framework developed in the paper shows that unifications may harm voting shareholders, as the dilution in the value of a voting right increases the higher is the percentage of the non-voting shares on the firm's equity and the larger is the price discount at which they are traded. In other countries such kind of expropriation has often been compensated either by an extraordinary dividend (Ang and Megginson, 1989, UK) or by assigning new voting shares to voting shareholders (Hauser and Lauterbach, 2004). In Italy, where the price differential between voting and non-voting shares is one of the highest in the world (Nenova, 2003, Zingales, 1994, Dyck and Zingales, 2004), voting shareholders have not received any explicit compensation. The Italian setting is therefore unique to study the wealth effect of a stock unification.

Our empirical evidence is also unique. We analyze the entire population of the 46 Italian unification made in the 1974-2005 period. In the three days around the announcement date, non-voting shares earn significantly positive returns of 11.66% and voting shares earn significantly negative returns of -1.56%. Our empirical results are aligned with our theoretical framework. Overall, we find that unifications do not seem to affect firm's value (+0.16%). Firm values tend to decrease however, when unifications are made in the presence of high voting premia and large fractions of non-voting equity. These conditions translate in a larger dilution of the vote segment and are typically associated with the majority shareholders holding large blocks of non-voting shares to hedge the negative effect on their voting block. Thanks to their ownership of non-voting shares, majority shareholders barely dilute their controlling block of voting shares. A volume analysis around the announcement date also seems to indicate that some insider trading activity going on in the three days before the information release.

Our detailed analysis of five cases of Italian unifications shows that majority voting shareholders hedge or even take advantage of such unifications by engaging in buying relevant blocks of non-voting shares, selling voting shares or approving stock option plans on non-voting shares few months or days before the announcement date. In the five cases, on average, the largest shareholder owned about 46% of non voting shares which appreciated by +15% while voting shares dropped by -6%. Overall, our evidence is consistent with the hypothesis that Italian dual class unifications can involve expropriation of minority shareholders.

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## Appendix

### Variable definitions

<i>Variable</i>	<i>Description</i>
<b><i>Financial variables</i></b>	
	All variables are taken from Datastream except for some missing values for the two earliest unifications (Fisac, 1982 and Reyna, 1986) which have been taken from "Il Taccuino dell'Azionista". All variables are computed as of the last financial statement before the unification announcement date.
TA	Firm's total assets (in millions of Euros)
Size	Natural logarithm of firm's total assets.
MTB	Firm's market value of equity over book value of equity.
Leverage-mkt	Total debt over total capital (debt plus shareholder's equity) at market values
Leverage-book	Total debt over total capital (debt plus shareholder's equity) at book values.
ROA1	Earnings before interest and taxes (EBIT) over total assets.
ROA2	Earnings before interest, taxes and depreciation (EBITDA) over total assets.
ROE	Net income over book value of shareholder's equity.
<b><i>Industry-adjusted financial variables</i></b>	
	For each company we classify all the Italian companies belonging to the same industry in three industry definitions in increasing level of detail: INDC3 (SIC2), INDC4 (SIC3) and INDC5 (SIC4). Due to the low numbers of firms in some industries, we use the most detailed industry (INDC5) only if the number of companies in the industry was greater or equal to 3, otherwise we use the less detailed industry (INDC4) or the least detailed (INDC3). We use the mean and median values for the industry values.
Ind-adjusted MTB	MTB – Industry MTB
Ind-adjusted Leverage-mkt	Leverage-mkt – Industry Leverage-mkt
Ind-adjusted Leverage-book	Leverage-book – Industry Leverage-book
Ind-adjusted ROA1	ROA1 – Industry ROA1
Ind-adjusted ROA2	ROA2 – Industry ROA2
Ind-adjusted ROE	ROE – Industry ROE
<b><i>Other variables</i></b>	
	Other characteristics of DCU firms are computed using dividend information from <i>Il Taccuino dell'azionista</i> and <i>Il Sole 24 Ore</i> database.
Quota-equity	Percentage quota of non-voting shares on all firm's equity.
Acceptance-rate	Percentage of non-voting shares which accepted the unification offer in non-coercive DCUs
D-compensation	Dummy variable = 1, if the unification sets an indirect form of compensation to voting shareholders (a cash payment, a conversion ratio based on the market price, or any limits on the amount of nv-shares that can be converted)
Voting-premium	Percentage voting premium three days before the announcement date ( $t = -3$ ) as from the price differential between a voting and a non-voting share over the price of a non-voting share.
Value of voting right	Percentage voting premium computed as the ratio of voting right over the market price of non-voting shares on date $t-3$ . The vote right also accounts for the higher dividends to non-voting shares.
TVR-fraction	Fraction of the all equity value represented by the sum of all voting rights (Total Voting Rights).
Legal-yield	Legal dividend yield = ratio of minimum dividend (by company charter) over the nv-share's market price in $t-3$ .
Current-yield	Current dividend yield = ratio of last DPS paid on non-voting shares over the nv-share's market price in $t-3$ .
Expected-yield	Expected dividend yield = ratio of next DPS paid on non-voting shares over the nv-share's market price in $t-3$ .
Extra-yield	Expected-yield - 10y Italian Treasury Bond gross yield in the same month of the announcement date (source: Bank of Italy).
<b><i>Ownership variables</i></b>	
	Ownership data are from <i>Il Taccuino dell'azionista</i> (1982-1995), the

	Consob material database (1995-1997) and the Consob online database (1998-2005).
Owntype	Equals 1 if the largest voting shareholder is the government, 2 if it is a family or an individual, 3 if it is an financial institution or a blockholder.
Alfafirst0	Fraction of the firm's voting rights owned by the largest shareholder before the DCU.
Alfa2nd0	Fraction of the firm's voting rights owned by the second largest shareholder before the DCU.
Alfafirst1	Fraction of the firm's voting rights owned by the first largest shareholder after the DCU.
Alfa2nd1	Fraction of the firm's voting rights owned by the second largest shareholder after the DCU.
O/C-before	Ratio of control rights and cash flow rights before the unification. The ratio is computed using the methodology from Faccio and Lang (2002) and Consob ownership data since 1995.
O/C-after	Ratio of control rights and cash flow rights after the unification.
Paired Dummy	Equals 1 if between the two dates for Alfafirst0 and Alfafirst1 there has been only the unification. Equals 1 if there has been a merger, an equity issue, an IPO, a privatization, a change of the largest shareholder.
NV-declared	Fraction of the firm's non-voting shares owned by the largest shareholder as declared by the firm's press announcement or the press, where available.
NV-inferred	Fraction of the firm's non-voting shares owned by the largest shareholder as inferred from Alfafirst0, Alfafirst1 and the DCU characteristics for firms with Paired Dummy =1 which allowed the inference.
Alfa-NV	The minimum value between ALFANV-declared and ALFANV-inferred for those firms which had values for at least one of the two variables .
D-Alfa-NV	Dummy =1 for Alfa-NV greater than zero, otherwise = 0.
<b><i>CAR variables</i></b>	The event date for the event study is defined as the first board announcement date or the first next trading date if the stock was suspended by the Italian exchange in the day of the information release.
CAR-voting	Market-adjusted cumulative abnormal return for voting shares in several event-windows around the DCU announcement dates.
CAR-nv	Market-adjusted cumulative abnormal return for non-voting shares in several event-windows around the DCU announcement dates.
CAR-mkt-cap	Market-adjusted cumulative abnormal return for the firms' market capitalization (computed also on the third class of shares when present) in several event-windows around the DCU announcement dates.
DIFCAR3	CAR-nv - CAR-voting in the three-days window [-1;+1] around the announcement date.
<b><i>Framework variables</i></b>	
Exp-return-voting	Expected return on non voting shares from the framework, based on DCU characteristics and stock prices three days before the announcement date.
Exp-return-nv	Expected return on voting shares from the framework, based on DCU characteristics and stock prices three days before the announcement date.
Exp-difcar	Exp-return-voting minus Exp-return-nv.
Exp-wealth-transfer	Expected wealth transfer from voting to non-voting class of shares as percentage of firm' market capitalization in t-3 as from the framework and DCU characteristics.
<b><i>Volume variables</i></b>	Daily volumes have been transformed as $\text{Logvolume}_t (1 + \text{VOL}_t)$ as from Ajinkya and Jain (1989).
AbnLogvolume3-voting	Daily Percentage of higher or lower volumes in the 3 days preceding the event day (-3-1) compared to the pre-event 27 days volume average (-30-

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	4) for voting shares.
AbnLogvolume3-nv	Daily percentage of higher or lower volumes in the 3 days preceding the event day compared to the 27 days volume average (-30-4) for non-voting shares.

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**Table 1**  
**Estimated wealth effects of a coercive 1:1 unification on dual class shares.**

The wealth effect on voting and non-voting shares is determined for different levels of voting premium (computed as price differential on voting shares) and different levels of percentage quotas of nv-shares on firm's equity.

<i>Classes of shares</i>	<i>Voting premium</i>	<i>Quota of non-voting shares on total shares</i>				
		<b>1.00%</b>	<b>10.00%</b>	<b>25.00%</b>	<b>33.33%</b>	<b>50.00%</b>
<i>Non-voting shares</i>	100%	99.00%	90.00%	75.00%	66.67%	50.00%
<i>Voting shares</i>		-0.50%	-5.00%	-12.50%	-16.67%	-25.00%
<i>Non-voting shares</i>	50%	49.50%	45.00%	37.50%	33.33%	25.00%
<i>Voting shares</i>		-0.33%	-3.33%	-8.33%	-11.11%	-16.67%
<i>Non-voting shares</i>	20%	19.80%	18.00%	15.00%	13.33%	10.00%
<i>Voting shares</i>		-0.17%	-1.67%	-4.17%	-5.56%	-8.33%
<i>Non-voting shares</i>	10%	9.90%	9.00%	7.50%	6.67%	5.00%
<i>Voting shares</i>		-0.09%	-0.91%	-2.27%	-3.03%	-4.55%

**Table 2**  
**Types and frequencies of Italian dual class unifications**

Time and type distribution of all Italian dual class unifications till October 2005. The year of frequency is defined as the year of the DCU's approval by the shareholders' meeting.

<i>Year</i>	<i>#</i>	<i>Coercive</i>			<i>Non-coercive</i>				
		<i>1:1</i>	<i>1:1 with cash refund</i>	<i>y voting for x nv or 1:1 with cash payment</i>	<i>1:1</i>	<i>1:1 with cash payment</i>	<i>1:1 with conv. limit</i>	<i>y voting for x nv or 1:1 with cash payment</i>	<i>y voting for x nv</i>
<i>1982</i>	1	0	0	0	1	0	0	0	0
<i>1986</i>	1	0	0	0	1	0	0	0	0
<i>1990</i>	1	0	0	0	1	0	0	0	0
<i>1991</i>	2	0	0	0	1	0	1	0	0
<i>1992</i>	1	0	0	0	0	0	1	0	0
<i>1993</i>	3	1	0	0	0	2	0	0	0
<i>1994</i>	4	1	0	0	1	1	1	0	0
<i>1996</i>	1	1	0	0	0	0	0	0	0
<i>1998</i>	6	2	0	0	3	0	0	1	0
<i>1999</i>	4	1	0	0	1	2	0	0	0
<i>2000</i>	8	4	0	1	0	2	0	0	1
<i>2001</i>	5	2	0	2	1	0	0	0	0
<i>2002</i>	2	1	1	0	0	0	0	0	0
<i>2003</i>	4	3	0	0	0	0	0	0	1
<i>2004</i>	2	2	0	0	0	0	0	0	0
<i>2005</i>	1	0	0	0	1	0	0	0	0
<i>Total</i>	46	18	1	3	11	7	3	1	2

**Table 3**  
**Stated reasons for abolishing dual class shares**

This table summarizes the stated reasons why the dual class companies in our sample decided to unify their shares. This information was compiled from company disclosures and newspaper articles. Some firms gave more than one reason. For 19 firms, no justification for the stock unification could be found. For 11 firms, there was no stated reason but the unification was connected with some extraordinary operation.

<b>Reason</b>	<b>Frequency</b>		
	<b>1<sup>st</sup> reason</b>	<b>2<sup>nd</sup> reason</b>	<b>3<sup>rd</sup> reason</b>
Simplify equity structure	5	1	2
Raise cash for new investments	4		
Improve attractiveness for international investors	2	1	1
Increase floating and liquidity	2	3	1
Because non-voting shares were too illiquid or unlisted	3		
Secure and increase current index membership		1	
Before or after the firm's privatization by the government*	5		
Before a merger*	3	1	
Before an equity issue*	3		
None or not found	19		
<b>Total</b>	<b>46</b>		

\*Reason not declared but DCU connected with the specified extraordinary operation.

**Table 4**  
**Financial characteristics of Italian DCU firms**

Summary statistics of the major financial characteristics of Italian DCU firms are reported in Panel A, while Panel B and C report the same financial variables respectively adjusted by the industry mean and median. Financial variables are from the last financial statement before the unification announcement date. *T*-Statistics for testing the equality of means between the DCU firms group and the industry control group are presented. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels. See the Appendix for detailed information on the construction of these variables.

**Panel A: Raw financial characteristics**

<i>Acronym</i>	<i>Brief Description</i>	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>Std. Dev.</i>	<i>Min.</i>	<i>Max.</i>
TA*	Total assets	38	4249	1062	12457	22	74768
MTB	Market to book	46	2.63	1.53	4.36	0.27	23.45
Leverage-mkt*	D/(D+E) at market values	38	0.40	0.39	0.25	0.00	0.90
Leverage-book*	D/(D+E) at book values	38	0.33	0.32	0.22	0.00	0.79
ROA1*	EBIT/TA (%)	38	7.90	6.40	6.77	-4.71	37.60
ROA2*	EBITDA/TA (%)	38	12.39	10.86	8.23	0.14	48.91
ROE	Return on Equity (%)	46	9.60	8.57	12.24	-16.17	51.73

\* Computed only on industrial companies

**Panel B: Industry-mean-adjusted financial characteristics**

<i>Variable</i>	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>Std. Dev.</i>	<i>Min.</i>	<i>Max.</i>	<i>t-stat.</i>
Ind-adjusted MTB	46	-0.685	-0.376	4.625	-13.560	21.995	-1.006
Ind-adjusted Leverage-mkt	46	0.038	0.036	0.313	-0.690	0.826	0.831
Ind-adjusted Leverage-book	46	0.045	0.017	0.237	-0.404	0.634	1.290
Ind-adjusted ROA1	46	0.040	-0.089	6.366	-14.796	22.139	0.043
Ind-adjusted ROA2	42	0.334	-0.784	7.477	-13.663	25.574	0.289
Ind-adjusted ROE	46	0.269	1.658	14.609	-45.563	52.400	0.125

**Panel C: Industry-median-adjusted financial characteristics**

<i>Variable</i>	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>Std. Dev.</i>	<i>Min.</i>	<i>Max.</i>	<i>t-stat.</i>
Ind-adjusted MTB	46	-0.404	-0.095	4.484	-13.560	21.995	-0.611
Ind-adjusted Leverage- mkt	46	0.038	0.050	0.308	-0.690	0.826	0.842
Ind-adjusted Leverage- book	46	0.042	0.005	0.243	-0.404	0.634	1.186
Ind-adjusted ROA1	46	-0.061	-0.307	6.633	-14.796	23.043	-0.063
Ind-adjusted ROA2	42	0.491	-0.689	7.946	-13.663	29.887	0.401
Ind-adjusted ROE	46	-0.400	0.215	10.781	-30.638	27.339	-0.252

**Table 5**  
**Ownership characteristics of Italian DCU firms**

Panel A reports summary statistics for the percentage fractions of voting equity held by the largest and second largest shareholder in the first available ownership data before the share class unification. Panel B shows summary statistics for non-voting shares' ownership variables by the largest shareholder. See the Appendix for detailed information on the construction of these variables.

**Panel A: Ownership of voting shares**

<i>Owntype</i>	<i>#</i>	<i>Fraction of votes owned by largest shareholder</i>					<i>Fraction of votes owned by second largest shareholder</i>				
		<i>Mean</i>	<i>Median</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>	<i>Mean</i>	<i>Median</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
Families	30	57.20	58.20	17.44	25.21	85.35	5.29	4.94	5.39	0.00	24.30
Government	8	69.60	69.85	15.31	43.22	86.73	4.28	2.08	5.71	0.00	14.60
Institutions	8	58.90	55.98	20.74	23.50	97.35	2.96	0.00	4.95	0.00	11.83
Total	46	59.65	59.90	17.92	23.50	97.35	4.71	3.36	5.33	0.000	24.30

**Panel B: Ownership of non-voting shares**

<i>Acronym</i>	<i>Brief Description</i>	<i>#</i>	<i>Mean</i>	<i>Median</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
<i>NV-declared</i>	NV-ownership as declared	8	41.28	42.60	23.41	7.82	81.71
<i>NV-inferred</i>	NV-ownership as inferred from DCU characteristics	18	32.05	18.78	27.19	4.50	93.98
<i>Alfa-NV</i>	NV-ownership as min. (declared; inferred)	21	30.56	19.94	23.67	4.50	81.71

**Table 6**  
**Other characteristics of Italian DCU firms**

Summary statistics of other characteristics of Italian DCU firms. Variables are computed for the subset of firms that are included in the event study. See the Appendix for detailed information on the construction of these variables. Values in percentages.

<i>Acronym</i>	<i>Brief Description</i>	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>Std. Dev.</i>	<i>Min.</i>	<i>Max.</i>
Quota-equity	Quota of nv-shares on total equity	35	17.55	18.01	13.78	0.004	0.4562
Acceptance-rate	% unified in non-coercive DCUs	24	83.79	91.08	19.85	22.67	100.00
Voting-premium	Voting premium at t-3	35	38.73	29.50	18.65	-17.99	213.77
Vote-segment	Value of Voting Right at t-3	35	54.20	49.17	42.61	8.98	225.88
TVR-fraction	Total VR as a fraction of all equity value	35	29.79	28.88	14.18	8.39	71.61
Legal-yield	Minimum NV-div. yield at t-3 mkt price	35	1.83	1.11	1.93	0.00	7.61
Current-yield	Non-voting div. yield at t-3 (last dps)	35	2.89	2.57	2.35	0.00	8.70
Expected-yield	Non-voting div. yield at t-3 (next dps)	35	2.91	2.57	2.26	0.00	9.72
Extra-yield <sup>§</sup>	Expected-yield - 10year T-bond yield	35	-3.06	-2.75	3.00	-9.14	4.51

§ Extra-yield is greater than zero for 5 observations.

**Table 7**  
**Ownership dilution and lower ownership/control separation after the DCU**

Summary statistics for the ownership of voting shares and ownership/control separation by the largest shareholder before and after the unification. Variables are defined for the subset of comparable ownership data (dummypaired=1). See the Appendix for detailed information on the construction of these variables. Ownership values in percentages.

<i>Acronym</i>	<i>Brief Description</i>	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>Std. Dev.</i>	<i>Min.</i>	<i>Max.</i>
Alfafirst0	Largest shareholder' ownership before DCU	30	55.85	54.60	17.34	23.5	85.35
Alfafirst1	Largest shareholder' ownership after DCU	30	54.24	55.06	17.38	23.5	83.41
O/C-before	Ownership/Control before DCU	23	0.762	0.804	0.243	0.181	0.999
O/C-after	Ownership/Control after DCU	23	0.873	0.999	0.233	0.250	1.000

**Table 8****Stock returns surrounding the announcement of dual class unifications**

Panel A reports percentage stock cumulative market-adjusted returns over window [x; y] for voting, non-voting shares and firm's market capitalization. Panel B reports expected returns for voting and non-voting shares and wealth transfer as percentage of the pre-DCU firm's market capitalization as from the wealth-transfer framework. Panel C reports three days CAR [-1;+1] for voting, non voting shares and market capitalization for the subsets where the largest shareholder owned block of non-voting shares (D-Alfa-NV =1) and the subset of operations where we have no information on the ownership of non-voting shares. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels for t-tests for zero means and Wilcoxon signed-rank tests for zero medians. Both parametric and nonparametric tests are run for testing difference means and medians in Panel C.

**Panel A: Actual stock returns surrounding the DCU announcement date**

Window	#	Voting shares			Non-voting shares			Market Cap.		
		#>0	Mean	Median	#>0	Mean	Median	#>0	Mean	Median
[-1. +1]	35	13	-1.56*	-1.25	30	+11.66***	+6.75***	18	+0.16	+0.13
[-2.+2]	35	14	-1.94*	-0.60	31	+12.50***	+6.53***	19	+0.08	+0.01
[-1.+30]	35	13	-1.45	-3.17	24	+15.12%***	+9.14%**	14	+1.00	-0.61

**Panel B: Expected stock returns from the wealth-transfer framework**

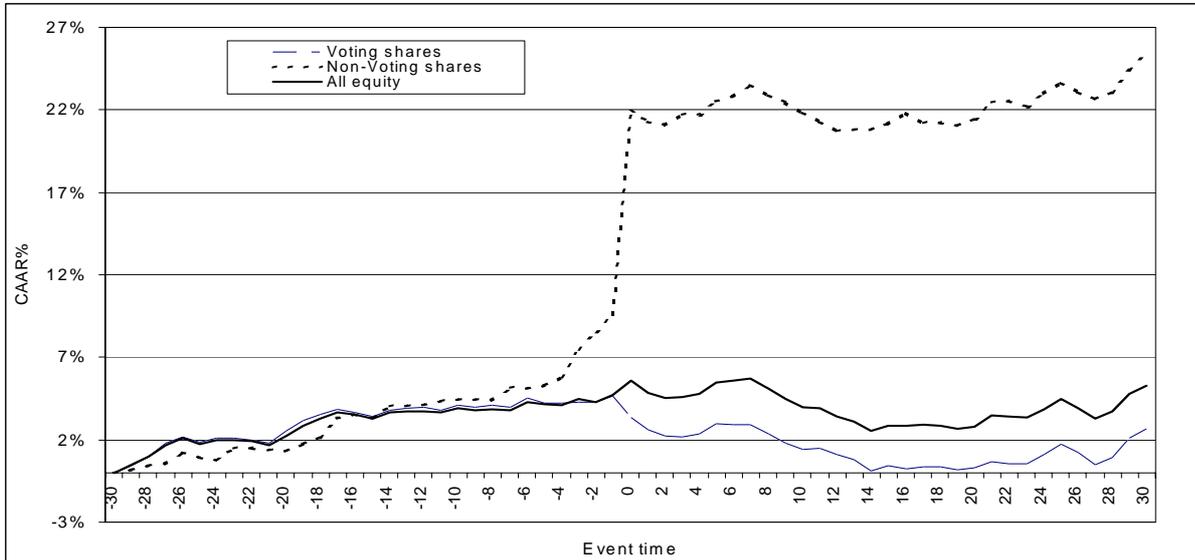
Acronym	#	Mean	Median	Std. Dev.	Min	Max
Exp-return voting	35	-3.40***	-1.09***	5.68	-29.11	-0.02
Exp-return non-voting	35	+18.30***	+14.12***	20.99	0.65	122.45
Exp-wealth transfer	35	2.53***	0.84***	3.78	+0.02	+18.66

**Panel C: CAR3 when largest shareholders owned blocks of non-voting shares**

	#	Voting shares		Non-voting shares		Market Cap	
		Mean	Median	Mean	Median	Mean	Median
NV-ownership	17	-3.71***	-4.59**	+12.29***	+9.37***	-1.48	-1.46
No information	18	+0.46	+0.80	+11.07**	+6.43***	+1.71	+2.10
Difference		-4.17***	-5.39**	+1.22	+2.94	-3.19**	-3.56**

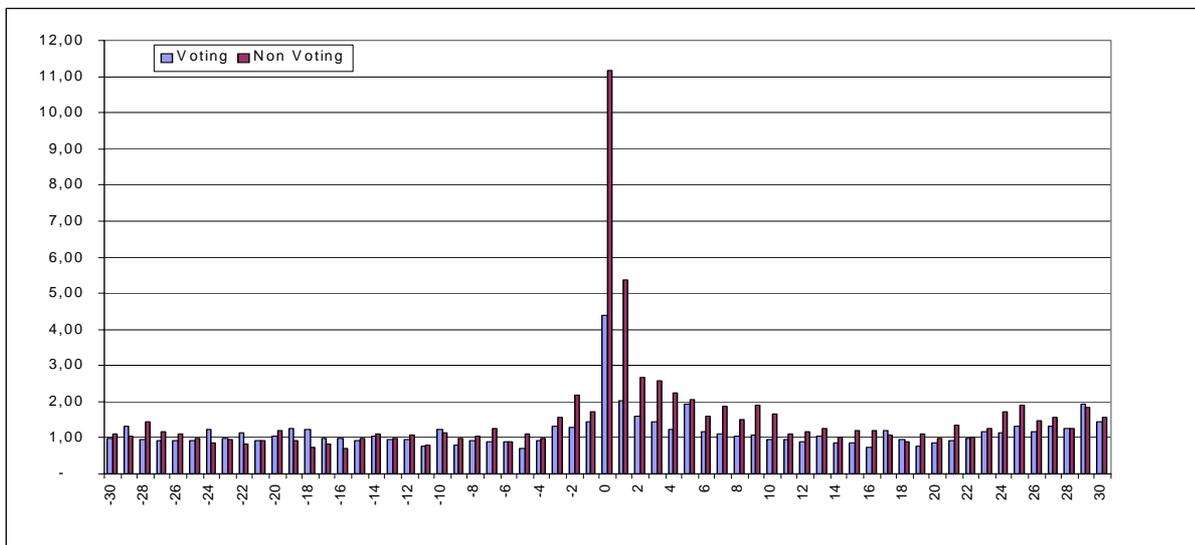
**Figure 1**  
**Graph of cumulative abnormal returns around the DCU announcement date.**

Graph of the average cumulative abnormal returns (market adjusted) of the voting, non-voting shares and firm's market capitalization in the 60 days around the announcement date (-30; +30) for the 35 observations in the event study subset.



**Figure 2**  
**Graph of abnormal volumes around the DCU announcement date**

Graph of the abnormal volumes of voting and non voting shares in the 60 days around the announcement date. Abnormal daily volumes are the ratio of the daily volume on the normal volume determined from 30 days till 4 days before the announcement date.



**Table 9**  
**Abnormal volumes before the unification announcement date**

Summary statistics for log-transformed abnormal volumes. Abnormal volumes (log-transformed as in Ajinkya and Jain, 1989) are the percentage higher or lower average daily volumes in the three days preceding the announcement date [-3.-1] compared with the pre-announcement period [-30-4]. See the Appendix for detailed information on the construction of these variables. \*, \*\*, and \*\*\* indicate statistical significance at the 10%, 5%, and 1% levels for t-tests for zero means and Wilcoxon signed-rank tests for zero medians.

<i>Acronym</i>	<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>Std. Dev.</i>	<i>Min.</i>	<i>Max.</i>
AbnLogvolume3-voting	35	2.61**	0.99*	6.90	-1.84	29.53
AbnLogvolume3-nv	35	5.77***	3.38***	9.73	0.22	37.50

**Table 10**  
**Regression analysis**

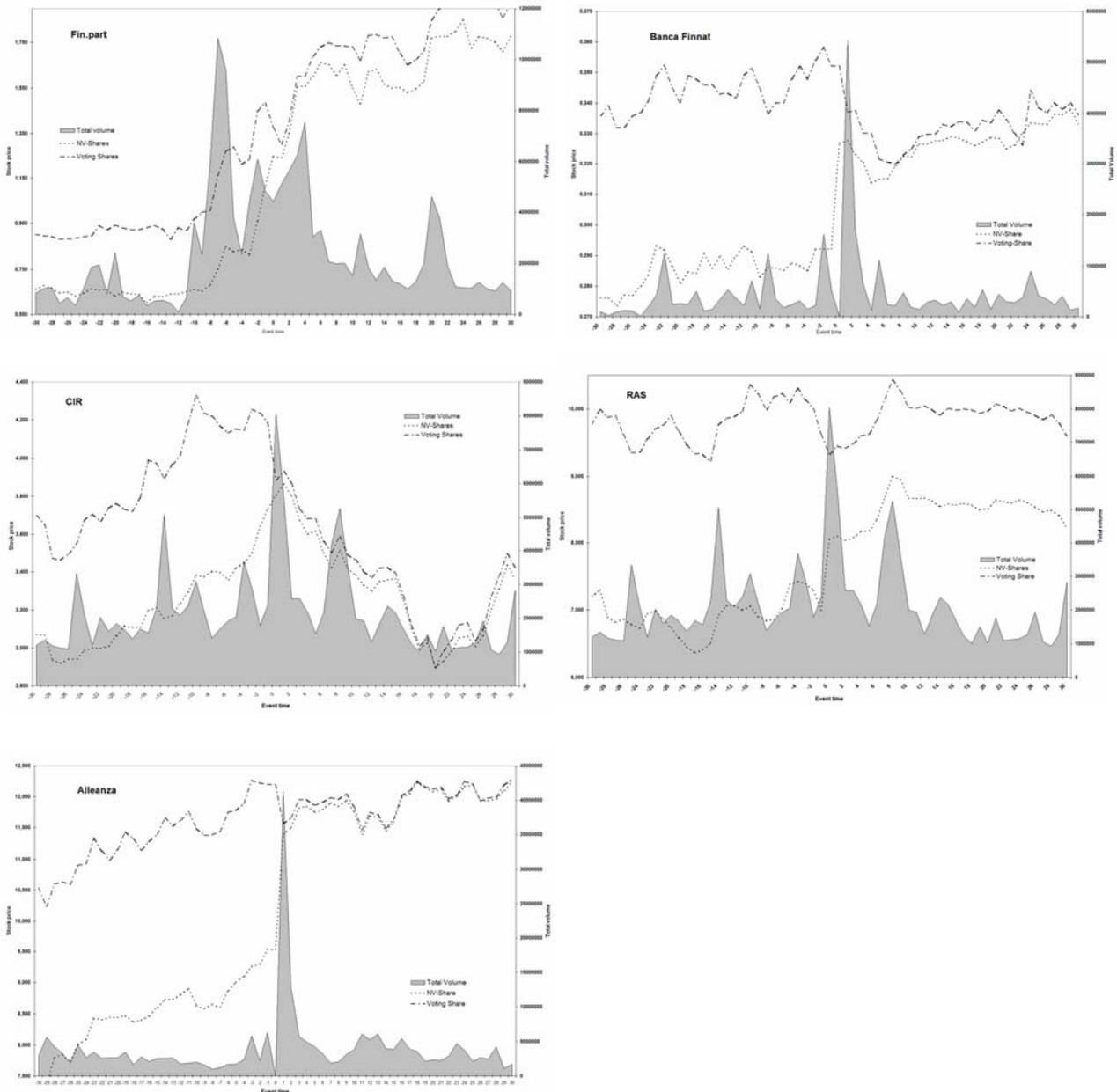
OLS cross-sectional regressions of three-day CAR for the voting shares (CAR3-voting), non voting shares (CAR3-nv), DIFCAR3 (CAR3-nv – CAR3-voting), on some explanatory variables. Also OLS regressions of expected wealth transfer between the two classes of shares as percentage of firm's equity value (Exp-wealth-transfer) and change in firm's value from the DCU announcement (CAR3-mktcap). See the Appendix for detailed information on the construction of these variables. \*, \*\*, and \*\*\* indicate statistical significance of the coefficients at the 10%, 5%, and 1% levels.

	<i>Dependent variable</i>					
	(1) CAR3-voting	(2) CAR3-nv	(3) DIFCAR3	(4) Exp-wealth- transfer	(5) CAR3-mkt- cap	(6) CAR3-mkt-cap
Intercept	-0.025	0.132	0.158	0.002	-0.065	0.006
Voting-premium	0.015	0.289***	0.274***	0.058***	0.064***	0.074***
Quota-equity	-0.291***	-0.170	0.121	0.120***	-0.271***	-0.226***
Alfafirst0	0.117**	-0.119	-0.236	-0.030	0.122**	0.072
Alfa2nd0	0.305	-0.996	-1.301**	-0.097	0.399*	0.217
Extra-yield	-0.240	0.254	0.495	0.084		-0.059
D-compensation	0.002	-0.155***	-0.157***	-0.031**		-0.038*
Size	-0.002	0.006	0.008	0.001		-0.002
R <sup>2</sup>	0.489	0.557	0.579	0.702	0.397	0.493
Adj- R <sup>2</sup>	0.358	0.442	0.471	0.625	0.317	0.362

**Figure 3**

**Stock prices and volumes around the DCU announcement date for the five case studies**

Stock price and total volumes (voting + non-voting) behavior in the 60 days around the announcement date for the five DCU case studies: Fin.part, Banca Finnat, Cir, Ras and Alleanza. The stock price of the two classes of shares don't get aligned at the Ras DCU announcement date since the DCU was requiring a 1.059 euro cash payment for converting a non-voting into a voting share.



**Table 11****Ownership and return data for the five case studies**

For the five case studies, we report the voting premium; quota of non-voting shares on total equity; ownership of voting equity by the largest shareholder before the DCU; inferred and disclosed ownership of non-voting shares by the same largest shareholder; actual return for voting, non voting shares and firm's market capitalization (three-days market-adjusted CAR); expected return from the wealth transfer framework for the voting and the non voting shares (based on pre event stock prices); estimated wealth transfer as percentage of the firm's market capitalization based on the wealth transfer framework.

	Voting- premium	Quota- equity	Alfafirst0	NV-Ownership		Actual return % (CAR3)			Expected return		Exp -wealth transfer
				NV- inferred	NV- declared	Voting	Non- voting	Mkt cap.	Voting	Non- voting	
<i>Fin.part</i>	53.44	39.09 <sup>§</sup>	41.95	59.51	58.52	-6.90	+26.80	+2.47	-17.42	+26.71	+12.85
<i>Banca Finnat</i>	23.53	40.00	71.24	93.98	81.71	-4.59	+14.04	+0.13	-7.62	+14.12	+4.95
<i>Cir</i>	21.70	22.51	54.93	19.94		-6.73	+6.44	-4.50	-4.01	+16.82	+3.24
<i>Ras</i>	36.99	30.08	51.40	49.02	43.00	-4.05	+13.16	-1.46	-4.90	+15.96	+3.73
<i>Alleanza</i>	31.43	15.55	54.28	9.47	7.82	-7.78	+17.12	-1.23	-3.72	+26.54	+3.26
<b>Mean</b>	33.42	29.45	54.76	46.39	47.76	-6.01	+15.51	-0.92	-7.53	+20.03	+5.61

§ Includes preferred shares' quota.