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THE VALUE OF CONTROL: A STUDY OF DUAL-CLASS SHARES IN EUROPEAN LISTED COMPANIES

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Abstract

In this paper we identify the levels of the value of a control block vote and thus the lower bound of the value of control as well as private benefits attached to it. The identification is done for companies listed in the European Union's stock exchanges where dual class stock with differentiated cash flow and voting rights is allowed. The values of control block votes are then compared on yearly basis for a period 2003 to 2007 and are found statistically larger than zero for all the years. In particular we look at the levels of the first and the ultimate year of the period and find that the value has decreased significantly from what it was in 2003. The average values are 4.48% of the company market capitalization for year 2003 down to 2.88% of the company market capitalization for year 2007. The biggest change is noted in Italy, whereas the other stock markets seem to follow the trend at a much slower pace or the levels stay practically the same. The country level of corporate governance is attributed to matter most for this change.

Keywords: Corporate Governance, Measured Value of Vote, Dual Class Shares, Private Benefits of Control.

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1 Introduction

The relationship between ownership and control has been a problematic issue since early times of the history of corporations – the establishment of the Verenigde Oostindische Compagnie (V.O.C.) in 1602 in Denmark after unification of several smaller businesses. As noted by Hopts and Leyens (2004), this corporation was similar to current corporations in many ways – it was a person legally, its rulers had limited liability and its shares were publicly traded as well as listed. Yet, soon after the establishment, the V.O.C. had the first problems coming caused by its founders, who were involved in what today is known as self-dealing transactions. The joy did not last long, as in 1623 stricter regulations were passed (Hopts and Leyens, 2004). But the first years of the V.O.C. were perhaps the first time of someone enjoying private benefits of control (PBOC) in today's sense of the expression.

PBOC stem from the perceived value of being in control. However, one can note that the words 'perceived' and 'private' are linked to the phenomena of at least some level of subjectivity. And indeed subjective it is. PBOC can take many different forms. As discussed by Barak and Lauterbach (2007), one in power can consume private benefits directly; the best example being tunnelling of the company resources. Though usually hard to spot due to various types of camouflaging of the real situation by the one in control, this kind of consumption can at least be measured in monetary terms. It is not so with the indirect PBOC consumption. Who can tell whether the charity donation is not more valuable for the controlling shareholder or the CEO of the company in terms of honour and social status improvement, than to all the shareholders according to their cash flow rights acquired? Or if that corporate jet was actually needed, especially with crocodile leather seats included? This uncertainty of whether a private need or a company need is fulfilled leads to difficulties in measurement, thus requiring proxy tools to be used for estimations.

Various insights and theories on the accurate estimation of the value of control have been developed so far. One of the more popular, used by Nenova (2003), Doidge (2003), takes into account the difference between superior and inferior voting class shares as a proxy for finding the lower bound of the value of control and thus the estimate of PBOC. This method is also the most direct one. However, there are many more indirect methods. Nenova (2003) lists the following: block premium studies (see Barclay and Holderness, 1989, Dyck and Zingales, 2001), returns in case a proxy fight appears (see Dodd and Warner, 1983), takeovers and managerial resistance to them, returns to the bidder in a value destroying acquisition and so on. Studies of the company's performance after the dual-class share IPO

are developed as well (see Ehrhardt and Nowak, 2003). In this thesis we focus on the first method – the comparison of superior and inferior voting class shares in order to obtain the value of a control block vote, and thus the lower bound of the value of control.

Our research questions are the following: **How large is the value of control block votes in companies holding two classes of listed shares in seven stock exchanges of the European Union Member States? How had this value been changing over the years 2003 - 2007?**

Direct cross country and single country studies had mainly been done in years up to 2003. In turn, this paper contributes to the renewal of the topic data on European Union's largest stock markets, providing fresh levels of the value of control block votes. What is more, we compare the change of this value over 5 years time in countries, where many official (thus binding) and unofficial (e.g. public opinion formation) pressures were made in order to decrease the use of Control Enhancing Mechanisms (CEMs), or at least make them more transparent. At least to our knowledge this is the first study doing a cross-country analysis over time on the subject.

The thesis is constructed in the following way. Section 2 reviews the relevant literature, focusing on two issues: the value of control and private benefits attached to it, and dual class shares as a capital structure. Section 3 introduces the methodology of the paper as well as hypotheses to be checked. Section 4 presents the data characteristics, while Section 5 outlines the empirical results of the paper. Section 6 explains these results, and Section 7 concludes with suggestions for further research presented in Section 8.

2 Literature Review

In this section we firstly discuss the value of control and PBOC. Secondly, we look at dual class shares as a share capital structure and note the breach of trust in disproportional ownership. Thirdly, we review studies that explored the value of vote in companies with dual class shares. Finally, we summarize the section with developments in the European Union's stock markets.

2.1 Private Benefits and Value of Control

Not so long ago a company was considered to be a "black box", a mathematical cost minimization or profit maximization function, where you have inputs, you have outputs, and you have engineers to take care of the in-between. This approach – "a neoclassical firm" –

had many limitations, which were noted even by Adam Smith (Jensen, Meckling, 1976). However, it was not until Berle and Means (1932), Coase (1937) and later Jensen and Meckling (1976) published their works where the theory of the firm was reshaped.

The reshaped theory claims that any kind of company is not a single and undividable unit, thus it cannot exactly be its legal definition (company = person). Any company is formed by people and of people and because of that inside of any company there might be conflicts of interest and arising inefficiencies which bear costs. To continue, the boundaries of the company are not clear, and its goals appear to be much more diverse than just to maximize shareholder value. Thus, Jensen and Meckling (1976) portrayed a company as a nexus of contracts, an approach able to handle differences in goals and values of company's stakeholders. At first, these contracts were assumed to be explicit, yet later studies proved that one has to take the account of implicit contracts as well (Zingales, 2000). To complicate matters further, the understanding that contracts are not complete came in light. You cannot have all the possible events and conditions written in one contract – otherwise the contract becomes endless and would take years to read, agree, and sign. It became clear that someone (usually a CEO or the largest shareholder) must have residual rights to solve any problems with an incomplete contract on frequent basis (for further analysis, see Williamson, 1988).

However, the residual decision power can be used not only to solve problems, but also to extract company resources for personal gain. This is where the value of control and PBOC studies appear. According to Dyck and Zingales (2001), "the theoretical literature often identifies private benefits of control as the "psychic" value some shareholders attribute simply to being in control", but not only – it is also "perquisites enjoyed by top executives" or majority shareholders. Thus, the benefits are hard to measure, because the value of most of them is personal and not verifiable in a direct way.

Another study by Ehrhardt and Nowak (2003) classify the benefits into four categories depending on how transferable the benefits are and whether they are pecuniary or non-pecuniary (see Appendix 1). The authors argue that the appearance of any kind of benefits deprives the majority shareholder from maximization of the total firm value – the personal optimal solution is maximizing private benefits, no matter in what form. This leads to a worse situation of the minority shareholders, as the monitoring of the main shareholder is costly and sometimes impossible. What is more, Control Enhancing Mechanisms (CEMs), which in one or the other way separate the ownership and control rights in a company, make it more attractive for the one in power to consume the company resources and pay only a fraction of the amount consumed. There are 13 of such CEM's defined (ECGI et al., 2007),

among them several classes of shares, pyramid structures, cross shareholdings, shareholder agreements and other.

2.2 Differentiated Voting Classes of Shares

Having several classes of shares with disproportionate cash flow and voting rights attached to each class, thus inhibiting the deviation from One Share – One Vote (OSOV) principle, is one of the most popular CEMs. It is common for companies to have several classes of shares in Western Europe, as is noted by Faccio and Lang (2002). In fact, they find that: "Dual class shares are used by few firms in Belgium, Portugal, and Spain, but by 66.07%, 51.17%, and 41.35% of firms in Sweden, Switzerland, and Italy" respectively. Yet it is also notable that the class of shares with superior voting power is listed on the stock exchange not as often, especially in new IPOs, thus making the comparison among the two classes harder (see Holmen and Högfeldt, 2004).

To continue, this type of share capital structure serves for several purposes. As noted by Pajuste (2004), various studies find that firstly, it allows the founders of the company acquire capital through an IPO not giving up the control rights, and secondly, it provides a substantial defence against takeovers. Thus the dual class share issuance should be attractive for new companies, where the founder does not want to lose his or her influence over the decisions of the company. Partch (see Cornett and Vetsuypens, 1989), in her article "The Creation of a Class of Limited Voting Common Stock and Shareholder Wealth" argues that: (1) dual class share structure can even be beneficial in cases when the management or main shareholder(s) has a dilemma on whether foregoing a potential project if not raising capital from outside or diluting the control and even threatening own positions; (2) the idiosyncratic risk is reduced for the incumbent managers and shareholders as there is less capital to be invested into one company which contributes to better diversification.

However, the dual class ownership might also inhibit entrenchment of the owners or managers, which is not always positive. As reported by Holmen and Högfeldt (2004), though the main benefits observed in Sweden are non-pecuniary – such as reputation and pride, the wealth and even more control concentration in one hands is rather dangerous, especially in presence of heirs, who might not be ready to use the capital inherited in most efficient ways and involve themselves into empire building and other much more direct private benefit extraction.

So the question arises whether it is bad to issue dual class shares. If we consider the Inherent Right of Self Organization (IRSF) principle, issuing several classes of shares is not bad because the company should be free to choose the capital structure it perceives to be the most feasible. Thus, it becomes a case to case, not general rule of thumb selection of the capital structure. For example, companies with highly dispersed ownership might benefit from the deviation of OSOV principle if the largest shareholder(s) monitors the management actions and helping to reduce the free-riding problem. Yet, when instead of monitoring the largest shareholder starts expropriating company resources him- or her-self, the use of dual class capital structure is deficient. Many scholars focused on the issue, estimating just how large the value of controlling a company can be. Some of the studies done for companies which have issued dual class shares are presented in the following section.

2.2.1 Studies of the Value of Control

Most studies of companies which adopted dual class shares can be regarded as the calculation of the value of vote. In this type of studies, the price differential between classes of shares, when all other differences, such as differentiated cash flows per share etc., are accounted for, can be regarded as the value one puts on being in control and thus the ability to extract private benefits. The theoretical foundations for this type of studies were laid by Grossman and Hart (1987), whereas such a link between share price differential and value of control was researched in studies by Modigliani and Perotti (1997), Rydqvist (1996), and Zingales (1995).

All the previously mentioned studies were done for single countries, and it was Nenova (2003) who took into consideration also country-specific factors by performing a study on the value of votes in the controlling block in 18 countries with a sample of 661 dual-class companies. She considered the value of votes in a control-block to be the “lower bound for actual private benefits of the controlling shareholder” (Nenova, 2003). To continue, there are several insights she made. Firstly, the value of control is usually revealed in the contests for overtaking it. The premiums paid over the value of security are attributed to the willingness of a potential contestant to bid more if he or she believes that the value of being in control is positive. This drives up the prices of superior voting class shares in comparison to inferior voting class shares.

Secondly, the price difference, or in other words the voting premium, is observed even in the absence of contest for the acquisition of control at the time of observation. This can be explained by the fact that the future prospect of challenging incumbent shareholders to

gain control of a company keeps the price difference in place. In turn, the higher the difference, the more valuable the control is assumed to be.

As was the case for the block sale method adopted by Dyck and Zingales (2001), the inter-country results in Nenova's (2003) study varied significantly: from 48% of the total firm value for South Korea, 29% of the firm value for Italy, 27%-28% for France, to less than one percent in Scandinavian countries and -2.88% in Hong Kong. What is more, in the same study Nenova (2003) also looked at the most important factors to the size of the value of vote. These appeared to be "the legal environment, law enforcement, investor protection, takeover regulations, and power-concentrating corporate charter" which explained 68% of the value variation. Many of these factors can be traced back to the studies by La Porta et al. (1998).

It has been puzzling why the Scandinavian companies experience such low value of vote and if that means that there are low PBOC in these countries. As discussed by Adams and Ferreira (2007), "shareholder-specific private benefits <...> are likely to be high, but they are not reflected in the market prices of control transfers" so "in countries like Sweden, where family control is ubiquitous, but the legal environment and media awareness are strong, the measured value of control is likely to understate the value of private benefits of control substantially".

Nevertheless, Holmen and Högfeldt (2004) argue that many IPOs would not have occurred at all if there had not been a dual class share system in Sweden. They claim that the founders of the company that made an IPO act in consistence with PBOC theories, though the benefits are non-material, thus no strong underpricing of the B-class shares against A-class is visible.

2.2.2 Out of Fashion?

European Commission's attempts to modernise and homogenize financial markets inside the European Union were done in a continuous as well as controversial manner and by pushing through the OSOV principle at least at first (Khachaturyan, 2006). This can be explained by the thought that deviations from OSOV cause a loss for a company value. For example, Ehrhardt and Nowak (2003) look at the performance of the companies after the IPO of one or both classes of shares and observe the tendencies of the stock price, which are later related to the extraction of PBOC. They find a significant underperformance of dual class share IPOs in Germany.

The reaction of investors and companies was rather quick. The developments in some of the main European stock markets have been captured by Pajuste (2004), where she finds a

unification trend of dual class shares. This trend, she claims, is driven by two lines of argumentation by the companies – "rational" and "not-so-rational". The "rational" line of argumentation takes into account that some investor groups (e.g. institutional investors) cannot have superior class shares in their portfolios. The "not-so-rational" line of argumentation is that the company is not as good having dual class shares as it would be if only single class was present.

What is more, having several classes of shares is perceived to be "out of fashion" if the company wants to approach investors for additional capital. This also present a vice versa behaviour if compared to the one observed when the company goes for the IPO with dual class shares. The "out-of-fashion" feeling has been driven by the requirements of the "new markets" in Germany and Italy to list only one class of shares as well (Pajuste, 2004).

All in all, the perception of CEM's and among them several classes of shares as a capital structure of the company has been changing in recent years. The aim of this paper is to catch the effects of this change on the values of control block vote over time. Though these values represent only the lower bound of the value of control, the change of the level of them provides also a grasp over the situation with pecuniary PBOC extraction.

3 Methodology

In this section we provide the model for calculation of the control-block votes' value, scaled by the company's market capitalization. We then formulate hypotheses to be checked as well as expectations of the outcomes.

3.1 Model

To relate the share price differential between several classes of shares with the value of vote, one can choose to directly calculate just how much one vote is worth by subtracting the price of inferior voting class share from the superior voting class share and then dividing the difference by the difference in voting rights attached to each class accordingly. However, to be able to link the value (price) of vote and the value of control, we need to take account of the value of votes in a share block the holder of which can effectively control the company. Thus we use a slightly modified model, developed by Nenova (2000, 2003), which bridges the gap between dual class share prices and the combined value of votes in a control-block, and thus control of the company.

Nenova (2003) refers to the value of vote as "the total value of control block votes as a share of the firm market value" or simply as a measured value of vote (MVOV). It is calculated in the following way:

$$MVOV = \left(\frac{P_S - P_F}{1-b} \right) \left(\frac{(N_S + bN_F)/2}{N_S P_S + N_F P_F} \right) \quad (1)$$

Here:

P_S – price of one share of a class holding superior number of votes per share;
P_F – price of one share of a class holding inferior number of votes per share;
b – votes per share, where b<1;
N_S – the total number of shares of a class holding superior number of votes per share;
N_F – the total number of shares of a class holding inferior number of votes per share.

The measured value of vote can be directly calculated. Since it is scaled by the company size, it is also directly comparable. Nenova (2000) notes three factors, affecting the measured value of vote. These are summarised in the second equation below.

$$MVOV = \pi BEN - \pi COST + EDIV \quad (2)$$

Here:

BEN – net benefits derived by holding a block (thus, legal costs subtracted);
COST – block holding costs;
EDIV – excess dividend paid to the superior class of shares
π – probability that the contestant will acquire the block.

The estimation of values on the right hand side of the equation is out of the scope of our research. Nevertheless, it helps to explain why the measured value of vote can become zero or negative by providing simple mathematical connections between the measured value of vote, private benefits of control, block holding cost and difference in dividend and other payment rights.

We can analyze further each of the three components. Firstly, block holding costs might come from several sources. The most prompt one is the substantial investment made in the company and limited liquidity (in most cases) of the superior voting class of shares. The limited share liquidity drives the measured value of vote down as the investment in case something goes wrong is most probably sunk in the company. Secondly, the excessive dividend payment for the inferior voting class shares drives the measured value of vote down. However, as noted by Pajuste (2004), the excessive dividend payment might become a too heavy burden especially if the interest rates for the company loans become lower than the ones the company promised to pay as preferential dividend. Thirdly, laws and their enforcement are of key importance. The private benefits are extracted from the total value of the company, and thus from the reach of other shareholders. The extraction comes at a cost,

which can be attributed to the minority protection – the stricter it is – the harder the extraction and the higher the cost (Nenova, 2003).

3.2 Empirical Design and Hypotheses

In this sub-section we clarify the usage of the model presented beforehand and formulate hypotheses to be tested. Our expectations of the outcomes are provided as well.

To begin with, we calculate measured values of vote for each company of the sample. For this we use weekly closing share prices, which are averaged on yearly (or 52 week) basis. Additionally, we take the prices of those weeks where both classes have closing prices, eliminating the entries where only one class has been traded. This helps us to achieve more comparable results among the share classes and thus more precise measured value of vote.

The first thing we should check is whether the measured value of vote is statistically larger than zero. As noted in the literature review section, the value of control block votes mostly reflect directly transferable and pecuniary PBOC, thus statistical significance of this value would indicate the presence of such PBOC in the country. Following the findings of earlier works (see Section 2.2.1) we expect the overall values to be statistically larger than zero. This is also the case for all country groups by legal origin except for Scandinavian law countries, where the levels were recorded to be very low, and in Finland even negative (Nenova, 2003).

Hypothesis 1: *The pooled average measured value of vote of sample countries is statistically larger than zero for all the years 2003 – 2007.*

The basis of our research lies on the thought that the value of control is not constant over time as it depends on firm level, industry level and country or even inter-country level variables (as shown by Modigliani and Perotti 1997, Nenova, 2003, Rydqvist, 1996, Zingales, 1995,) which in itself are changeable. Thus an active stance to alter the variables of influence should also change the value of control and thus the measured value of vote. Inside the European Union these influences came both from markets and from bureaucrats (see Section 2.2.2). We hypothesize that these influences as well as publicity on the issue have made it much harder to directly consume PBOC, thus decreasing measured values of vote over the focus years.

Hypothesis 2: *The average measured value of vote inside sample countries has decreased during the years 2003-2007, and the difference of the levels*

between the period-start and period-end years is statistically larger than zero.

In addition to checking the abovementioned hypotheses, we discuss two issues. Firstly, we divide the sample into companies having preferential (or minimum) dividend attached to inferior voting class of shares and companies with equal dividend distribution to both classes. Usually, one would expect the measured value of vote to be larger in companies where the dividend rights are equal among the share classes. However, it would be naive of us to expect that this is the case as already in the early stages of data gathering it appeared that most of the companies with equal dividend rights are in Scandinavian countries, which are noted for small direct expropriation of company resources, causing the difference between two classes of shares to be minimal. We check whether the difference between the levels of years 2003 and 2007 is significant for both groups.

Secondly, where applicable we look at the trends on a single country level. This is done in order to identify if there are any drivers of the change during the study period from the year 2003 to 2007. Though the countries are members of the European Union, we expect a great variation of the levels of measured value of vote because of unique country differences.

In addition, to identify key issues and their influence on the measured value of vote, we conduct an interview with A. Pajuste[1], who helps us to attribute the issues and influences holding most importance on the pattern of measured value of vote over time we see.

4 Data

4.1 Sample

The definition of the company eligible to enter the sample is the one used by Nenova (2003) with adjusted listing and trading requirements to suit our study. The company (1) has issued and is publicly trading at least two classes of shares, where each class has different voting rights per same cash flow attached; (2) each share class was listed and traded from January 1, 2003 to December 31, 2007; (3) the listing of the two classes is made in the company's domestic stock exchange; (4) shareholders are not allowed to convert freely from the inferior voting class shares to the superior; (5) fixed dividend payment is not present for any class of

[1] Anete Pajuste holds a PhD in Finance from Stockholm School of Economics, was a visiting fellow at the Department of Economics in Harvard University. Her research interests cover corporate finance, corporate governance, behavioural finance, and transition economies. She is the author of several studies used in our work as well.

shares, though minimum dividend and preference in dividend distribution is allowed; (6) a company cannot redeem or call in the shares issued at a pre-set price; (7) the company is not a bank.

Using Reuters Database we find 112 listed companies which have dual class shares as their capital structure in seven European Union countries – Austria, Denmark, Finland, Germany, Italy, Sweden, and the United Kingdom. However, to match all the sample criteria, 27 companies are excluded because of not being listed in the domestic exchange, inferior voting class shares being easily convertible into superior voting class shares, or equal cash flow and voting rights. To continue, several cases are excluded because of different reasons than the sample requirements, such as being restructured because of bankruptcy and not publicizing the information on the dividend rights. What is more, as we are taking only the dates when both share classes are traded, we have to exclude two Danish companies GPV Industri AS and Spaencom AS due to the absence of weeks when both share classes have closing prices in 2003. Nevertheless, we allow a slight deviation from the requirement of being listed starting from January 1, 2003 for two Italian companies, which start the trade later than the required date. We motivate this move by the fact that some of the companies due to "both classes traded at the same week" requirement experience a much lower number of yearly observations than the two latter companies in 2003.

All in all, we are left with 85 companies matching the criteria (see Table 1 below).

Table 1. Dividend Rights by Country

Country	No. of Companies	With Preference or Guaranteed Minimum Dividends of Inferior Shares	With Equal Dividend Rights
Austria	3	3	0
Denmark	5	2	3
Finland	9	2	7
Germany	20	19	1
Italy	20	20	0
Sweden	26	0	26
United Kingdom	2	0	2
Total	**85**	**46**	**39**

Table 2. Sample Characteristics by Countries

Country	Non-voting present	Classes of Shares (Superior/ Inferior)	Voting Rights per Share (Superior/ Inferior)
Austria	Yes	Ordinary/ Preference	1/0
Denmark	Yes	A/B	20/2, 10/1, 1/0
Finland	No	A/B, A/R, K/A, K/Preferred	20/1, 10/1
Germany	Yes	Ordinary/ Preference	1/0
Italy	Yes	Ordinary/ Savings or privileged	1/0
Sweden	No	A/B, A/C, C/A	1000/1, 100/1, 10/1, 5/1
United Kingdom	Yes	Ordinary/Non-voting ordinary	1/0

Source: Authors' Data

Germany, Italy and Sweden dominate in our sample due to the largest number of companies with dual class shares – the three countries together constitute 77.6% of the total amount of companies. On the other hand, Austria, Denmark and the United Kingdom are only represented by three, five and two companies respectively. One can also note that the number of dual class share listings in our sample is much lower than Nenova's (2003), who found 261 such companies in 1997 in the countries represented in our sample. There might be several explanations for this. The first one was already touched upon in the literature review section – many companies unified their two share classes into one. But one of the share classes might also be delisted due to low liquidity or just not enough free float or might not have been listed at all to start with.

Reuters Database is used for the collection of weekly closing stock prices over the years 2003-2007 as well. We got to know that Reuters already incorporates stock splits into weekly closing prices, thus the most recent number of shares outstanding is gathered, mostly for the end of 2007 from companies' filings with the stock exchanges, or companies' websites. Voting and dividend rights for each class of shares are taken from the companies' articles of association, companies' filings with national stock exchanges, or companies' websites.

Stock properties in Scandinavian companies differ from the rest of the sample firms (see Table 2 on the previous page). In Scandinavia mainly A and B classes exist, having equal dividend rights but diverse voting rights between the two classes across sample companies: the smallest one is 5 to 1 and the highest – 100 to 1 in Sweden. None of the ratios have changed over the studied period of time, except the case of Ericsson when the ratio from 1000 to 1 in 2003 changed to 10 to 1 in 2004. Nevertheless, two Danish companies have issued non-voting shares with preference dividend. Two companies from the United Kingdom are similar to the most of Scandinavian companies in terms of dividend rights which are equal to both classes of shares, yet one of classes is non-voting.

On the contrary, Austrian, German and Italian companies' share capital structure is made of ordinary and preference/privilege shares. The latter class carries no voting rights, but have preference in dividend distribution while the ordinary shares have voting rights assigned.

When sample companies are assigned to sectors according to Global Industry Classification Standard (GICS) developed by MSCI Barra (see Table 3 on the next page), it is notable that Industrials take the biggest share of our sample – approximately a quarter of companies, and are followed by the Consumer Discretionary Sector with companies

producing goods and services sensitive to economic cycles, the Financials Sector, and the Materials Sector where a wide range of commodity related manufactures operate. The information of sub-industries, which are later grouped into sectors based on GICS structure, is obtained from the Reuters Database.

Lastly, we assign the sample countries to 4 different legal origins according to Djankov et.al (2006). Scandinavian civil law legal origin being represented by Denmark, Finland and Sweden with 40, German civil law – by Austria and Germany with 23, French civil law – solely by Italy with 20 and Common law – by UK with only 2 companies.

Table 3. Companies by sectors according to Global Industry Classification Standard (GICS)

Sector	No. of Companies	Sector Definition (based on GICS definitions)
Materials	12	A variety of commodity related manufacturing industries: paper products, construction materials, commodity chemicals, diversified metals and mining, steel producers
Industrials	21	Companies engaged in one of the following activities: construction and engineering, building products, industrial machinery as well as industrial conglomerates, construction and farm machinery and heavy trucks, office services and supplies; provision of marine and airport services
Consumer Discretionary	16	The industries which tend to be the most sensitive to economic cycles. Manufacturing segment: automobile manufacturers, house wares and specialties, apparel, accessories and luxury goods, household appliances. Service segment: publishing, broadcasting
Consumer Staples	8	Businesses which are less sensitive to economic cycles: food retail, hypermarkets and super-centers, brewers, distillers and vintners, soft drinks, household products, personal products, department stores, home improvement retail, distributors
Health Care	4	Firms engaged in providing health care equipment, health care technology. Companies involved in the research, development, manufacturing and marketing of biotechnology products
Financials	14	Companies taking up the following activities: asset management and custody banks, multi-sector holdings, other diversified financial services, property and casualty insurance, multi-line insurance, real estate management and development
Information Technology	6	Companies from 2 general areas: Technology Software & Services - internet software and services, application software; Technology Hardware & Equipment - electronic equipment manufacturers, communications equipment, technology distributors
Telecommunication Services	2	Integrated telecommunication services provided through a wide rage of networks
Utilities	2	Multi-utilities, independent power producers and energy traders

Source: MSCI Barra, 2008.

4.2 Representativeness

An essential question to ask in our study is what exactly the sample we select represents. To answer this question, we firstly define why and how the sample selection was done and secondly indicate possible biases this process might introduce.

The first and the main drawback comes from the non-random sampling method used for our sample selection. The main obstacle for random sampling is that the disproportionate ownership is an endogenous factor of a firm (Adams and Ferreira, 2007). According to the same authors, "the ownership structure cannot be randomly assigned across companies". As the developed methodology requires a specific capital structure in order to function properly, we have to pick only the companies having issued dual class shares for the calculation of the measured value of vote. What is more, we constrain ourselves to only one region – the European Union, and seven countries in particular. Thus we support our hypotheses testing with non-parametric statistics.

To continue, the number of companies with both classes of shares listed is limited and, as can be seen from our sample, is rather small if compared to the total number of companies in the European Union or even with the total number of companies with dual class shares in the same region. Indeed, although companies issue dual shares, not all of them choose to list both of them. As described by Pajuste (2004), one of the reasons for such choice could be the willingness to maintain unchanged ownership within a firm. Due to unavailable information on how stock market values the shares of the unlisted class we cannot estimate the lower bound of the value of control in such companies and compare them.

This issue is not new in the field. Adams and Ferreira (2007) note that the values estimated by the method we use have a downward bias. The main concern here is the already discussed transferability of the benefits. If the controlling shareholder cannot get the value one attaches to his or her shareholding, the transaction does not occur, thus the price is not recorded. And the value one attaches consists of both pecuniary and non-pecuniary benefits one can extract, which can also be regarded as shareholder-dependent and shareholder independent. A similar argument could be said about listing the superior voting class on the stock exchange. The companies listing both classes of shares will be the ones in particular need of the listing – either additional capital or incumbent owners' willingness to reduce their concentrated shareholdings in the most effective way.

To sum up, sample selection bias is considered as one of the threats to the internal validity of the study results. Due to the abovementioned reasons sample companies do not and cannot fully represent all the companies from seven stock exchanges having dual class shares. However, it is almost unrealistic to achieve fully representative sampling, i.e. to avoid threats to the validity of the results as discussed by Adams and Ferreira (2007). Thus we interpret our findings with caution.

5 Empirical Findings

In this section we discuss the empirical results of the paper. The summary of our findings is presented in Tables 6 and 7 (see Appendix 2). In general we note a trend downwards of the average measured value of vote. This can be seen in Figure 1, where the average measured value of vote for all sample companies is depicted. One can observe even stronger trend downwards for companies having preference dividend for inferior voting class shares in place. A small decrease is also notable in the group of companies with equal dividend rights for both of their share classes up to 2005, however afterwards it picks up again in 2007 reaching almost the level of 2003. All in all, the lowest averages for measured values of vote are experienced in years 2005 – 2006, while in 2006 to 2007 there is a slight increase from 0.0256 to 0.0288.

Figure 1. Average measured values of vote.

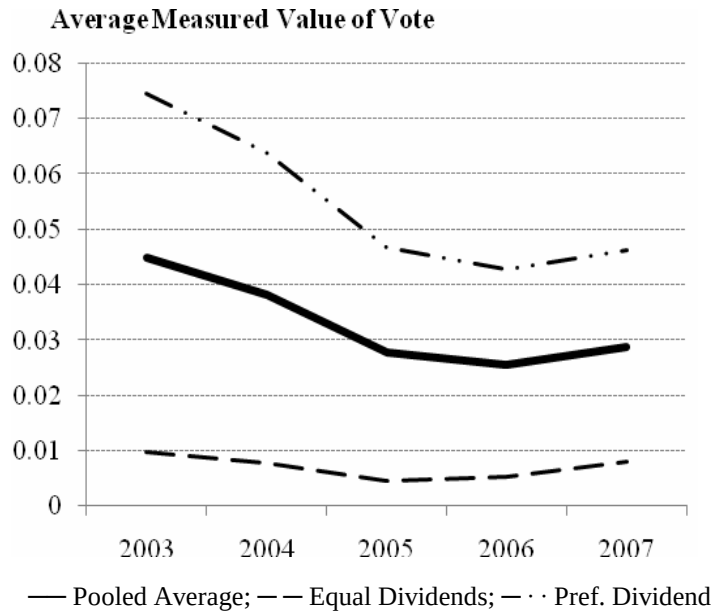
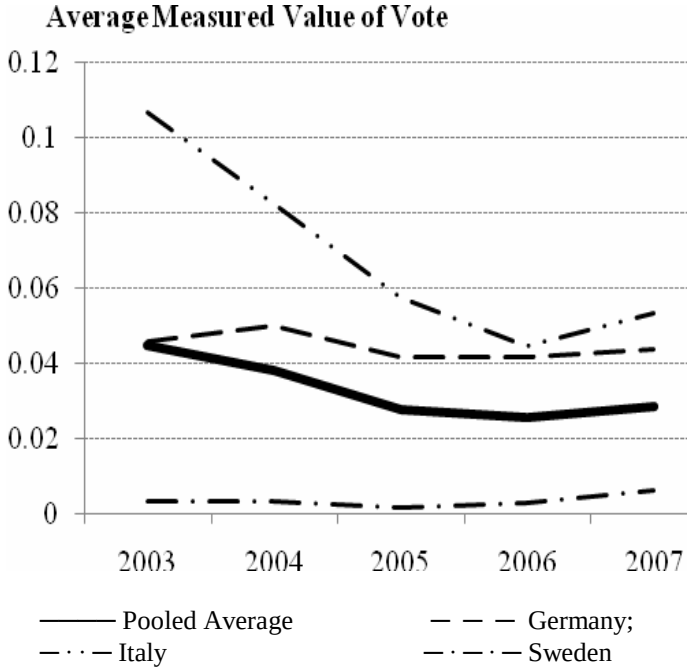


Figure 2. Measured Value of Vote: Largest Countries



If we look at the situation in three largest countries of the sample we can also note a downward trend in Italy (see Figure 2). However, average measured value of vote in Germany and Sweden stays relatively unchanged over the years.

Figure 3. Median Measured Values of Vote

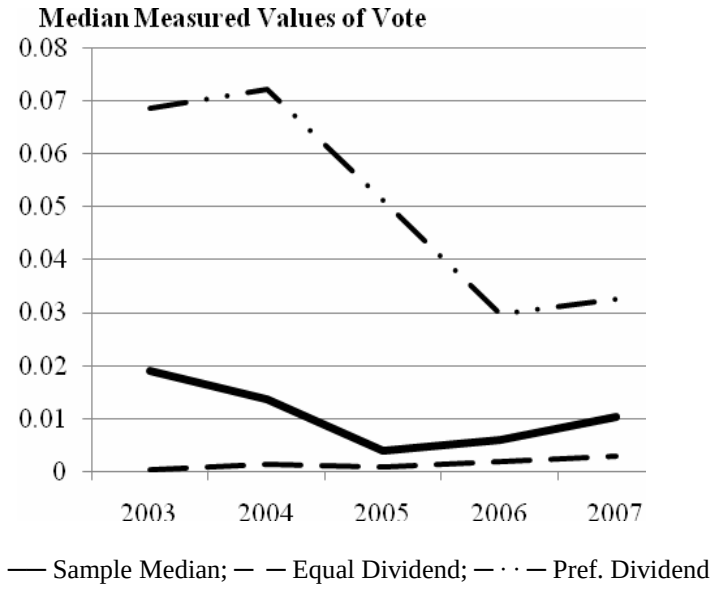
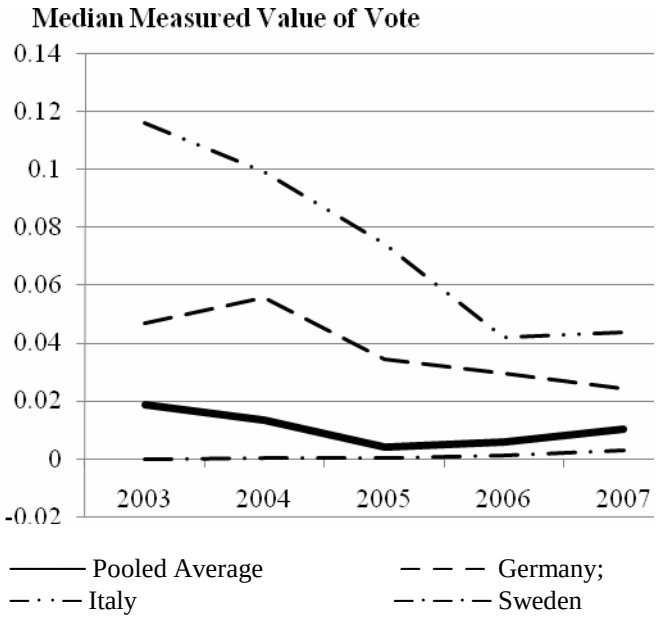


Figure 4. Median Measured Value of Vote. Largest Countries



Figures 1-4 are composed by authors.

Another striking outcome of the study is the size of measured values of vote – they are much smaller if compared with earlier studies. Only Austria and Italy experience the average measured value of vote larger than 10% of the firm market capitalization in 2003, whereas in the 1997 sample of Nenova (2003) the figure for Italy was 29% of the firm market capitalization. The figures for Sweden and Germany remained similar. As for Austria, Denmark, Finland, and the United Kingdom, the numbers of companies included in the sample are just too small to draw any reasonable trends on the one country level.

To see whether the observed trends hold not because of the presence of outliers in the sample – companies with overly positive or overly negative measured values of vote – we take the median values. Medians for a sub-sample of companies with preferential dividend and sub-sample of companies with equal dividend rights are presented in Figure 3. The general trend remains the same as when calculating averages, though the lowest point of the sample medians is recorded in 2005, picking up again for years 2006 and 2007.

Table 4. Standard Deviations over years 2003 – 2007

	2003	2004	2005	2006	2007
St. Deviation	**0.073428528**	**0.0636091**	**0.0542131**	**0.0547201**	**0.0462218**
St. Dev. (Sweden)	0.014873139	0.014031505	0.013645997	0.010710657	0.009095431
St. Dev. (Germany)	0.080310651	0.0715213	0.0729577	0.0720418	0.0580338
St. Dev. (Italy)	0.076793732	0.0710103	0.0522941	0.0592315	0.0492008
St. Dev (Pref. Dividend)	0.08696256	0.0753936	0.0660238	0.0688398	0.0556256
St. Dev. (Equal Dividend)	0.025130199	0.0216955	0.0169865	0.0151431	0.0157763

Source: Authors' calculations.

Figure 4 depicts the situation in three largest countries of our sample, where we observe similar trends if compared with the situation with means. Companies in Italy are keeping their fast pace of decrease of measured values of vote over years 2003-2006, whereas in 2006-2007 the situation stabilizes, with similar values recorded for both years. Only Germany faces a change in the trend from fluctuating around in Figure 2 to falling down, though at a slower pace comparing to Italy.

We observe that the median values are approximately equal to half of the average values for the whole sample during the period 2003-2007. This can mainly be explained by looking at standard deviations of the subsamples of companies with equal dividend rights per both share classes and for companies with preferential dividend (see Table 4 and Table 6, Appendix 2).

The standard deviation for companies with equal dividend rights is about a third of the standard deviation of companies with preferential dividend, and the mean is approximately a sixth of the mean of the companies with preferential dividends. Thus, it causes the companies with preferential dividend to be more widespread in terms of measured values of vote, whereas the companies with equal dividend rights are more concentrated with lower values thus causing the median to appear closer to their concentration. It is also a sign that our sample distribution is positively skewed, as means are higher than medians.

Table 4 also provides an insight that together with overall decrease of measured values of vote in the sample, the standard deviation decreased as well from 0.0734 to 0.0462. This means that over five years the sample values went gradually closer to the sample mean.

5.1 Results for Hypothesis 1

To check whether the pooled average measured value of vote of sample countries is statistically larger than zero for the period 2003-2007, we use one sample mean comparison t-test against a hypothesized mean of zero for each of the five years. We allow a minimum confidence interval of 90% to determine whether the results are statistically significant. For

all years we reject that the sample mean is equal to hypothesized mean of zero at 1% level of significance, while the two-tailed t-statistics being 5.6268, 5.5367, 4.6914, 4.3208, and 5.7358 for the years 2003-2007 respectively. Thus we fail to reject Hypothesis 1 of our paper.

In addition we check the significance of the measured value of vote on companies with equal dividend rights for both classes of shares and for companies with preferential or minimum dividend rights to inferior voting class share. For the first group of companies with equal dividend rights the average measured value of vote is different from zero for the years 2003, 2004 and 2006 at 5% significance level, for year 2007 at 1% significance level. We fail to reject that the value is significantly different form zero for year 2005 though.

A quite different story is observed in the group of companies with preferential or minimum dividend assigned to the inferior voting class shares. We fail to reject that the value is different from zero at 1% level of significance for all the years observed.

In order to confirm the validity of results we also check the Hypothesis 1 using non-parametric statistics, in particular Wilcoxon's test (see Appendix 2 Table 7). The calculated probability that the median is equal to zero is allowed to be up to 0.1 for us to reject the hypothesis that the median measured value of vote is equal to zero. The calculated z-values are equal to 5.5360, 5.3740, 4.6470, 4.2440 and 5.707 with probabilities practically equal to zero for years 2003 to 2007 respectively.

5.2 Results for Hypothesis 2

To evaluate the change in measured value of vote during the years 2003-2007, we take the period-start year 2003 and period-end year 2007 for each company and test using a t-test for paired data. Once again we allow up to 10% level of significance to determine whether the result is significant. As for the whole sample we reject the hypothesis that the change between the two years is insignificant at 5% level, whereas the test statistics is equal to 2.3993 (see Table 5, Appendix 2). Furthermore, the level of significance is equal to 1% when checking for the difference between the years 2003 and 2006, a year when the lowest average measured values of vote were observed.

If we split the companies according to their dividend rights, we can note a statistically significant (at 5%) change of average measured values of vote in companies with preferential or minimum dividend payments to the inferior voting class of shares, whereas the situation in companies granting equal dividend rights is has not significantly changed over the years.

As in the beginning of this section we wrote that Italy is the country with the most significant fall of measured values of vote, we explicitly check whether the change is in our sample is driven by Italy. Thus we take the observations of the Italian companies out of the sample and see that the average measured value of vote, though changed from 2.57% of the company's market capitalization in 2003 to 2.12% in 2007, is not statistically significant.

We repeat the testing using Wilcoxon's signed-rank test for matched pairs, which allows loosening the assumption of normal distribution. The results that we achieved with paired t-test are confirmed, even though the medians are smaller in numerical terms if compared to means.

6 The Analysis of Empirical Findings

In this section we analyze the findings of our study, looking at the developments able to explain the trends in measured values of vote. The section is divided into several parts, each of which attempts to partly explain what we can see with the market prices of the dual class shares. Firstly, we discuss the largest scandals with ownership and disclosure, which have their impacts on the perception on any type of means for entrenchment and non-accountability of either managers or largest shareholders. What is more, the changes in Italy are discussed, as Italy is the country which experienced the highest slide of the measured value of control. Secondly, we discuss the positive trends in the area of dual class shares, in particular looking at the case of Google IPO in 2004, as well as provide an overview of the general media and information technologies' development and their impact. Thirdly, we look at the situation with the European Union and its responses to the issues of transparency.

6.1 Largest Corporate Scandals

We look at two cases of respected companies ending up cheating their investors. Though the literature on PBOC and the value of control predates both scandals, the impact of the latter on issues with corporate governance was extreme and served as a 'bad example' of how things should not be done and what to do to avoid the cases alike in the future.

Perhaps the most publicized case is the one experienced by Enron Inc., once one of the most admired companies in the US and worldwide (Healey, Palepu, 2003). The company's failure to properly disclose the transactions made and flawed accounting practices led to cheating on company's investors on a huge scale with countless parties involved, starting with auditors (Arthur Andersen), banks, which invested in special purpose entities the

company established to transfer the debts of their parent and thus show extremely healthy accounts, and ending up with regulatory authorities. This created a considerable mistrust in the levels of disclosure of companies all over the world, not only US.

Yet the type of Enron scandal was perceived as distant up until something similar happened in the European Union (Armour, McCahery, 2006). A case of Parmalat in 2003, a dairy products company headquartered in Italy, altering the company accounts, appeared as a clear sign that Europe is not an exception from the cases of poor governance and cheating on a large scale.

The main problems causing the scandalous malpractices to occur were noted to be lack of trustable monitoring of the behaviour by the managers or main shareholders in both cases. The scandals were enough for the means to concentrate power in a company – CEMs – to go under suspicion (A. Pajuste, personal communication, March 19, 2008). A great number of studies and articles on the issues of the problems with CEMs were published.

What is more, a focused media attention was drawn to the issue. The issue reached all levels of investors, who became both aware and more suspicious. A simple parallel of the media effect was described by D. C. Langevoort (in Armour, McCahery, 2006) with the case of EntreMed. This biotechnology company was acclaimed to have licences to an "exciting medical breakthrough" by the New York Times, a newspaper. Consequently, its shares saw a substantial increase in the market price. The catch here is that all the information "revealed" by the New York Times was already available and thus supposedly known to investors.

This is especially the case in Italy. According to Financial Times (Barber and Kapner, 2004), the investors in Italy after the Parmalat scandal were pleased by the companies trying to meet the best practices in corporate governance in order to be trusted and thus invested in. This transparency movement was more self-driven. The law – even more strict than in the US at the time of Enron – was in place starting from 1998 (or a year later from Nenova's (2003) sample of 1997) (Armour & McCahery, 2006). Yet the implementation was sloppy – consider Parmalat's gap in accounting of 14 billion euro went unnoticed up to the very break of the scandal ("Still crying over spilt milk", 2005), and its failure to implement several issues of key importance from the Italian corporate governance (Melis, 2005). Thus the companies after the scandal were considering what is more feasible – leave the opaqueness or become more open. Many chose opening up, which made the costs go up both directly as well as via the increase in costs of the extraction of PBOC. In this case the measured value of vote should decrease theoretically and as shown by us it also did practically.

Nevertheless, one should not forget that though the average measured value of vote decreases significantly in Italy, comparing the lowest level is approximately equal to the average measured value of vote in Germany, though Germany has not seen such a change in the measured values of vote. As put by the Economist, “Italy remains in a regulatory mess: it has four separate financial watchdogs as well as a supervisory role for the central bank” up to 2005, whereas the political reforms are slow to initialize (“Still crying over spilt milk”, 2005). Yet, remembering Zingales (1994) results of more than 80% simple voting premium the voting shares experienced, the current levels seem very low indeed.

6.2 Google IPO and Other Influences

The one-sided negativism towards dual class share capital structure, among other CEMs, could not last long and was soon challenged. The major event was the successful listing of Google Inc. in 2004, when a famous, innovative and respected company chose dual class share capital structure. As noted by Pajuste (personal communication, March 19, 2008), the selection of this type of capital structure made market participants once again to rethink whether dual class capital structure is really so bad. It is now argued that having several classes of shares in a company is acceptable as long as it is clear and recognized by investors (ECGI, ISS, and Shearman & Sterling LLP, 2007). Due to this transparency, there are no additional costs, as all interested parties know what they should know and thus price company’s assets accordingly.

6.3 And Where Is the European Union?

A substantial media attention gave good grounds for the European Union’s aim to homogenize the stock markets across the European Union member states. In particular, European Commission paid additional interest to the facilitation of the movement towards fair and balanced common rules. Two important directives were issued, *the Directive 2003/71/EC of the European Parliament and of the Council of 4 November 2003 on the prospectus to be published when securities are offered to the public or admitted to trading and amending Directive 2001/34/EC* (2003) and *the Directive 2004/25/EC of the European Parliament and of the Council of 21 April 2004 on Takeover Bids* (2004), containing sensitive to the dual class share system regulations if transposed into national laws.

First, the Directive 2003/71/EC (2003) promotes investor protection and market efficiency via full provision of reliable information about securities and their issuers. The

publication of prospectus, with all relevant details necessary to investors, appears to be the most appropriate way to achieve this protection. The Directive 2004/25/EC (2004) contains provisions supporting proportionate ownership of a company because dual class shares can be used as a defence against takeovers. This document includes two important requirements restricting the use and availability of dual class shares – board neutrality[2] and breakthrough[3]. The directives were mostly seen in light of improving or even proposing the OSOV principle.

Nevertheless, the European Commission altered its view after the release of reports on the implementation of the latter directives. The importance of transparency was put in front instead of pressure to implement proportionate ownership across companies. They admitted that application of provisions of the Directive 2004/25/EC might create additional obstacles on the development of corporate control in the European market (Commission of the European Communities, 2007). In addition, the Commission concluded that shareholders were free to choose which provisions to apply in the companies as well as what type of company structure to choose. (Commission of the European Communities, 2007)

To continue, soon after publication of these reports the new *Directive 2007/36/EC of the European Parliament and of the Council of 11 July 2007 on the Exercise of Certain Rights of Shareholders in Listed Companies* (2007) was issued. Still being very new it offers improvements in issues of transparency and participation in the management of the company[4] for small shareholders, especially outside the European Union. For example, improved rules on transparency, possibilities of proxy voting and electronic participation in general meetings if implemented would strengthen shareholder's rights.

In sum, the provisions of the mentioned directives lead to the fact that European Commission was more like following the trend present in the market. The first two issued directives turned to be quite ineffective: existent allowances let the member countries avoid the implementation of some "more painful" provisions. Also, the large number of the European Union member states as well as the diversity of regulatory systems in each of them made it hard to reach a common agreement. So the directives served more as a general trend setting mechanism or public opinion formation device.

[2] Board neutrality rule limits the board's power the raise obstacles to hostile takeovers for the shareholders' loss and let the owners decide on the future of the company (Commission of the European Communities, 2007).

[3] Breakthrough rule imposes certain restrictions inoperable during the takeover period and allows easy replacement of the incumbent board of the target company and changes in its articles of association (Commission of the European Communities, 2007).

[4] Not all the companies included. Cooperatives, investment companies and mutual funds are not covered by the directive.

7 Conclusions

In this paper we aim to find the value of a control block vote, which if expressed as a share of the company's market capitalization is referred to as measured value of vote. The measured value of vote is argued to display the lower bound of the private benefits possible to extract from the company by a controlling shareholder – thus the lower bound of the value of control. We find that average measured value of control has changed from 4.48% of the market capitalization in 2003 to 2.88% in 2007, a significant decrease. Although we divide the companies of the sample by their dividend rights attached to each share class and find significant decrease of the measured value of vote in companies with preferential dividend rights to the inferior voting class stock, we are soon to find out that by removing Italian companies from the sample we lose the significance of the change between 2003 and 2007.

We address this issue via considering the changes in Italy for the last several years. We note that the corporate scandals were the main driver for companies holding dual as well as single classes of shares in Italy to shape up their governance, thus causing the measured value of vote to go down. On the other hand, changes of the measured value of vote for companies paying equal dividends have not decreased significantly whereas the overall values are not statistically different from zero.

To continue, we regard the role of the European Union as an additional factor, though not influential enough. This is attributed to the task of homogenizing the financial markets being of extreme difficulty, with directives including opt-out clauses for any Member State. Thus a shock experienced by the market is sometimes healthy for investors to start requiring more from companies in terms of disclosure levels and accountability. It also helps to put through the otherwise hard to reach agreements with companies in terms of corporate governance.

8 Suggestions for Further Research

Further research could be possible in several main directions. Firstly, estimations of the value of control block vote in the areas which were out of scope of this work could be beneficial. However, it requires a considerable preparation beforehand. Thus we find single country studies of the change in measured value of vote examination and possible determinant identification would be the most promising move on the level of bachelor thesis, yet one has to consider the number of companies listed with dual class shares – for seven countries we managed to get only 85 valid entries to the sample.

Yet, the harder task would be to prepare panel datasets and run regression analysis, looking how the levels of measured value of vote are affected by their previous values or are they the effect of only current issues in the market.

On the other hand, a study for the Baltic States could be carried to find out the level of PBOC. As the dual class shares are extremely rare case, different methodology should be used. In particular we would suggest measuring the PBOC level through share block sales (Barak and Holderness, 1989). However, from our experience we know that currently not all the Baltic states have the information available on such deals: OMX Baltics provides data just for Estonia, whereas Latvia and Lithuania just recently started registering or legally allowing such trades. Thus in several years time the study could be performed.

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Appendices

Appendix 1

Table 5. The classification of private benefits of control:

		Pecuniary ("Tunneling")	Non-Pecuniary
Transferability	High	**I. "Self-Dealing"** o Asset transfers at arbitrary prices o Cheap loan and guarantees o Diversion of resources o Excessive (above-market) compensation	**III. "Amenities"** o Influencing public opinion o Owning a luxury brand o Physical appointments o Winning the world series
	Low	**II. "Dilution"** o Creeping acquisitions o Freeze-out and squeeze out o Insider trading o Issuance of shares at dilutive prices	**IV. "Reputation"** o Family tradition o Personal relations o Promotion of relatives o Social prestige

Source: Ehrhardt, O. & Nowak, E. (2003, June). *Private Benefits and Minority Expropriation (or What Exactly Are Private Benefits of Control)*. EFA 2003 Annual Conference Paper No. 809. Retrieved January 6, 2008 from Social Science Research Network Website: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=302919#PaperDownload

Appendix 2

Table 6. Measured Value of Vote over Years 2003 – 2007. Means and T-statistics.

	No. of Companies	Measured Value of Vote (Means)					T-test (paired data 2003 and 2006 values)	T-test (paired data 2003 and 2007 values)
		2003	2004	2005	2006	2007		
Pooled Average	**85**	**0.0448**	**0.0382**	**0.0277**	**0.0256**	**0.0288**	**3.1452***	**2.3993****
T-statistics		(5.6268*)	(5.5367*)	(4.6914*)	(4.3208*)	(5.7358*)		
Pooled Average (excl. Italy)	**65**	**0.0257**	**0.0245**	**0.0185**	**0.0198**	**0.0212**	**1.2510**	**0.7436**
T-statistics		(3.3855*)	(3.6058*)	(2.8527*)	(3.0517*)	(3.9859*)		
By Dividends:								
Preference (or minimum)	46	0.0745	0.0639	0.0469	0.0428	0.0463	2.9868*	2.4001**
T-statistics		(5.8036*)	(5.7480*)	(4.8129*)	(4.2182*)	(5.6421*)		
Equal rights	39	0.0098	0.0079	0.0046	0.0054	0.0081	1.3329	0.4787
T-statistics		(2.4233**)	(2.2716**)	(1.6788)	(2.2243**)	(3.2043*)		

Significance: * – 1%, ** – 5%, *** – 10%. T-statistics used is two-tailed. T-tests are for paired data.
Source: Authors' calculations, Data: Reuters, Stock Exchanges, Company Websites and filings with stock exchanges.

Table 7. Measured Value of Vote over Years 2003 – 2007. Medians and Wilcoxon's matched pairs signed rank tests.

	No. of Companies	Measured Value of Vote (Medians)					Wilcoxon matched pairs signed rank test (2003 and 2006)	Wilcoxon matched pairs signed rank test (2003 and 2007)
		2003	2004	2005	2006	2007		
Pooled Average	**85**	**0.0189**	**0.0136**	**0.0040**	**0.0059**	**0.0104**	**2.9250**	**2.3770**
z		5.5360	5.3740	4.6470	4.2440	5.7070		
Prob. p		0.0000	0.0000	0.0000	0.0000	0.0000	0.0034	0.0174
Pooled Average (Italy excl.)	**65**	**0.0069**	**0.0046**	**0.0016**	**0.0026**	**0.0044**	**1.4020**	**0.3500**
z		3.9050	3.7410	3.1430	3.4540	4.5580		
Prob. p		0.0001	0.0002	0.0017	0.0006	0.0000	0.1610	0.7266
By Law:								
Scandinavian	40	0.0001	0.0008	0.0006	0.0013	0.0026	0.6050	-0.6320
z		1.3980	1.3710	0.7260	1.9620	2.9300		
Prob. p		0.1621	0.1704	0.4680	0.0497	0.0034	0.5453	0.5276
German	23	0.0551	0.0644	0.0274	0.0371	0.0329	0.9730	1.0950
z		3.2240	3.2540	3.0110	2.7680	3.3150		
Prob. p		0.0013	0.0011	0.0026	0.0056	0.0009	0.3304	0.2735
French	20	0.1160	0.0992	0.0744	0.0419	0.0439	2.8370	2.5390
z		3.6210	3.4350	3.3970	2.7250	3.4720		
Prob. p		0.0003	0.0006	0.0007	0.0064	0.0005	0.0045	0.0111
Common	2	0.0206	0.0185	0.0174	0.0165	0.0275	0.4470	-1.3420
z		1.3420	1.3420	1.3420	1.3420	1.3420		
Prob. p		0.1797	0.1797	0.1797	0.1797	0.1797	0.6547	0.1797
By Dividends:								
Preference of Inferior shares	46	0.0687	0.0722	0.0512	0.0296	0.0325	2.9120	2.9660
z		4.8670	4.6920	4.3760	3.6760	4.7470		
Prob. p		0.0000	0.0000	0.0000	0.0002	0.0000	0.0036	0.0030
Equal rights	39	0.0002	0.0013	0.0007	0.0016	0.0028	-0.1400	-1.0610
z		1.5910	1.7300	1.3410	2.5400	3.4470		
Prob. p		0.1116	0.0836	0.1798	0.0111	0.0006	0.8890	0.2889

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Table 7. Continued.

	No. of Companies	Measured Value of Vote (Medians)					Wilcoxon matched pairs signed rank test (2003 and 2006)	Wilcoxon matched pairs signed rank test (2003 and 2007)
		2003	2004	2005	2006	2007		
By Country								
Austria	3	0.1218	0.0921	0.0274	0.0803	0.0754	0.5350	1.0690
z		1.6040	1.6040	1.6040	1.6040	1.0690		
Prob. p		0.1088	0.1088	0.1088	0.1088	0.2850	0.5930	0.2850
Denmark	5	-0.0001	-0.0001	0.0013	0.0013	-0.0009	0.4050	0.4050
z		0.4050	-0.1350	-0.1350	0.1350	0.1350		
Prob. p		0.6858	0.8927	0.8927	0.8927	0.8927	0.6858	0.6858
Finland	9	0.0059	0.0030	0.0007	0.0014	-0.0001	1.4810	0.7700
z		2.1920	1.8360	1.4810	1.2440	0.7700		
Prob. p		0.0284	0.0663	0.1386	0.2135	0.4413	0.1386	0.4413
Germany	20	0.0467	0.0557	0.0346	0.0296	0.0243	0.8590	0.8590
z		2.8370	2.8750	2.5760	2.3150	3.1730		
Prob. p		0.0045	0.0040	0.0100	0.0206	0.0015	0.3905	0.3905
Italy	20	0.1160	0.0992	0.0744	0.0419	0.0439	2.8370	2.5390
z		3.6210	3.4350	3.3970	2.7250	3.4720		
Prob. p		0.0003	0.0006	0.0007	0.0064	0.0005	0.0045	0.0111
Sweden	26	-0.0001	0.0002	0.0001	0.0013	0.0029	-0.3430	-1.2320
z		0.4950	0.7490	0.2020	1.6380	3.0860		
Prob. p		0.6204	0.4537	0.8401	0.1014	0.0020	0.7317	0.2180
United Kingdom	2	0.0206	0.0185	0.0174	0.0165	0.0275	0.4470	-1.3420
z		1.3420	1.3420	1.3420	1.3420	1.3420		
Prob. p		0.1797	0.1797	0.1797	0.1797	0.1797	0.6547	0.1797

Source: Authors' calculations, Data: Reuters, Stock Exchanges, Company Websites and filings with stock exchanges.