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Evidence from the Nordic countries

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ANTITAKEOVER PROVISIONS AND PERFORMANCE – EVIDENCE FROM THE NORDIC COUNTRIES

Abstract

We construct a dual framework for Nordic and U.S. corporate governance for explaining differences in the roles of antitakeover provisions. In the Nordic model shareholders adopt these provisions to protect their long run economic benefits. These benefits are gained on the one hand through controlling managers and on the other by assisting them in running business. In the U.S. model, managers set these provisions to protect themselves.

We examine the influence of antitakeover provisions on valuation, stock return and operating performance using data from an extensive sample of publicly listed Nordic companies during the time period of 1999-2004 (similar to Gompers et al., 2003 in the U.S.). We collected data from nine most commonly used provisions. The results suggest that antitakeover provisions have a negative impact on valuation, no effect on stock return and a positive influence on operating performance. While analysing the influence of each the single most important provision dummy contributing to the negative valuation is dual-class stock but the discount decreases over the years.

The positive influence of antitakeover provisions on operating performance supports our Nordic model, which also explains earlier results with European data by Bauer et al. (2004) and Beiner et al. (2006), but which contradicts with the U.S. results by Gompers et al. (2003) and Cremers et al. (2005).

Our results indicate that companies with several takeover protection provisions are valued lower, especially in the case of those having two classes of shares than other companies. These results suggest that neither speculators nor competing management teams find such companies interesting investment targets, thus lowering the valuation level of these companies.

Key words: antitakeover provision, Nordic countries, company performance

INTRODUCTION

In this study we create and empirically test a dual framework, which explains the influence of antitakeover provisions on valuation and operating performance of companies. With this framework we offer an explanation on why in the U.S. antitakeover provisions lower operating performance (Gompers et al., 2003; Cremers et al., 2005; Core et al., 2005) where as in Europe they do not lower or even improve it (Bauer et al., 2004; Beiner et al., 2006).

In our dual framework for U.S. and Nordic models of corporate governance we attempt to explain differences in the roles of antitakeover provisions. The U.S. model refers to Anglo-Saxon or common law countries, and the Nordic model refers to Scandinavian countries with a tradition of civil law simlar to the Germanic and French-origin countries (La Porta et al., 1997 and 1998; Weimar & Pape, 1999; Mueller, 2006; López-de-Forondo & López-Iturraiga, 2007). We are aware of the simplification of such a dichotomous classification (see Heugens & Otten, 2007), but this kind of theorizing, which has been called for by Weimer & Pape (1999), offers a logical bases for understanding how the roles of antitakeover provisions differ between the U.S. and European countries.

In our U.S. model, the ownership is widely dispersed and company management has a strong power position. The quality of corporate governance relies heavily on the external corporate governance, where the market for corporate control has a disciplinary effect on a company's management, but a company's management may protect itself against this takeover threat by using provisions in the company's by-laws (see Weimar & Paper, 1999; Gompers et al., 2003). The Nordic model is based on the fact that ownership is more concentrated than in the U.S. model (see La Porta et al., 1998). We argue, that in Nordic countries the provisions in bylaws may have roles different from protecting current management against corporate takeovers. We argue that these provisions are set by the current shareholders to protect themselves against takeover activities of outside investors. These provisions offer current shareholders a safe corporate governance environment to assist and to control managers and in extreme cases to replace management without costly mechanisms of corporate takeovers (Walsh & Seward, 1990). Current shareholders may gain these benefits without a constant threat from outside shareholders who may take over these benefits. These provisions in company by-laws guarantee that no other investors will replace current owners to receive

these long term benefits through takeover process (see example from Sweden, Carlsson, 2007). Thus, we argue that the takeover protective provisions will in Nordic model improve

2007). Thus, we argue that the takeover protective provisions will in Nordic model improve current shareholders' interest to assist and to control managers probably leading to improved company performance.

In our empirical part we test the validity of the Nordic model with data from four Nordic countries: Denmark, Finland, Norway and Sweden. We analyse how the amount of antitakeover provisions influences valuation, stock return and operating performance of companies. Statistics show that the Nordic countries are among the most active takeover markets in Europe, along with the UK, in terms of takeover activity (Bernitz, 2004, Skog, 2004 and Carlsson, 2007). The ownership structure of Nordic companies is more concentrated and less widely held than in the U.S. or U.K. (La Porta et al., 1998; Faccio & Lang, 2002). The *legal framework* in these countries is closer to each other than European countries in general, based on strong historical connections and similar company legislation. As noted by La Porta et al. (1998), the laws of the Nordic countries belong to the same family, which differ from those of other countries in Europe. In addition to company legislation, the development of corporate governance recommendations is also strikingly similar. In addition, the institutions overseeing the stock markets are also closely aligned. The merger of the exchanges of Copenhagen, Helsinki and Stockholm, together with the merger of the main lists of the exchanges to form a single Nordic list, reflects not only the desire to have one unified stock market in the Nordics, but also the view of the practitioners that the Nordic stock markets are already sufficiently similar to form a single market. Thus, we have good reasons to believe that publicly quoted Nordic companies suit well for evaluating the influence of takeover protective provisions in company bylaws to company performance.

Our population comprises of all publicly listed Nordic companies over the period from 1999 to 2004. The size of our sample is 367 companies in 1999, growing to 516 in 2004. Altogether, we have 2,799 company-year observations. We have no problems with sample selection bias, since we include the population of Nordic publicly quoted companies.

For our companies, we constructed an antitakeover provision index based on nine most commonly used protective provisions in Nordic listed companies, which are expected to lower the probability of takeovers. The use of this index is free from the endogeneity problem, since our study period of six years included only a couple of longitudinal withincompany changes in the external corporate governance index. Thus, we anticipate no problems caused by endogeneous changes in our index after poor company performance.

Based on our Nordic model we expected that the amount of antitakeover provisions will lower valuation of companies, will not affect stock return, and will improve operating performance of companies. For our analysis we use OLS regression method, where independent variables are our antitakeover provision index or each provision separately. Dependent variables are constructed as follows: The valuation of companies is measured with relative industry adjusted valuation differences in Tobin's Q (see Gompers et al., 2003 and Kaplan & Zingales, 1997), stock returns returns with the four-factor Carhart (1997) model by including country specific indices to ctach the country specific stock return differences, and operating performance is measured with industry adjusted net profit margin (NPM), return on equity (ROE) and net sales growth (NSG).

Our results show a strong negative relationship between the valuation of companies measured by Tobin's Q and the amount of antitakeover provisions. In particular, company valuation is lowered by the inclusion of a provision concerning dual-class shares (i.e. a company has at least two series of shares with different voting rights), even though the discount decreases over the years. These results strongly supports that dual-class of shares is an efficient mean to lower the probability of company takeover. We do not find evidence that higher threat of company takeovers improves stock returns. These results suggest that the stock market has already considered the impact of provisions on valuation. Finally, we find that larger amount of these provisions leads to higher operating performance, especially when measured as the ROE but also as the NPM. This evidence suggests that these provisions provide opportunities for current shareholders to control and assist managers and to gain these benefits from companies in the long run. These results lend a strong support on our Nordic framework, which argues that current large shareholders set defensive covenants to protect themselves against takeover activities of external investors and to gain stronger power position within the company.

THE ECONOMIC IMPACT OF ANTITAKEOVER PROVISIONS IN COMPANY BYLAWS

Amount of protective provisions and relative valuation (Tobin's Q)

In the U.S., Gompers et al. (2003) found that the relative valuation of companies as measured by Tobin's Q with the least amount of protective provisions i.e. high quality of external governance, was significantly higher than the valuation of companies with a high amount of these provisions. Brown et al. (2004) broadened the analysis covering 51 different provisions, including both those used by Gompers et al. as well as other provisions unrelated to takeover defense. Brown et al. found that only those variables related to takeover defense can account for the statistically significant positive correlation between governance and Tobin's Q. Similarly, Larcker et al. (2005) report a positive correlation between takeover protection provisions and Tobin's Q; however, after applying recursive partitioning methodology, the results were no longer significant.

Evidence from Europe by Drobetz et al. (2004) also supports the findings from the U.S. showing that a higher amount of defensive provisions negatively affects a firm's relative valuation. Bauer et al. (2004) find in their study, based on European data, a weak positive association between the amount of protective provisions and the relative valuation of a company, but the results are not statistically significant after controlling for country effects. Further, using a sample of Swiss companies, Beiner et al. (2006) report a positive correlation between the quality of external corporate governance (based on a broad index) and Tobin's Q.

Amount of protective provisions and equity returns

In the U.S., Gompers et al. (2003) found a relationship between the amount of protective provision and equity returns. The stock return on shares in companies with the least number of different defense mechanisms against takeovers were 8.5 percentage points higher on average annually compared to shares in companies with the weakest external governance. The performance difference was constant throughout the 1990s. Thereafter, since 1999, this relationship has been weaker (Cremers and Nair, 2005) or even non-existent (Core et al., 2005; Larcker et al., 2005).

Evidence from Europe provides only weak support for a negative relationship between the amount of provisions and equity returns. Drobetz et al. (2004) found, based on German data,

that companies with the least amount of provisions outperformed those with highest amount of provisions by 16.4 % at an annual level during 1998-2002, after controlling for size and other normal control variables. In their study, Drobetz et al. (2004) used a broader corporate governance index than Gompers et al. (2003), whose index focused only on takeover defense mechanisms. Bauer et al. (2004) conducted a Europe-wide study based on governance ratings for FTSE Eurotop 300 companies of Deminor. Results based on the UK companies were similar to those of Gompers et al. (2003). The results for companies from other European countries were mixed and the positive relation between the governance ratings and stock returns was not clear. After controlling for country effects, Bauer et al. was unable to find statistically significant results for continental Europe.

Amount of protective provisions and operating performance

In the U.S., Gompers et al. (2003) find a negative relationship between the amount of provisions and two performance measures, sales growth and net profit margin, suggesting that higher takeover threat has a positive impact on a company's performance. Cremers et al. (2005) suggest that the takeover vulnerability alone (as measured with the amount of takeover provisions) does not contribute to strong operating performance, rather substantial institutional ownership is also required for higher operational performance compared to companies with low takeover vulnerability.

Based on evidence from Europe, Beiner et al (2006), using Swiss data and a broad governance index, report a negative correlation between the quality of corporate governance and profitability measured by ROA. Similarly, results from Europe by Bauer et al. (2004) do not support the notion of a positive relation between operational performance and the quality of external corporate governance.

These results suggest that the relationship between the amount of defensive provisions in company bylaws and operating performance is not straightforward. They even indicate that in Europe lower quality of corporate governance increases operating performance.

In the following, we construct a framework for understanding the similarities in valuation results and the differences in operating performance results between the U.S. and European studies.

PROVISIONS FOR PROTECTING CURRENT SHAREHOLDERS

Internal and external corporate governance mechanisms are means to control company management performance. Internal corporate governance, especially the board of directors, directly controls company management by reducing the agency costs of self-interested and/or incompetent management and by assisting company management in their performance (Walsh & Seward, 1990). If internal corporate governance fails, external corporate governance is needed mainly through takeover market. These two mechanisms are the disciplinary methods over current company management. We constructed a framework (Figure 1), which illustrates the differences between Nordic and the U.S. corporate governance institutions.

[Insert Figure 1 here]

In Panel A, Nordic model is presented. The internal corporate governance requires major shareholders in place, which are powerful enough to control efficiently managers. They also assist managers, since they have a large enough stake in the company to be interested to do so. In Scandinavia as well as elsewhere in Europe, the ownership has traditionally been concentrated (Faccio & Lang, 2002), and major owners have been families (Sweden and Denmark), founders, state (Finland), and pension funds. These shareholders with concentrated portfolios, the control over the managers is a key attribute of their portfolio management. This control power is guaranteed by amendments in the company bylaws such as dual-classes of shares with different voting powers, temporary suspension of voting rights of new owners, the board acceptance for purchased shares and board's extended term of office. These provisions offer them means for assisting and controling company management and to gain later on the benefits of these measures. At the extreme, control is needed to replace managers without highly expansive and timely takeover activities (Walsh & Seward, 1990, La Porta et al., 2000).

The assist benefits are possible to attain through active work in the board of directors for example by defining company strategy and making major capital investment and acquisition decisions. Such a direct and close relationship between managers and major shareholders may offer bases for good operating performance of the company (see Jensen, 1993 and Walsh & Seward, 1990).

Although the protected major shareholders may improve company performance, this protected ownership reduces the probability of corporate takeovers. It is highly difficult, even impossible, to take over the company, where the major shareholder has protected their power position with antitakeover provisions. In these protected companies the opportunities for alternative, hostile takeovers are highly unlikely. Thus, in Nordic countries market for corporate control is substituted by the major shareholder's use of direct power to control, replace and assist current management.

While these provisions lower the probability of takeovers they also lower the speculative interest in shares of the company. Therefore, despite of possible positive outcomes on company operating performance, the market valuation of protected companies may lag behind those with higher takeover threat.

In addition, lower share price of protected companies with concentrated ownership power may also be influenced by major owner's interest to extract private benefits, since major owners may promote their own interest instead of general interest of shareholders. They may define for example dividend policy according to their own interest (Kinkki 2008), use transfer prices, asset stripping, investor dilution or select top executives, which favor them instead of all owners (La Porta et al., 2000). These examples illustrate reasons, why outside shareholders may in general be skeptical about the economic motives of powerful shareholders while they act in the board of directors. This is likely in the cases where ownership control is gained with small amount of shares, since small owner do not bear as much cost of this expropriation, when power structure is protected with company by-laws such as dual-classes of shares (López-de-Foronda & López-Iturriaga, 2007).

These expropriation activities may take extreme forms in the cases of emerging markets and economic downturn (Johnson et al., 2000), whereas in more established markets and normal economic conditions they may have minor role. If expropriation costs play a major role as ownership is protected with company by laws, we may find both lower level of operating performance and company valuation.

In Panel B, U.S. model is presented. Accordingly, the protective provisions are set by company management to defend themselves against takeover threat. These provisions were

mainly set at the time period when takeovers became popular and executives found their positions threatened. Managers within the protected companies did not face the disciplinary effects of market for corporate control resulting to lower level of operating performance and company valuation. These are the consequences of managerial self-interest, which may appear as a reduced level of work effort, fewer investment risks and shorter time horizon than would be optimal for shareholders (Jensen & Smith, 1985).

To summarize, within Nordic corporate governance model, protective covenants are expected to improve company operating performance but they also lower the company valuation, since protective covenants are set by the major shareholders to motivate them to assist and control company management in order to gain higher economic benefits from their companies. In the established markets and normal economic conditions, wealth expropriation is not a big issue. The Nordic model differs from the U.S. model, which assumes that protective provisions are set by the company management to protect themselves and their private benefits against takeover market. Thus, according to the U.S. model, protective covenants reduce both operating performance and share valuation.

DEFENSIVE PROVISIONS FOR CORPORATE GOVERNANCE INDEX

Our data covers all Nordic companies listed during the period from 1999 to 2004. We use companies' articles of association, available on their websites, as the main source of information for the governance provisions. For those companies without articles of association on the web, we contacted the company in order to obtain copies of the articles. The financial and accounting data are obtained from Datastream and Worldscope data bases. The industry classification of the sample is made according to the Global Industry Classification System (GICS), applying the level three classification as reported by the Nordic stock exchanges.

We construct the defensive corporate governance index (G) based on Gompers et al. (2003). Each provision adds one point to the index value, though the magnitude of each provision has no impact on the index value. However, due to legislative and cultural differences, our corporate governance index will differ from the original. We collected data from nine most commonly used provisions, while the corporate governance index used by Gompers et al.

includes 24 factors. Bebchuk et al. (2006) find that only six provisions of the 24 were those that accounted for the perceived performance differences between companies, suggesting that even an index with a small number of variables is able to reveal differences if the components have any economic impact.

We use the corporate governance index components, which either secure management's position over market for corporate control, offer control means for current active shareholders over the company management or guarantee long term benefits to the current owners. Our governance index includes no provisions related to management compensation or indemnification contracts due to the unavailability of broad data regarding those factors. We update the index values of each company at the beginning of each year of the sample. If a change in the provisions occurs during the first six months of a year, we consider the change to have occurred at the beginning of that year, while those changes taking place in the latter half of the year will affect the index (G value) from the beginning of the next year.

The provisions of the governance index (each provision adds one point to the company-year specific external corporate governance index). Nordic model will be used to explain expected influence of each provision on valuation and operating performance:

1) Two series of shares: A company has two series of shares if a difference in voting rights exists between these share classes. From the takeover perspective dual-class of shares complicates the process for achieving control over the target company. In many previous studies, companies with dual-class of shares have been left out of the sample due to the strength of the dual-class structure as a governance mechanism, since this provision considerably mitigates the significance of the other governance variables (see, e.g., Bebchuk et al., 2006). For the major shareholder, two series of shares offers longer-term stable condition to gain benefits from efficient control over company management.

Dual-class of shares plays a major role in Finland, Denmark and Sweden. If we had excluded those companies with dual-class of shares, a large part of the market capitalization would have been left out. Due to the expected importance of dual-class of shares on our results, its influence on our results is explicitly analyzed and discussed (see Carlsson, 2007).

2) **Oppressed minority:** Oppressed minority means that shareholders have the right to have their shares redeemed by the company if they oppose major changes in the company. This provision may lower the interest in major corporate changes if a large block of minority shareholders have to be bought out in order to get these changes accepted. Oppressed minority provision offers active current shareholders stability for gaining benefits from the company.

In Finland, shareholders who oppose a merger or a de-merger (division) are allowed to have their shares redeemed, while in Denmark shareholders have this right if they have opposed some major amendments to the articles of association.

3) The mandatory (minority) offer: The mandatory offer refers to the level of ownership of capital or of votes, regulated in the articles of association or in the legislation, which triggers the obligation to launch a mandatory offer for the rest of shareholders. If the level of ownership leading to a mandatory offer is low, it substantially lowers the point, at which an investor has to acquire 100 % of the shares in order to gain control over company. This provision offers major shareholders' safe corporate governance environment to gain benefits from the company.

We consider this provision to be defensive if it is set below 50 %. Such a mandatory offer provision makes it highly expensive to gain control over the company and efficiently prevents an investor from gaining majority ownership in the target company, compared to the 50% or higher ownership provision for mandatory bid (Chen, 2004). A company gets a point to its corporate governance index, if it is subject to a provision, which lowers the ownership level and triggers a minority offer already at a level ownership below 50%.

In Sweden, a binding recommendation by an association (NBK) regulating the stock market states that companies must launch a mandatory offer if their holding of votes exceeds 30%. In Norway, the Securities Market Act stipulates that the mandatory offer has to be made if the share of votes exceeds 40 %. In Denmark, according to the Securities Trading Act, a shareholder has to launch a mandatory offer following a transaction through which the shareholder effectively gains control over a company, given that the resulting holding is above 30%, though the law does not state any

specific limit. Krüger-Andersen (2004) suggests that, in practice, the limit would typically be about 40 % of the votes for Danish companies. In Finland, the limit is two-thirds of the votes, according to the Securities Market Act. Hence, due to regulation by legislation, all Danish, Norwegian and Swedish companies receive one point for this provision, while Finnish companies gain a point if their articles of association include a provision lowering the limit.

4) Voting restrictions in the general meeting: This refers to a situation in which a company has a provision in the articles of association that limits the number of votes one shareholder or a proxy may cast in a shareholders' meeting. Such a provision may reduce the power of major shareholders when ownership is concentrated. It may also reduce large investors' interest in gaining major stakes in companies that restrict voting rights. This kind of provision is especially efficient against takeovers when the ownership is dispersed, but the current shareholders have similar interests, like suppliers or customers of the company. If the company has voting restrictions in the articles of association, we consider this to be a defensive provision.

In a takeover situation, such a restriction reduces the opportunities of one takeover party to gain power over company resources, but at the same time reduces opportunities of one shareholder to extract private benefits and could increase the power of managers.

Voting restrictions are not very common in Nordic countries except in Finland. These restrictions are mainly targeted to maintain power within one group of owners instead of one individual owner.

5) Greater than a 2/3 majority required for changing the articles of association: Requiring a higher majority effectively raises the amount of votes that a corporate rider needs to have in order to make changes in the articles of association, thus making it more expensive to gain power over a company. This provision also guarantees the power of current shareholders over the company management and over the potential takeover candidate. This provision is crucial, if current owners prefer status quo, and they have gained control and assist benefits within the company. According to Nordic company legislation, the majority needed to change articles of association is normally set at the level of two-thirds of the votes and share capital presented at the meeting. Nevertheless, the company may set higher requirements in their articles of association. We consider this provision to be takeover protective if greater than a 2/3 majority is required for changing the articles of association.

6) Temporary suspension of voting rights: This refers to a provision in the articles of association that stipulates a certain period of time following the purchase of shares, during which the voting rights attached to the shares cannot be used. This delays a possible takeover process, as the shareholder who aims to take over the company must wait until their voting rights can be used, thus discouraging takeover activities. This reduced danger of takeover attempt increasing current shareholders' interest to control and assist company management.

If a company has such a temporary suspension of voting rights, requiring shareholders to register their ownership at least one month before the general meeting in order to be able to exercise their voting rights, we consider this to be a defensive provision. In Nordic countries, temporary suspension was rare, and it was not used at all in Finland and Sweden.

7) The board of directors' acceptance required for purchasing shares in the company: Some companies include a provision in their articles of association stipulating that anyone who wishes to buy shares in the company must receive approval from the board of directors for the purchase. Such a provision effectively complicates the process of gaining voting power in a company with this provision. We consider this acceptance requirement to be a takeover protective provision in the article of association. This will protect current shareholders who are represented at the board of directors giving them a safe position to gain long term economic benefits from the company.

Also this provision was not common in Nordic countries. It was sometimes used in Denmark, Finland and Norway and in rare cases in Sweden.

8) Board's extended term of office (staggered board): If the board's term of office is longer than one year, it can make it more difficult to take over the company, as the whole board cannot be changed at one time. A staggered board can thus function as a takeover protective mechanism, though it may also result in inefficient management, as staggering allow the elected members to hold their seats for several years, regardless of their performance on the board.

In the previous literature, the staggered board is seen as one of the most important governance mechanisms (see, e.g., Bebchuk et al., 2002; Bebchuk, et al., 2006; Cremers et al., 2005). For example, Brown et al. (2004) finds a positive correlation between Tobin's Q and the absence of a staggered board. If a company defines in the articles of association that the board members have longer than one-year term of office, this is regarded as a defensive provision. Although such a provision may lead to inefficiencies, it also offers for the current shareholders an incentive to assist and use control over company management.

This provision was common in Norway, since three-year term of office is there as a rule, and in company by-law it is possible to set the term shorter. Therefore in Norway a company received one point if it is not otherwise stated in the provisions. In other countries, one year term of office was the starting point while reading company by-laws.

9) Shareholder agreements between shareholders that have more than 50% of shares: In this type of agreement between shareholders, the parties of the agreement are entitled to have the right of first refusal regarding shares being sold by the other party and covered by the agreement. Such an agreement hampers the free transferability of the shares, thereby making it more difficult to take over the company. Many companies offering two classes of shares include such a provision in the articles of association concerning the voting power shares. If holders of voting power shares are selling their shares, other current owners of these shares are entitled to buy them.

We consider this provision to be defensive if the majority of voting rights form part of a shareholder agreement or if a company has a right-of-first-refusal provision included in the articles of association. This kind of agreement offers a safe position for the major shareholders in respect to have veto right of the change in company control structure, thus leading to higher interest to control and assist company management.

To conclude, the above analysed defensive provisions may have consequences on company valuation, equity return and operating performance. We have generated our hypothesis based on the Nordic corporate governance model. We have the following hypothesis:

- H₁: Higher amount of defensive provisions have a negative impact on company valuation, since it lowers the probability of takeovers.
- H₂: Higher amount of defensive provisions have no impact stock returns, since provisions are stable over time and they are already considered in the company valuation.
- H₃: Higher amount of defensive provisions have a positive impact on operating performance, since it increases the control and assist benefits of major shareholders and offers a stable condition for gaining these benefits in a longer term.

EMPIRICAL RESULTS

Data and descriptive statistics

The sample

We constructed our population based on four criteria. First, the company must have been publicly quoted prior to the beginning of the preceding year and have a financial statement available from the preceding year. Second, the articles of association have to be available. We find articles of association for a total of 630 companies, which were listed during the sample period of 1999-2004. We exclude a total of 75 companies (of which 50 are non-financial companies), which were listed at the end of 2004, but have no articles of association available. Thirdly, we have included only those companies that are domiciled in one of the Nordic countries and are thus regulated by Nordic company law. Following these three restrictions, our population consists of 438 companies in 1999, growing to 601 companies in 2004. Finally, we include only non-financial companies, thus leaving 367 companies in 1999, but increasing to 516 in 2004. Compared to the total population of 669 companies listed in 2004 (excluding financial companies and companies not domiciled in the Nordic countries),

we have a sample, which covers roughly 80% of the target population. The unavailability of articles of association accounts for the greatest part of the difference between the total number of companies and those included in our sample.

If a share is listed on several exchanges in the Nordic countries, we consider it to be listed only in the exchange where the stock's main listing is.

[Insert Table 1 here]

Over the sample period of 1999 to 2004, on average, Swedish companies account for 40 %, Finnish companies for 23 %, and Danish and Norwegian companies both for about 18 % of our total sample. In 2004, our sample (excluding financial companies) covers 215 companies in Sweden, 116 in Finland, 94 in Norway, and 91 in Denmark. This sample represents about 90 % of the publicly quoted companies (excluding financial companies and firms not domiciled in the Nordic countries) in Sweden and Finland, but only about 60 % of similar companies in Denmark and Norway.

The distribution of governance index values

The distribution of governance index values (G) in each sample year is presented in table 2. All G values remain very stable over the years, except for the G value at the 90th percentile, which drops from four to three in 2001. This change was caused by the new companies listed in the 1999 and 2000, which were small technology companies having typically only one class of shares and no provisions restricting shareholders rights in excess of those that are effective due to the legislation. The median G value by country is two in Finland, Norway and Sweden, whereas for Denmark the median is three.

[Table 2 here]

A more detailed analysis of takeover protective provisions reveals cross-sectional, countryspecific differences and longitudinal development in each country. The country specific annual statistics for each provision are presented in table 3.

[Table 3 here]

The *Dual-class stock* arrangement is very common in Finland, Denmark and Sweden, but rare in Norway. Internationally the incidences of dual-class shares in Finland (varying from 48,5 % to 35,3 % of companies), Denmark (between 48,1 % and 35,6 %), and Sweden (between 69,7 % and 57,9 %) is relatively high (in the U.S., 9 %, Larcker et al., 2005, in Switzerland, 22 %, Beiner et al., 2006, in German 12 % and in Italy, 35 %, Pajuste, 2005). The low provision adoption (between 8,8 % and 5,3 %) of different voting right shares in Norway could be explained by the Norwegian legislative restrictions on acquisitions, which offers *staggered board* as a rule and which has been adopted in over 80 % of Norwegian companies). This has traditionally protected Norwegian companies from takeovers, thus mitigating the need for alternative means for major shareholders and managers to protect their power.

The oppressed minority provision affects only companies in Finland and Denmark due to country-specific legislation. From an international perspective, oppressed minority provisions in the law can be found in the U.S. and in the UK but not, for example, in France or Germany (La Porta et al., 1998). Minority offer below 50 % of ownership is a rule on Denmark, Norway and Sweden where this is either recommended in a binding form or an act stipulates it. All other company by law provisions are rare, normally used in less than 10 % of sample companies.

Changes in the governance index

During our study period, we registered only 13 amendments to the provisions that changed the Governance index. Conversions of two share classes into one accounted for the majority of these changes (10 out of 13). These changes were driven by the Corporate Governance recommendations published in each Nordic country, which state that companies should have only one class of shares. Therefore, the reductions evident in table 3 in the provision concerning share classes are solely driven by the increase in the number of small IPO companies, which adopted in fewer cases dual-class shares.

Correlations of governance index components

Table 4 presents pair-wise correlations between different provisions. Having two classes of shares is clearly correlated with the shareholder agreement (right of first refusal) provision (0.360), indicating that the major shareholders, such as families, maintain their power over the company through two classes of shares, effectively restricting transfer of the shares by right

of first refusal to those outside the controlling group. This combination efficiently stabilizes company control structure offering good bases for the major shareholders to gain assist and control benefits from the company in the long run.

The negative correlation (-0.230) between companies with dual-class stock and a staggered board (extended term of office) is in line with the evidence that these two governance mechanisms would serve as substitutes regarding takeover protection. They also dominantly exist in different countries, dual-class stock in Sweden, Finland and Denmark, and staggered boards in Norway. This would also indicate that these provisions would be the most powerful means for protecting companies against takeovers, and only one of them alone is needed for effective protection (see Bebchuk et al., 2002; Cremers et al., 2005; and Bebchuk et al., 2006).

A high negative correlation (-0.508) was found between oppressed minority and minority offer provisions. They both exist mainly in Denmark (all companies) and in Finland (1/3 of companies), but in Sweden and in Norway only minority offer provision exists. Thus, country specific features explain this difference. In addition, a high positive correlation (0.327) between voting restrictions and supermajority requirements exists mainly due to the fact that almost all of the Finnish companies having capped voting rights in general meeting have also lifted the majority requirement needed to amend such a provision.

[Table 4 here]

Overall, it seems that dual-class shares and staggered boards would represent substitutes as power institutions against takeovers. In addition, companies with dual-class shares and restricted transfers of shares complement each others by strengthening the position of the controlling owner, whereas the low and often negative correlations for dual-class share provision with other provisions suggests that dual-class share alone would be seen as a strong enough protection mechanism. Between other provisions, the correlations seem to be mainly positive, indicating that these provisions complement each other.

Takeover protection provisions and valuation

To study the relation between company valuation and the governance index, we separately regress industry-adjusted Tobin's Q on both corporate governance index and its components. As control variables, we use a natural logarithm of assets and the country of incorporation. To reduce the impact of outliers, we windsorize the values of Tobin's Q in the sample at the first and the 99th percentiles, respectively. Table 5 presents the results. We note that the inclusion of financial companies in to the sample does not cause any material changes to the results.

[Table 5 here]

The relation between G and Tobin's Q is statistically significant and negative between 1999 and 2001, after controlling for industry and country, while the relation is insignificant from 2002. Moreover, the average for the sample period is negative and significant. These results support our hypothesis that firms with higher takeover protection have lower relative valuations. Our findings are similar to those reported by Gompers et al. (2003).

When we compare three sub-periods bull-market (1999-2000), bear market (2001-2002) and bull market (2003-2004,) we find that G based undervaluation is not caused by bear market. The strongest G based undervaluation was during the New Economy boom. Thus, we could not detect any increased distrust to those companies which have protected covenants set by controlling owners during the time period of bear market similar to the results by Johnson et al. (2000) in the emerging markets.

We also compared extreme cases of antitakeover provision groups. We restricted our sample to companies with G=1 (democracy, i.e. they have only one antitakeover provision) and G \geq 5 (dictatorship, i.e. they have five or more antitakeover provisions) similar to Gompers et al. (2003). By using a dummy variable for the democracy portfolio, we find that the results are statistically insignificant within each year, except the average for the whole period, when the dummy variable has a significantly positive influence. Coefficients for each year are positive, however, as expected.

The coefficient of dual-class share is negative and significant in all years, though the discount decreases over the years. The negative impact of two classes of shares and related ownership

concentration on valuation has been earlier documented in the individual Nordic countries. Maury and Pajuste (2004) found based on Finnish data, that a difference in voting power between different classes of shares has a negative impact on a firm's valuation. Bøhren & Ødegaard (2006) find, based on Norwegian data that concentrated ownership is negatively related to relative valuation. In addition, Chen (2004) found lower market-to-book ratios for Swedish firms with strong controlling owners. We note that dual-class stock in most cases reflects the presence of concentrated ownership.

The statistically significant negative coefficient for oppressed minority is interesting. We added a point for this provision to the Finnish and Danish companies. These results suggest that the possibility of having shares redeemed by the company would actually play a role in corporate governance in the Nordic countries, although the strong correlation (0.60) with the country dummy may bias the results.

The positive coefficients of the voting restrictions and minority offer provisions are also surprising, though we note that the average coefficient for the minority offer provision is significant only at the 5% level and none of the annual coefficients of either the minority offer provision or of the voting restrictions is significant, thus reducing the robustness of the results. These positive coefficients may be explained by the increasing plurality required for takeover approval, encouraging target management to better consider shareholders' common interests in the merger negotiations, as suggested by Jensen and Ruback (1983).

The negative coefficients of temporary suspension of voting rights and the board's acceptance required for purchasing shares seems to indicate that these provisions are mainly for protecting current owners against a takeover threat. Temporary suspension may delay the influence of a takeover effort, and current owners may take other actions in the meanwhile to protect their power position within the company.

Concerning the staggered board, the results do not indicate that this provision would lower company valuation. This is surprising since we expected that this provision would have been one of the strongest means for the current owners to protect against takeover threat.

Taken together, our results suggest that defensive provisions would have a negative impact on valuation, despite the decrease in its effect in recent years. Our results further suggest that of

the different defense mechanisms, dual-class stock has a clear negative correlation with valuation, while evidence of several other mechanisms' contribution is not consistent over the years or it is somewhat mixed. These results lend support to the view that a dual-class shares alone provides a sufficiently strong protection mechanism against takeover threat and to mitigate the impact of the other mechanisms, or that the other mechanisms are only complementary to the dual-class stock. On the other hand, we do not find evidence for a significant negative impact of staggered board on valuation, as has been reported in several previous studies.

Defensive provisions and share returns

To study the impact of governance on share returns, we apply the four-factor model by Carhart (1997) but also add to the equation the returns on country indices as independent variables to catch country specific share return differences. The regression equation can be expressed as follows:

(1)
$$R_{i,t} = \alpha + \beta_1 * RMRF_t + \beta_2 * SMB_t + \beta_3 * HML_t + \beta_4 * Momentum_t + \beta_5 * Finland_t + \beta_6 * Sweden_t + \beta_7 * Norway_t + \beta_8 * Denmark_t + e_{i,t}$$

Where $R_{i,t}$ is the excess return over risk-free rate of company *i* in month *t*, *RMRF_t*, is the month *t* value weighted market return minus the risk free rate, and the terms *SMB_t* (small minus big), *HML_t* (high minus low) and *Momentum_t* are the month *t* returns on the zero investment factor mimicking portfolios designed to capture the size, book-to-market and momentum effects, respectively. *Finland*, *Sweden*, *Norway*, and *Denmark* are variables reflecting the excess return of each country portfolios over the risk-free rate. For the risk-free rate, we use a basket of the one-month inter-bank offering rates in each of the four currencies. To form the basket, we have weighted the risk-free rates of each country by the share of the companies of the total sample market capitalisation, which trade in that currency. The returns on the country portfolios are calculated as the value-weighted average of returns on shares representing each country in the sample. For the robustness check, we also ran the regressions based on equal weighted returns. In addition, we made the regressions both for a sample including financial companies and for a sample excluding companies with two classes of shares.

Table 6 presents the regression results. The first row shows alpha for the strategy buys the democracy portfolio (G=1) and sells short the dictatorship portfolio (G \geq 5). The next five rows show alphas for the portfolios based on different values of the Governance index. The long democracy - short dictatorship strategy results in positive alpha, which is not, however, statistically significant. The alpha for the dictatorship portfolio (G \geq 5) is the largest of the negative alphas and is also statistically significant, although only at the 5% level. However, the one significant alpha may also exist by chance. The results do neither show any consistent trend in alphas. Therefore these results based on Nordic data do support our hypothesis of no relation between takeover protection provisions and share returns. Moreover, a Spearman rank-correlation test yields similar insignificant results, suggesting that the null hypothesis of no correlation cannot be rejected¹.

[Table 6 here]

All in all, we do not find a statistically significant relation between takeover protection provisions and share returns. Our findings are in line with those of other studies based on European data. In addition, we note that researchers using U.S. data that the positive and statistically significant relation, reported by Gompers et al. (2003) from 1990 to 1999 period, has vanished since 1999 (Cremers and Nair, 2005; Core et al., 2005; Larcker et al., 2005), and the same may also hold true for Europe and the Nordic countries.

Corporate governance and operating performance

To explore whether defensive provisions have a positive impact on company's operating performance as we hypothesized based on the Nordic model or a negative one as suggested by the U.S. model and empirically supported in the U.S. context, we regress our corporate governance index on industry adjusted net profit margin (NPM), return on equity (ROE) and net sales growth (NSG). As control variables, we use the log of the book-to-market multiple

¹ We also estimated both value weighted and equal-weighted results on the long democracy - short dictatorship portfolio for the base case sample, for two sub-samples (including financial companies and excluding companies with dual-class shares) as well as for three sub-periods (1999-2000, bull-market; 2001-2002, bear market; 2003-2004, bull market). None of the alphas is statistically significant, although the majority of them are positive.

and the home country of each company. To reduce the impact of outliers, we windsorize the values of the dependent variables at the first and 99th percentiles respectively.

Table 7 reports the results for *return on equity* $(ROE)^2$. The analysis based on ROE yields similar results to those based on net profit margin, with the coefficients of both the whole index and the democracy dummy being statistically significant. These results suggest that companies with higher amount of defensive provisions have higher ROE than those with less defensive provisions. None of the components of index stands out as significant, except the oppressed minority provision. The inclusion of financial companies does not change the results. Gompers et al. (2003) find no statistically significant relation between ROE and G. However, in addition to net profit margin, Brown et al (2004) report that companies with stronger takeover protection out-performed unprotected companies in terms of ROE, which is in line with our findings.

[Table 7 here]

Results on regressions using *net sales growth* as a dependent variable are far less significant than they are for return on equity and net profit margin. The average coefficient of whole index is significant only at the 5% level, while the coefficient of the democracy dummy is no longer significant.

These results suggest that anti-takeover provisions in Scandinavian companies are set for the purpose of protecting current shareholders to gain in the long run assist and control benefits from the company. Thus, these provisions which company management use in the U.S. to protect themselves against takeover threat, have another role in the Nordic corporate governance model.

² We do not report the NPM and NSG tables here but they are available upon request.

CONCLUSIONS AND DISCUSSION

In our theoretical part we constructed a dual framework, one for the Nordic corporate governance model and one for the U.S.. The model differences are based on the fact that in Nordic countries ownership is more concentrated, major shareholders have big enough stake in the company thus having an interest to use resources for assisting and controlling managers. In order to gain the benefits from these activities, major shareholders of Nordic companies protect their position against outside threat of corporate takeovers. The probability of external corporate takeover is low without the initiative of these major shareholders. This Nordic model predicted that takeover protective covenants improve company operating performance. In addition, due to lower takeover threat, company valuation lags companies with takeover threat. The Nordic model is especially efficient in replacing company management, since major shareholders have power and interest to do so without any market for corporate control (Walsh & Seward, 1990; La Porta et al., 2000). The Nordic model also explains the results of other European studies, which have also found a positive relation between operating performance and the amount of protective provisions or low quality of corporate governance (Bauer et al., 2004; and in Switzerland, Beiner et al., 2006).

Our results indicate that companies with several takeover protection provisions are lower valued, especially in the case of those having two classes of shares. These results suggest that neither speculators nor competing management teams find such companies interesting investment targets, thus lowering the valuation level of these companies. The bear market conditions do not increase the takeover protected provision based undervaluation in Scandinavian countries. These results are very similar to those in the U.S. (Gompers et al., 2003; Brown et al., 2004) and in Europe (Drobetz et al., 2004; Bauer et al., 2004; and in Switzerland, Beiner et al., 2006).

Our results on operating performance support our Nordic model. The companies which have larger amount of takeover protective provisions have higher return on equity and net profit margin. These results support the explanation that major shareholders set takeover protective provisions to generate higher operating performance and to guarantee that they will also benefit from it in the long run. Any major wealth expropriation which would show up as lower level of operating performance we could not detect. These results contradicts with those from the U.S. (Gompers et al., 2003; Cremers et al., 2005) but they are inline with the results from Europe (Bauer et al., 2004; and in Switzerland, Beiner et al., 2006).

The corporate governance story does not have a single solution where external corporate governance with takeover threat provides an all-inclusive solution against company management. Instead, researchers should consider country or cultural specific institutional features to detect the insufficiencies as well as supplementary and complementary roles of various corporate governance mechanisms and to offer explanations for differences in valuation and performance similar to Johnson et al. (2000). Good suggestions for further studies have already been presented by Weimer & Pape (1999), Mueller (2006) and Heugens & Otten (2007). Another venue for further research would be to follow studies such as Holmen and Nivorozhkin (2007) and Maury (2006) and look for the identity of the controlling owner and its effect on firm valuation and performance.

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Figure 1. Panel A: Nordic perspective on the effects of protective provisions on valuation and performance



Panel B: U.S. perspective on the effects of protective provisions on valuation and performance

US: Fragmented ownership, diversified owners



Table 1 Data description

This table presents statistics for the sample companies. Each company-year observation has to fulfil the following criteria to qualify for inclusion into our sample: the articles of association must be publicly available; the company must be listed at the beginning of the previous year and their financial statement from the prior year must be available; and the company must be domiciled either in Denmark, Finland, Norway or Sweden.

	1999	2000	2001	2002	2003	2004				
Sample excluding financial companies	367	418	481	504	513	516				
Companies with only one class of shares (excluding financial companies)	186	222	274	299	309	312				
Total sample including financial companies	438	490	561	589	598	601				
Total sample excluding financial companies by country:										
Denmark	77	80	88	90	90	91				
Finland	80	100	112	114	116	116				
Norway	68	68	83	89	91	94				
Sweden	142	170	198	211	216	215				
Total Sample	367	418	481	504	513	516				
Total sample excluding financial companies – ten largest industries by the number of companies										
Machinery	34	35	36	36	38	38				

Total sample excluding financial companies – ten largest industries by the number of companies											
Machinery	34	35	36	36	38	38					
Software	8	20	30	32	33	33					
Real Estate	27	31	32	32	32	32					
Commercial Services & Supplies	23	25	29	31	32	32					
IT Services	16	24	26	27	28	27					
Electronic Equipment & Instruments	12	16	21	24	24	24					
Media	17	20	21	22	22	22					
Communications Equipment	11	14	18	19	19	19					
Food Products	13	13	16	16	16	16					
Biotechnology	9	10	14	16	16	16					

Table 2The Governance Index

This table provides summary statistics on the distribution of G, the Governance index. We divide the sample into five portfolios based on the level of G and report the number of firms in each portfolio. The democracy portfolio is composed of all firms where G is =1, and the Dictatorship portfolio contains all firms where $G \ge 5$.

	1999	2000	2001	2002	2003	2004
Governance Index						
Minimum	1	1	1	1	1	1
Mean	2	2	2	2	2	2
Median	2	2	2	2	2	2
Mode	2	2	2	2	2	2
Maximum	6	6	6	6	6	6
Standard deviation	1	1	1	1	1	1
10 th percentile	1	1	1	1	1	1
90 th percentile	4	4	3	3	3	3
Number of firms						
G=1	70	94	121	132	138	138
G=2	163	179	208	217	221	224
G=3	88	98	105	110	109	108
G=4	27	27	27	26	26	26
G=5	14	14	14	13	13	13
G=6	4	6	6	6	6	7
G=7	0	0	0	0	0	0
G=8	0	0	0	0	0	0
G=9	0	0	0	0	0	0
Total	367	418	481	504	513	516
Median by country						
Finland	2	2	2	2	2	2
Denmark	3	3	3	3	3	3
Norway	2	2	2	2	2	2
Sweden	2	2	2	2	2	2

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Table 3Detailed description of Governance index components in Nordic countries in 1999-2004

Provisi	on	1	2	3	4	5	6	7	8	9	
						Required majority in voting	Temporar y suspensio n of				
		Two series of shares	Opressed minority	Minority offer below 50% ownership	Voting restrictions in general meeting	on the change in the articles of associatio n higher than 2/3	voting rights (following the purchase of the shares)	The board's acceptance required for purchasing the shares	Board's extended term of office (longer than 1 year)	Shareh. agreements between holding more than 50% of the shares	Aver.
1999	Sample	49.3%	42.8%	85.3%	7.4%	7.6%	2.2%	5.7%	23.7%	12.8%	26.3%
	Denmark	48.1%	100.0%	100.0%	5.2%	10.4%	7.8%	9.1%	27.3%	11.7%	35.5%
	Norway	40.070	100.0%	32.370	10.070	10.070	0.0%	1.370	10.0% 92.90/	13.8%	21.870
	Sweden	69.7%	0.0%	100.0%	2.1%	0.7%	0.0%	0.7%	0.7%	17.6%	24.770
2000	Sample	46.9%	43.1%	84.2%	7.2%	7.9%	1.7%	5.0%	21.3%	12.7%	25.5%
-000	Denmark	45.0%	100.0%	100.0%	5.0%	10.0%	6.3%	8.8%	26.3%	11.3%	34.7%
	Finland	42.0%	100.0%	34.0%	19.0%	20.0%	0.0%	7.0%	10.0%	12.0%	27.1%
	Norway	8.8%	0.0%	100.0%	7.4%	5.9%	2.9%	10.3%	85.3%	2.9%	24.8%
	Sweden	65.9%	0.0%	100.0%	1.2%	0.6%	0.0%	0.0%	0.0%	17.6%	20.6%
2001	Sample	43.0%	41.6%	84.6%	6.2%	6.9%	1.7%	4.4%	21.6%	11.9%	24.6%
	Denmark	40.9%	100.0%	100.0%	4.5%	9.1%	6.8%	8.0%	26.1%	11.4%	34.1%
	Finland	37.5%	100.0%	33.9%	17.0%	17.9%	0.0%	6.3%	8.9%	10.7%	25.8%
	Norway	7.2%	0.0%	100.0%	6.0%	4.8%	2.4%	8.4%	85.5%	2.4%	24.1%
	Sweden	62.1%	0.0%	100.0%	1.0%	0.5%	0.0%	0.0%	0.0%	16.7%	20.0%
2002	Sample	40.7%	40.5%	85.3%	6.3%	6.5%	1.6%	4.6%	22.0%	11.1%	24.3%
	Denmark	36.7%	100.0%	100.0%	4.4%	8.9%	6.7%	7.8%	25.6%	10.0%	33.3%
	Finland	36.8%	100.0%	35.1%	18.4%	17.5%	0.0%	6.1%	9.6%	10.5%	26.0%
	Norway	6.7%	0.0%	100.0%	5.6%	4.5%	2.2%	9.0%	86.5%	2.2%	24.1%
2002	Sweden	58.8%	0.0%	100.0%	0.9%	0.5%	0.0%	0.5%	0.0%	15.6%	19.6%
2003	Sample	39.8%	40.2%	85.2%	6.2%	6.4%	1.6%	4.5%	22.0%	11.1%	24.1%
	Denmark	35.0%	100.0%	100.0%	4.4%	8.9%	0.7%	/.8%	25.0%	10.0%	33.2% 25.90/
	Finland	50.2% 5.50/	100.0%	34.5%	18.1%	1/.2%	0.0%	0.0%	9.5%	10.3%	23.8%
	Norway	5.5% 57.0%	0.0%	100.0%	5.5% 0.0%	4.470	2.270	0.070	0.0%	2.270	25.9%
2004	Sweden	37.970 20 50/	0.0%	100.0% 85 20/	0.9% 6 29 /	0.3% 6 49/	0.0%	0.5%	0.0%	13.770	19.370 24 10/
2004	Denmark	36 3%	40.170	0 3.3 70	U.470 1 1%	0.470 8 8%	1.070 6.6%	4.370 7 7%	22.170 26.1%	11.0%	24.170 33 5%
	Finland	35 30/2	100.0%	34 5%	18 1%	17.2%	0.0%	6.0%	20.470 9.5%	10.3%	25.570
	Norway	5 3%	0.0%	100.0%	5 3%	4 3%	2.1%	8.5%	87.2%	2.1%	23.170
	Sweden	58 1%	0.0%	100.0%	0.9%	<u>5</u> %	2.170 0.0%	0.5%	0.0%	15 3%	23.970 19.5%
	Sweden	JO.1/0	0.070	100.070	0.7/0	0.370	0.070	0.370	0.070	13.370	17.3/0

Table 4Correlations between the Governance index components

This table presents pairwise correlations between different components of the governance index in 2004.

	Two series of shares	Oppressed minority	Minority offer below 50% ownership	Voting restrictions in general meeting	Required majority in voting on the change in the articles of association higher than 2/3	Temporary suspension of voting rights (following the purchase of the shares)	The board's acceptance required for purchasing the shares	Board's extended term of office (longer than 1 year)	Shareholder agreements between holding more than 50% of the shares
	1	2	3	4	5	6	7	8	9
1	1.000								
2	-0.063	1.000							
3	-0.044	-0.508	1.000						
4	-0.027	0.199	-0.075	1.000					
5	-0.049	0.239	-0.003	0.327	1.000				
6	0.059	0.089	0.052	0.098	0.031	1.000			
7	0.075	0.091	-0.069	0.217	0.097	0.201	1.000		
8	-0.230	-0.113	0.108	0.149	0.029	0.044	0.175	1.000	
9	0.360	-0.011	-0.045	-0.014	0.034	0.056	0.044	-0.073	1.000

Table 5

Regressing Tobin's Q on G and its components

The first column of this table presents the coefficients of G (the governance index) from regressions of industry adjusted Tobin's Q on G and control variables. The second column restricts the sample to firms in the democracy (G=1) and Dictatorship (G \geq 5) portfolios and includes as regressors a dummy variable for the Democracy portfolio and the controls. Columns 3 to 11 present results for the regressions, where the components of the G index are the independent variables in addition to the control variables. We include as control variables, the log of assets in the fiscal year and a country dummy. The coefficients of the control variables are omitted in the table. The values of industry-adjusted Tobin's Qs are windsorized at the first and 99th percentile, respectively. Industries are defined based on the third level of GICS provided by the stock exchanges. Standard errors are reported in parenthesis and significance at the 5% and 1% level is indicated by * and **, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	G	Democracy- portfolio	Two series of shares	Oppressed minority	Minority offer below 50% ownership	Voting restrictions in general meeting	Required majority in voting on the change in the articles of association higher than 2/3	Temporary suspension of voting rights (following the purchase of the shares)	The board's acceptance required for purchasing the shares	Board's extended term of office (longer than 1 year)	Shareholder agreements between holding more than 50% of the shares
1999	-0.067**	0.29	-0.16**	-0.02	0.23	0.10	-0.02	-0.08	-0.19	-0.07	-0.05
	(0.02)	(0.15)	(0.05)	(0.07)	(0.12)	(0.11)	(0.11)	(0.18)	(0.11)	(0.07)	(0.08)
2000	-0.068**	0.24	-0.15**	-0.10	-0.02	0.04	-0.01	-0.14	-0.12	-0.08	0.02
	(0.02)	(0.16)	(0.06)	(0.08)	(0.12)	(0.11)	(0.11)	(0.21)	(0.13)	(0.08)	(0.08)
2001	-0.049**	0.32	-0.13**	-0.09	0.10	0.16	-0.08	-0.17	-0.06	-0.07	0.06
	(0.02)	(0.13)	(0.04)	(0.06)	(0.09)	(0.09)	(0.09)	(0.16)	(0.10)	(0.06)	(0.07)
2002	-0.03	0.18	-0.10**	-0.04	0.08	0.10	-0.07	-0.08	-0.03	-0.03	0.07
	(0.02)	(0.11)	(0.04)	(0.05)	(0.07)	(0.08)	(0.07)	(0.13)	(0.08)	(0.05)	(0.05)
2003	-0.02	0.20	-0.09*	-0.11*	0.06	0.09	-0.02	0.00	-0.17*	0.04	0.14*
	(0.02)	(0.10)	(0.04)	(0.05)	(0.08)	(0.08)	(0.08)	(0.14)	(0.09)	(0.05)	(0.06)
2004	-0.03	0.13	-0.10**	-0.07	0.06	0.15	-0.07	-0.23	-0.15	0.04	0.12*
	(0.02)	(0.10)	(0.04)	(0.05)	(0.08)	(0.08)	(0.08)	(0.14)	(0.09)	(0.05)	(0.06)
Mean	-0.04**	0.22**	-0.10**	-0.07**	0.09*	0.11**	-0.05*	-0.12*	-0.12**	-0.03	0.06
	(0.01)	(0.03)	(0.01)	(0.02)	(0.03)	(0.02)	(0.01)	(0.03)	(0.03)	(0.02)	(0.03)

Table 6 Results for the share return regressions for portfolios based on G values

We estimate eight factor regressions of value weighted monthly returns for portfolios of firms sorted by G. The first row contains the results when we use the portfolio that buys the Democracy portfolio (G=1) and sells short the Dictatorship portfolio (G \geq 5). Rows two to six show the regression results for the portfolios including companies in each G portfolio from G=1 to G \geq 5. The G portfolios are reset at the beginning of each year. The explanatory variables are RMRF (return on the market portfolio over monthly risk-free rate), SMB (return on small companies less return on large companies sorted by market cap), HML (return on high book to market less return on low book to market companies), Momentum (return on the portfolio of companies with the highest 30% past eleven month returns lagged one month) and the country indexes minus risk-free rate. The country indexes are calculated as the value-weighted average of the returns of companies from each country in the sample. The RMRF, SMB, HML and country portfolios are recalculated at the beginning of each year from 1999 to 2004, while the momentum portfolio is updated at the beginning of each month. The sample period is from January 1999 to December 2004 and excludes financial companies. Standard errors are reported in parenthesis and significance at 5% and 1% level is indicated by * and **, respectively. Data source: Worldscope and Datastream.

		a	Market return less risk- free rate	Small companies less large companies	High book-to- market companies less low book-to- market	Momentum	Denmark	Finland	Norway	Sweden
Democracy- Dictatorship	(1)	0.70 (1.05)	-0.13 (1.95)	0.10 (0.32)	-0.35 (0.25)	0.75 (0.41)	-0.40 (0.32)	0.03 (0.80)	0.24 (0.30)	0.27 (0.77)
G=1 (Democracy portfolio)	(2)	-0.74 (0.83)	0.88 (1.54)	0.24 (0.25)	-0.17 (0.20)	0.19 (0.32)	-0.35 (0.25)	-0.17 (0.63)	0.19 (0.23)	-0.16 (0.61)
G=2	(3)	-0.33 (1.17)	-0.18 (2.18)	0.08 (0.36)	-0.16 (0.28)	-0.20 (0.45)	-0.24 (0.36)	0.20 (0.89)	0.19 (0.33)	0.38 (0.86)
G=3	(4)	-0.26 (0.93)	-0.16 (1.73)	0.18 (0.28)	-0.39 (0.22)	-0.16 (0.36)	-0.29 (0.29)	0.90 (0.71)	0.11 (0.26)	-0.24 (0.68)
G=4	(5)	-0.23 (0.59)	0.55 (1.10)	0.26 (0.18)	0.09 (0.14)	0.19 (0.23)	-0.11 (0.18)	-0.04 (0.45)	-0.01 (0.17)	0.01 (0.43)
G≥5	(6)	-1.45* (0.70)	1.02 (1.31)	0.14 (0.22)	0.18 (0.17)	-0.56* (0.27)	0.05 (0.22)	-0.20 (0.54)	-0.05 (0.20)	-0.43 (0.52)

Table 7

Operating performance – <u>return on equity</u>

This table presents results from the regressions of return on equity (ROE) for G (the governance index) and its components. The first column of this table presents the coefficients of G from regressions of industry adjusted ROE on G and control variables. The second column restricts the sample to firms in the Democracy (G=1) and Dictatorship (\geq 5) portfolios and includes as an independent dummy variable for the Democracy portfolio and the controls. Columns 3 to 11 present results for the regressions, in which the components of the G index are the independent variables in addition to the control variables. We include as control variables the log of the book-to-market multiple in the fiscal year and a country dummy. The coefficients of the control variables are omitted in the table. Return on equity is the ratio of reported net profit to the book value of common equity. The values of ROE are windsorized at the first and 99th percentile, respectively. Industries are defined based on the third level of GICS provided by the stock exchanges. Industry adjustments are made based on the industry medians. Standard errors are reported in parenthesis and significance at the 5% and 1% level is indicated by * and **, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	G	Democracy- portfolio	Two series of shares	Oppressed minority	Minority offer below 50% ownership	Voting restrictions in general meeting	Required majority in voting on the change in the articles of association higher than 2/3	Temporary suspension of voting rights (following the purchase of the shares)	The board's acceptance required for purchasing the shares	Board's extended term of office (longer than 1 year)	Shareholder agreements between holding more than 50% of the shares
1999	1.69	-12.68	0.96	5.81	0.49	0.66	1.62	-1.10	1.83	1.30	0.37
	(1.22)	(7.42)	(2.82)	(3.80)	(6.09)	(5.60)	(5.52)	(9.23)	(5.93)	(3.62)	(3.97)
2000	6.58*	-34.50	9.32	23.64*	14.31	-5.44	11.57	-3.26	-4.11	9.09	-1.99
	(3.06)	(19.91)	(7.06)	(9.31)	(14.55)	(14.19)	(13.46)	(25.67)	(15.58)	(9.29)	(10.05)
2001	2.41	-11.81	-2.15	12.98**	1.08	5.40	1.79	-2.17	1.38	-3.57	1.35
	(1.37)	(9.83)	(3.09)	(4.01)	(6.31)	(6.46)	(6.15)	(11.91)	(7.21)	(4.04)	(4.51)
2002	2.97	-11.07	-2.74	10.72*	-0.52	4.92	4.80	-1.93	1.86	0.51	2.71
	(1.64)	(12.73)	(3.76)	(4.84)	(7.64)	(7.76)	(7.47)	(14.64)	(8.63)	(4.89)	(5.59)
2003	2.73*	-8.61	0.14	6.50	-4.14	4.72	1.25	4.47	2.47	-0.70	3.74
	(1.27)	(9.44)	(2.94)	(3.74)	(5.91)	(5.99)	(5.78)	(11.32)	(6.69)	(3.75)	(4.37)
2004	3.70*	-22.45*	1.75	6.99	-3.39	5.16	0.83	-1.38	1.24	6.41	4.71
	(1.43)	(9.41)	(3.33)	(4.22)	(6.68)	(6.92)	(6.46)	(12.78)	(7.49)	(4.24)	(4.93)
Mean	3.35**	-16.9**	1.21	11.11**	1.31	2.57	3.64	-0.89	0.78	2.17	1.81
	(0.70)	(4.03)	(1.77)	(2.75)	(2.74)	(1.76)	(1.69)	(1.12)	(0.99)	(1.92)	(0.99)