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Publication date:
2000

[Link to publication in Tilburg University Research Portal](#)

Citation for published version (APA):

de Jong, A., DeJong, D. V., Mertens, G. M. H., & Wasley, C. (2000). *The Role of Self-Regulation in Corporate Governance: Evidence from the Netherlands*. (CentER Discussion Paper; Vol. 2000-59). Finance.

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Center
for
Economic Research

No. 2000-59

**THE ROLE OF SELF-REGULATION IN CORPORATE
GOVERNANCE: EVIDENCE FROM THE
NETHERLANDS**

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June 2000

ISSN 0924-7815

**The Role of Self-Regulation in Corporate Governance:
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Current Draft: June 17, 2000

Comments Welcomed.

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** For helpful comments and conversations, we thank the participants at the conference “Convergence and Diversity in Corporate Governance Regimes and Capital Markets” (Eindhoven, Netherlands). Part of this research was carried out while Abe de Jong was visiting Florida State University; he gratefully acknowledges financial support from The Netherlands Organization for Scientific Research (NWO R46-406).

The Role of Self-Regulation in Corporate Governance: Evidence from The Netherlands

ABSTRACT

The purpose of this paper is to gather evidence on the success of market forces in promoting investor interests through self-regulation. Corporate governance is a complex mechanism design problem that is both economic and legal/political based. As such there is great interest in whether (and when) market forces alone are sufficient to prompt change, and whether (and when) additional legal/political actions are required to write and enforce contracts between the owners and managers of capital. The Netherlands provides an excellent opportunity to gather such information. In 1996, a private sector Committee was formed to initiate debate and change in the balance of power between a company's management and investors. In 1997, the Committee issued its recommendations and one year later the Committee initiated a project to assess the impact of the report. We identify the corporate governance variables that are linked to firm value and assess the impact of the committee's recommendations on the identified variables. Finally, we use event study techniques to assess investors' reactions to the various events associated with the evolution of corporate governance practices in the Netherlands during this period.

Keywords: international economics, financial economics, law and economics, corporate governance

JEL Classification Numbers: F36, G38, K22

The Role of Self-Regulation in Corporate Governance: Evidence from The Netherlands

1. Introduction

Increased international competition and the integration of Europe through the European Union have focused attention on countries, industries and companies who are restructuring to meet competition and to promote economic growth. Accompanying the restructuring is a demand for capital to finance such activities. With limits to conventional sources of capital (e.g., banks and governments), attention has shifted to the capital markets. In capital markets, corporate governance plays a crucial role in determining where, in what form and at what cost capital is provided by outside investors (e.g., Price Waterhouse, 1997, Shleifer and Vishny, 1997, and La Porta, Lopez-de-Salanes, Shleifer and Vishny, 1998).

It is well known that serious agency problems are associated with the separation of ownership and control in corporations (Berle and Means, 1951, and Jensen and Meckling, 1976). To mitigate these problems, corporate governance mechanisms have evolved to help assure investors that they earn a competitive rate of return. Corporate governance is a complex mechanism design problem that is both economic and legal/political based. As such, there is great interest in whether (and when) market forces alone are sufficient to prompt change, and whether (and when) additional legal/political actions are required to write and enforce contracts between the owners and managers of capital (Alchian, 1950, Stigler, 1958, and Shleifer and Vishny, 1997).

The purpose of this paper is to gather evidence on the success of market forces in promoting investor interests through self-regulation. The Netherlands provides an excellent opportunity to gather such information¹ In 1996, a Committee on Corporate Governance was formed as a result of an agreement between the Association of Securities Issuing Companies and the Amsterdam Stock Exchange. Chaired by J. Peters (retired CEO of Aegon), its members included representatives from the business community, Amsterdam Exchange, security issuing companies, academics and a platform of investors (stockholder and pension representatives). The purpose of the committee was to initiate debate and change in the balance of power between a company's management and investors.

¹ The Dutch economy is internationally focused and heavily influenced by international competition. When comparing stock exchange capitalization to annual GNP (gross domestic product), the Dutch economy ranked sixth among developed countries in 1996 (Committee on Corporate Governance, 1997). However, it is not known for its strong investor rights.

In June 1997, the Committee issued its recommendations to increase the effectiveness of management, supervision and accountability to investors in Dutch corporations. A key element of the report was its reliance on self-enforcement, through market forces, to implement its recommendations. One year after the effective date of the report (and after the issuance of companies' annual reports and their general meetings of shareholders), the Committee initiated a project to assess the impact of the report. In cooperation with the listed companies of the Amsterdam Stock Exchange, a complete set of demographics was obtained for the listed companies for 1997.

The success or failure of self-regulation to implement corporate governance changes that enhance firm value is a significant issue to investors and policymakers.² Its outcome directly affects a country's ability to attract capital for restructuring and growth. As expected, the European Union and the Securities and Exchange Commission have closely followed the Dutch "experiment" in self-regulation. The Korean government has used the Committee report during its own deliberations on corporate form and governance.³

To evaluate the impact of the Peters Committee, we use Tobin's Q as our measure of firm performance. To identify corporate governance characteristics that impact value, we assembled a set of demographics for the listed companies on the Amsterdam Exchange for the five years prior to the Peters Committee report. This included information on a company's organizational form, voting rights, board characteristics, outside blockholders and debt characteristics. To assess the impact of the Committee's report, we use the set of demographics for the listed companies obtained from the monitoring report for 1997 and compare it to the pre-Peters period. Finally, we use event study techniques to assess investors' reactions to the various events associated with the evolution of corporate governance practices in the Netherlands during this period.

One of our major results addresses the organizational form of Dutch firms. When domestic firms in the Netherlands reach a certain size, they are legally required to organize as a structured regime. This regime requires a supervisory board comprised of outsiders that takes over numerous powers from shareholders; two principal ones being the election of the management board and the election of the supervisory board, itself. This structured regime has a negative impact, both statistically and economically, on firm value. Under the structured regime, investor accountability is further reduced by supervisory board members, who have interlocking directorates with other firms.

Consistent with the usual monitoring hypothesis, outside shareholders have a positive effect on firm value. Takeover defenses and limits on shareholder voting rights also have positive effects. However, the combination of the two forms of entrenchment has a significant and negative effect on firm value. Thus, outside owners, management and supervisory board members can and do entrench themselves by adopting a set of takeover

² The Ministry of Finance issued a report in May 1999 stating that the issues surrounding corporate governance are complex and that, for the present, further investigation is required before any decisions can be made (Ministry of Finance, May 10, 1999).

³ Remarks by Jaap Peters in his talk at the international conference "Convergence and Diversity in Corporate Governance Regimes and Capital Markets", Eindhoven, Netherlands, November 4-5, 1999.

defenses. Contrary to the usual monitoring hypothesis associated with the debt market, Dutch banks appear to constrain firm behavior in such a way that their relationship reduces the value of the firm. Financial institutions also fail in their monitoring role.

Our short-term results show that governance and its impact on firm value have not changed in the post-Peters period when compared to the pre-Peters period. Further, our event study results conclude that the market is pessimistic about the substantive evolution of corporate governance practices in the Netherlands. By inference, the market is equally skeptical of the underlying premise of the Peters Committee; market forces via self-regulation are sufficient to promote changes in corporate governance that increase investor returns.

From a mechanism design perspective, what is necessary for market forces to succeed? One of the Peters Committee recommendations provides the starting point; an appeal to re-evaluate the numerous constraints placed on the rights of shareholders. Direct/indirect takeover defenses should be re-evaluated so that the market for corporate control is allowed to function. Voting limitations should be re-evaluated in order to provide direct accountability of the management and supervisory boards to shareholders. Since supervisory and management boards effectively control a company's voting rights (via the structured regime and direct/indirect takeover defenses), it is doubtful that market forces can succeed without legal/political action to restore the voting rights of shareholders.

The next section presents a brief description of the Dutch corporate structure while section 3 identifies corporate governance variables that have been found to influence firm value. Section 4 describes our data and section 5 reports our results. Section 8 concludes.

2. Dutch corporate structure

2.1. Legal structure and board responsibilities

Current Dutch company law was enacted in 1971 after a government committee (Verdam Committee) issued a proposal for company law reform in 1965 and a draft law based on the report in 1968.⁴ At the time, there was a perceived monitoring problem within large companies and a desire to increase management's accountability to the company's broader set of "stakeholders" (i.e., investors, employees and the general public). The law addressed these two concerns by altering the legal form of large companies through the creation of the "Structured Regime" (see below). It also broadened accountability to include the possibility of three boards, a supervisory board, a management board

⁴ The Verdam Committee referred to the situation as "no longer acceptable"; inadequate control of management's activities led to their propensity to misstate the firms' financial position and to violate the position of shareholder, debtholders and employees (Verdam Committee, 1965, p. 119-125). This was the major drive to restructure company law (Mertens, 1997). Slagter (1996) documents the desire for more co-determination (*medezeggenschap*); meaning that all stakeholders interests should be represented in a fair way. The law also dealt with financial reporting requirements, the right of inquiry, a works council and the establishment of the enterprise chamber at the Amsterdam court (Zeff et al, 1992, p.171- 181).

(technically named the board of directors) and a works council, each with defined responsibilities.

Under Dutch law, our starting point is a shareholder controlled firm with a supervisory board, management board and works council. Shareholders elect members of the supervisory board and management board as well as approve the annual accounts. Dividend policy is set by management with the consent of the supervisory board and formally approved by shareholders at the annual meeting. Shareholders also vote on such issues as mergers and acquisitions. All votes are taken at the annually scheduled General Meeting of Shareholders and physical presence is required as voting by proxy is not part of the Dutch structure.

Once a company attains a certain size, it adopts the “Structured Regime” which has three variations. The most prevalent is the Full Structured Regime which is legally required for Dutch companies with more than 100 employees, a legally installed work council and book value of shareholders’ equity in excess of NLG 25 million (about US\$ 12.5 million). The full structured regime requires a supervisory board that takes over the following powers from shareholders: establishing (and by default the approval of) the annual accounts, the election of the management board, and the election of the supervisory board itself (called co-optation). The supervisory board also has authority over major decisions made by the management board.

The second variation of the Structured Regime is the Mitigated Structured Regime. This structure requires a supervisory board along with a system of co-optation, but leaves approval of the annual accounts in the hands of shareholders and also prohibits the supervisory board from hiring and/or firing the management board. The mitigated structured regime is required if a foreign company holds more than 50% of a Dutch subsidiary’s shares.

Third, there are exceptions to the legal requirements for the full structured regime. Dutch multinationals with more than 50% of their employees outside the Netherlands are exempt. For the Dutch subsidiary of a Dutch multinational, the full structured regime is not required if the parent adopts the structured regime and owns more than 50% of the subsidiary. Otherwise, the subsidiary is required to have the mitigated structured regime. It is also worth noting that a Dutch company may voluntarily adopt either the full structured or mitigated structured regime even though it is not legally required to do so.⁵

⁵ Companies required to apply the structured regime have statutes detailing the exact rights and duties of the supervisory board. If a company no longer meets these criteria (e.g., due to its international scope) and it wants to change to another organizational form, its statutes must be changed. The management board, supervisory board or the annual shareholders meeting may suggest a change in the statutes. However, the supervisory board still has most of the legal powers and shareholders usually have a limited say in this. This could be one of the reasons why a relatively large number of the largest publicly listed companies apply the structured regime on a voluntary basis.

Turning to operations, a Dutch company operates under a two-tier management structure consisting of a Supervisory Board and Management Board.⁶ The supervisory board is “independent” of the company and is responsible for the supervision of management policy and the company’s general course of affairs. Specifically, the law requires that the board serves the firm’s interest. The board is comprised entirely of “outsiders,” but can and often does include past members of management. The management board consists of the company’s management team and may be as small as one member, the president. The management board reports to the supervisory board and is responsible for attaining the company’s objectives, its strategy and policy, and the ensuing results. Absent the structured regime, shareholders vote on the membership of the supervisory board and management board. However, under the structured regime, the supervisory board has very few restrictions on its ability to determine its own composition, re-appointments and other organizational matters. In addition, the management board serves at the pleasure of the supervisory board.

Turning to the role of labor, labor is not required to have an “outside” representative on the supervisory board nor is labor a member of the management board (Company Law of 1971). The legally installed works council (noted above) has a right to relevant information and to advise on such major issues as transfers of ownership, plant closings and major investments. However, its permission is only required for changes in social arrangements (e.g., pensions, working hours, wages, safety rules). If the council disagrees with the company’s proposals on social arrangements, the company must obtain a local judge’s decision to proceed.

2.2. Ownership and voting rights

At the time of its organization, a company has an authorized capital structure consisting of “common” shares. Once issued, the shares are registered with the company. Such “registered” (or ordinary) shares have voting, dividend and trading rights. However, when the company’s organization and size require the full structured regime, the supervisory board is granted the three rights previously held by shareholders (i.e., approval of the annual accounts, election of the management board, and election of the supervisory board itself). Shareholders still vote on such issues as mergers and acquisitions and dividend policy.

In addition to registered shares, a company can also have a second type of security called Certificates. In fact, under the structured regime, the supervisory board can request the exchange of ordinary shares for certificates.⁷ A Trust Office administers the certificates when issued or initiates a certification process where certificates are exchanged for the ordinary shares. The trust office is comprised of members from the company

⁶ The creation of a supervisory board is arranged by company statute. In fact, many large companies had already installed a two-tier system with a supervisory board before 1971 (Slagter, 1996).

⁷ The supervisory board’s authority has limits even under the structured regime. For example, if an individual owns 66% of the certificates (which translates into 66% of the votes), the individual can force the board to convert certificates to ordinary shares.

(supervisory board and management board) and the “outside” (not from the company). While the chairman and majority of the trust office members must be outsiders, in practice, the trust office is always friendly to existing management. The trust office is given responsibility for the ordinary shares associated with the certificates. Through the process of certification, legal, but not “economic” ownership of the ordinary shares is transferred to the trust office (Slagter, 1996, p.210). Certificate holders have dividend rights, can freely trade their certificates and can attend the General Meeting of Shareholders, but they cannot vote. The trust office holds all voting rights including approval of the dividend policy.⁸ Individual shareholders do not have a formal obligation to exchange their ordinary shares when a company decides to issue certificates.⁹ However, the company may decide to de-list its ordinary shares from the exchange, leaving the shareholder with the choice of non-listed bearer shares or listed certificates (the latter of which are a lot easier to trade). The prevailing type of Certificate is the limited exchangeable certificate. Once issued, these certificates can be exchanged for ordinary shares up to a maximum percentage of 1% of outstanding equity capital. However, once exchanged for ordinary shares, holders lose trading privileges. Ordinary shares can be reconverted to certificates, but then voting rights are lost.¹⁰

As takeover defenses, many companies have additional types of securities in their authorized capital structure. The most common takeover defense is “protective preference shares.” Management can issue such shares to a friendly trust office during a hostile takeover threat. Preference shares are sold at nominal value to the trust office with an obligation to pay only 25% of the amount up front. Preference shares are restricted to a maximum of 50% or 100% of the current outstanding nominal capital depending on the anti-takeover amendments in place. Special voting privileges are also granted through “priority shares” which give their holders special rights in situations such as merger approval, new public offerings, charter amendments and company liquidation.¹¹ Finally, existing shareholders can have their voting power directly reduced. “Limited voting power”, which is normally set at 1%, implies that a shareholder can have a maximum of 1% of the votes irrespective of the number of shares owned.

With regard to stock exchange listing, if a company wants their shares or certificates traded on the Amsterdam Exchange, there are requirements to be listed. The three most

⁸ Under all organizational forms, dividend policy is set by management with the consent of the supervisory board.

⁹ According to the law, it is possible for a company to have both ordinary shares and certificates outstanding. However, the Amsterdam Stock Exchange does not allow this possibility.

¹⁰ There is a second type of certificate, fully exchangeable certificate, which as the name suggests has unlimited convertibility to ordinary shares. However, trading is not possible because shareholders must be registered by the company. Fully exchangeable certificates were initiated because companies wanted to insure that no party could have a voting majority at the general meeting of shareholders due to low attendance. A non-exchangeable certificate also exists but only one company has them, CSM. In April 1999 (after the monitoring project of the Peter’s Commission), CSM announced that they would convert their non-exchangeable to exchangeable certificates over the next year.

¹¹ In situations outside the structured regime, priority shareholders have extensive influence. They can initiate a binding nomination for candidates to the board of directors and supervisory board at the general meeting of shareholders. The nominations can only be defeated by a supermajority of votes present (or 50% of the outstanding capital).

relevant for our study are minimum size, profitability and constraints on takeover defenses (Amsterdam Exchanges, 1997). For listing, the company's book value of shareholders' equity must be greater than NLG 11 million (about \$5 million) and it must have been profitable in three of the five years prior to listing. Finally, the company can only use two of the three possible takeover defenses noted above (certificates, priority shares and protective preference shares).¹²

3. Corporate governance and firm value

In this section, we develop the hypothesized relationships between a company's corporate governance characteristics and its value. We then detail our expectations about the impact of the Peters' Committee.

3.1 Corporate governance

In the Dutch setting, corporate governance focuses on the rights of investors and the balance of power between investors and a company's supervisory board and management board. Nevertheless, one must recognize the mitigating influence that outside parties can have on the agency problems between investors and management via the market for corporate debt, the managerial labor market, and the market for corporate control

Previous research has demonstrated that firm value is adversely affected by constraints placed on shareholders' voting rights either permanently or by management's attempt to mitigate the market for corporate control (e.g., Stulz, 1988, Malatesta and Walking, 1988). In our context, the structured regime is used to directly limit shareholder influence. Under the structured regime, firm value is adversely affected by required adoption (full or mitigated) over voluntary adoption. Explicit constraints on shareholder influence occur through the use of Certificates and limited voting power. Takeover defenses that mitigate the market for corporate control are protective and priority shares.

In the Dutch context, it is necessary to address the two-tier management structure and its impact on corporate governance and hence firm value. The supervisory board is in some aspects analogous to outside board members under the one-tier system in the U.S. However, what is unique about the supervisory board is its lack of accountability to investors under the structured regime. To address this concern we consider the number of interlocking directorates. In particular, we conjecture that the number of interlocking directorates directly reduces board members' incentives to act in the best interest of the company's shareholders. Compensation plans and equity-holdings in the company by supervisory board members' offset the problems created by their lack of accountability to investors under the structured regime.¹³

¹² There is one exception, 100% protective shares can only be combined with priority shares.

¹³ The Committee on Corporate Governance recommended against supervisory board compensation that depends on company performance, e.g., stock options. Based on the results of the voluntary information provided during the monitoring project of the Committee in 1997, there is only one company, CSM, with a performance related compensation plan for its supervisory board members. By law, companies only report aggregate compensation paid to the supervisory board. Since there is no alternative source of information

Another item to consider is the size of the supervisory board. While legal requirements place a minimum on the number of supervisory board members (three), there is no maximum. Past research has documented a negative relation between board size and firm value under a one-tier system (e.g., Eisenberg, Sundgren and Wells, 1998, Yermack, 1996). The intuition is that increased problems of communication and coordination occur as group size increases, which in turn, decreases the ability of the board to control management. We investigate whether such a relationship exists under the two-tier system in the Netherlands by looking at the absolute size of the supervisory board and its size relative to the management board.

Turning to the management board, it is comprised of the company's management team, and there are no size constraints on the board, either minimum or maximum. However, increased board size may lead to less candid discussion of managerial performance and greater control by the president both within the management board itself, and relative to the supervisory board. The importance of the management board's size on company performance is evaluated by considering its absolute and relative size compared to the supervisory board. Under the structured regime, management serves at the discretion of the supervisory board and not the shareholders, thus accountability to shareholders is weak. Accountability to shareholders can be further reduced through the trust office and certification process. We conjecture that interlocking directorates by members of management directly reduce their incentives to act in the best interest of the company. As with the supervisory board, our tests recognize that management ownership and performance based compensation plans increase management's incentives to act in the interests of the shareholders (e.g., Loderer and Martin, 1997, McConnell and Servaes, 1990; e.g., Kumar and Sopariwala, 1992, Larcker, 1983, Mehran, 1995).¹⁴

Prior research has also found that major outside shareholders constrain management's deviation from value-maximizing behavior (e.g., Agrawal and Knoeber, 1996, Cho, 1998, Holderness and Sheehan, 1988, La Porta, Lopez-de-Silanes and Shleifer, 1999, and Morck, Shleifer and Vishny, 1988). In our tests, we consider the influence of a major outside shareholder owning more than 5% of the shares. Next, we investigate the influence of major shareholdings by financial institutions (i.e., banks, insurance companies, pension funds and institutional venture capitalists) and by industrial firms. Financial institutions can have a positive or negative impact on firm value (Pound, 1988). The effect will be positive if they are more efficient monitors than atomistic shareholders. It will be negative if they collude with management. While McConnell and Servaes (1990) find a positive relationship in the U.S., financial institutions are known for their passive attitude in the Netherlands.¹⁵ With regard to industrial firm holdings, the effect

available, we use aggregate compensation as our compensation variable. We do however have the direct equityholdings of the supervisory board; this can occur, for example, when there are outsiders and past members of management with equityholdings who are also members of the supervisory board.

¹⁴ Again, for the same reasons as the supervisory board, the management board's compensation is reported in the aggregate and does not include stock options. We again have access to the direct equityholdings of the management board.

¹⁵ Cantrijn and Vente (1997) sent questionnaires to Dutch insitutional investors. The response shows that the investors perceive liquidity to be more important than control. Exercising supervision on the firm's

may be positive due to improved monitoring, or negative due to collusion and/or attempts to influence decisions for the benefit of their own company.

Two final factors related to monitoring and firm value are debt markets and cross-exchange listing. Debt markets can discipline management's deviation from value-maximizing behavior (Jensen and Meckling, 1976). Our tests use firm leverage and representation on the supervisory board by financial firms (i.e., interlocking directorates) as measures of this positive influence.¹⁶ We also include as separate variables bank debt and interlocking directorates with banks because we expect the role of leverage to be more pronounced for this type of debt. When companies are listed on exchanges outside the Netherlands, it is important to recognize the disciplining aspects that this international competition can have. For example, UK and U.S. stock exchanges require more company and compensation disclosure than the Amsterdam exchange.¹⁷ Our tests investigate the hypothesized positive impact that cross-listings on the UK and/or US stock exchanges have on the value of Dutch firms.

Our empirical tests study the impact of these factors by using Tobin's Q as a measure of firm value and performance (Lindenberg and Ross, 1981). Tobin's Q is the market value of the firm divided by the replacement cost of its assets. Our calculation is described in Perfect and Wiles (1994).

Our main focus of attention in corporate governance is organization form, voting rights, supervisory and management boards characteristics and their hypothesized relationships to firm value discussed above. To isolate their impact, we must also recognize the monitoring roles of major outside shareholders, the debt market and the US and UK exchanges when Dutch companies cross-listed their shares on these exchanges. These hypothesized relationships are also detailed above. We use the 1992-1996, pre-Peters period to estimate and evaluate these relationships.

3.2 Peters Committee

The Peters Committee issued its preliminary conclusions in October 1996 and its final recommendations (which were expected to be the same) in June 1997. The committee made a major appeal to re-evaluate the numerous constraints placed on the rights of shareholders, though it was explicit about rendering no opinion pro or con for certificates. They spoke specifically to the accountability of the supervisory board (and management board) under the structured regime including the problem of interlocking directorates. However, they did not address the inherent problems of the structured regime, itself. Rather, the committee addressed how to make the structured regime relatively more accountable to shareholders without changing the fundamental rights of shareholders. A difficult task given that shareholders can have very few rights.

investment policies and the remuneration are considered to be tasks of the institutions by only 20% and 33% of the respondents, respectively.

¹⁶ The average Dutch firm has a lower leverage ratio than the average US firm. Otherwise, the characteristics of the debt are comparable for Dutch and US firms (de Jong, 1999).

¹⁷ See Lins, Strickland and Zenner, 1999, for the arguments connected with US listing.

The monitoring report of December 1998 contained all the corporate governance information that was collected on the companies for 1997 by the committee (one year after the release of the committee's report). We conduct a series of tests to assess the impact of the committee's recommendations on the corporate governance and related variables, themselves, and their impact on firm performance as reflected in Tobin's Q in the post-Peters period of 1997. We use the results from the pre-Peters period above as our standard for the comparison. For the committee to have an impact, we would expect a favorable change in the variables, themselves, and their impact on Tobin's Q.

4. Sample, variable definitions, and empirical tests

4.1. Sample

Our sample contains information on the financial, asset, and the corporate governance structure for all non-financial firms listed on the Amsterdam Stock Exchange from 1992 - 1997. We exclude financial firms because of their distinct regulatory structure. The financial and asset structure data are obtained from a data set of Statistics Netherlands (Centraal Bureau voor de Statistiek). To obtain data on board compensation and bank debt we used the Review and Analysis of Companies in Holland (REACH) dataset. We verified this information using the firms' annual reports. Ownership structure is obtained from the leading Dutch financial daily newspaper (Het Financieele Dagblad) that annually publishes a list of exchange-listed firms and their stakeholders, according to the notifications for The Law on Disclosure of Shareholdings (Wet Melding Zeggenschap).¹⁸ Takeover defenses and cross-listings are from the yearly overviews of all securities listed at the Amsterdam Exchange (Gids bij de Officiële Prijscourant van de Amsterdamse Effectenbeurs). The data for board members are obtained from the 1991-92 to 1996-97 issues of the Yearbook of Dutch Firms (Jaarboek Nederlandse Ondernemingen).

Data on structured regimes as of 1992 (1997) is obtained from firms' annual reports (the Monitoring Report 1998). In case we found a difference between 1992 and 1997, we investigated all annual reports over 1992-1997. The annual reports allowed us to investigate whether the supervisory board established (vaststellen) the annual accounts and whether the firms met the criteria for the structured regime. Under the structured regime, the supervisory board is responsible for the annual accounts. In cases of inconsistency, we contacted the firm. Our sample consists of 132 firms. Since all firms do not have data available in all years, the total number of firm-year observations is 684 (570 from 1992-1996 and 114 from 1997).

¹⁸ The Law on Disclosure of Shareholdings (*Wet Melding Zeggenschap*) went into effect in 1992. This law is the Dutch implementation of the EU Transparency Directive 88/627, which allows us to collect ownership structure data.

4.2. Variable Definitions

Table 1 lists the variables used in our empirical tests along with the abbreviations used to refer to them in the tables and the text. The dependent variable, Tobin's Q (TQ), is measured as the book value of liabilities plus the market value of equity divided by the replacement cost of the firm's assets (see Perfect and Wiles, 1994). In the Netherlands, firms either present replacement values or historical costs in their annual reports. If replacement values are presented no adjustment is required. If historical costs are presented we have to adjust the value to estimate replacement value. To do this we assume that in the base year the replacement value equals the historical costs. For each subsequent year we adjust this replacement value by adding new investments and corrections for the growth in capital good prices and subtracting depreciation. Growth in capital good prices is based upon the price index of investment goods, as provided by the Statistics Netherlands. The replacement value of the assets is the book value of assets plus the difference between the replacement value and historical value of plant and equipment.

Appearing next in Table 1 are the control variables. These variables are size measured as the log of the book value of total assets (BVTA), GROWTH measured as the log of one plus the three-year historical growth rate of the firm's book value of assets, and leverage (LEV) measured as long-term debt/book value of assets. From prior research, we expect the coefficient on LEV and BVTA to be negative and that on Growth to be positive. We also control for the overall performance of the Amsterdam Stock Exchange by including dummy variables for each of the years covered by the sample.

Our first independent variable deals with cross listing. This variable, XLIST, takes on the value 1 (0) if the firm is (not) listed on an exchange in the UK and/or US. The organizational form of the sample firms is addressed by the next two variables. SR takes on a value of 1 (0) if the firm is (not) a structured regime while SR_V takes on a value of 1 (0) if the firm has (not) adopted a voluntary structured regime.

We capture limitations on shareholder rights by using PRIO which takes on a value of 1 (0) in the presence (absence) of priority shares, PREF which is set to 1 (0) if the company can (not) issue and place protective preference shares, CERT which is set to 1 (0) when the company has (not) issued certificates and LVOTE which takes on a value of 1 (0) if there is (not) a limitation on voting, normally 1%. Two additional variables are used to capture cases where firms employ more than one of the above measures. DEF3 is the number (0, 1, 2, or 3) of takeover defenses from the set PRIO, PREF and CERT that are used by the firm while DEF4 is defined analogously after augmenting the previous set of three to include LVOTE.

Next are the variables designed to capture characteristics of the supervisory and management boards. SBMB_S is the total number of supervisory and management board members. For the supervisory board, SB_S and SB_RS are the number of members on the supervisory board and the size of the supervisory board relative to the total number of board members on both boards, respectively. SB_EQ is the sum of the block-holdings by all members of the supervisory board and SB_COMP is the average compensation paid to

each board member (measured as the total compensation paid to the supervisory board divided by board size). Finally, SB_ILOCK quantifies the number of interlocking directorates by members of the supervisory board. It is the average number of interlocking positions per board member (measured as the absolute number of other board memberships divided by board size). For the management board, we have a comparable set of variables (MB_S, MB_RS, MB_EQ, MB_COMP and MB_ILOCK) that are defined in an analogous manner.

The influence of the debt market as a disciplining force is measured using BANK_ILOCK, which is the number of bank interlocking directorates on the supervisory board and FIN_ILOCK, which is the number of interlocking directorates with financial institutions. Both are measured as the number of relationships (interlocks) with banks or financial institutions with bank interlocks being a subset of financial institutional interlocks. A third variable, BANK_D measures a firm's bank debt (long-term bank debt divided by total assets).

The three final independent variables capture the concentration and identity of outside shareholders. OSIDE_EQ is the stake of the largest outside block-holder owning 5% or more of the shares,¹⁹ INSTI_EQ is the sum of all institutional block-holdings (banks, insurance companies, pension funds and institutional venture capitalists) and INDUS_EQ is the sum of the block-holdings by industrial firms.

4.3 Regression model

The following regression model is used to test the relationships developed in section 3.

$$TobinQ = f(\text{Organizational Form, Limits on Voting Rights, Board Characteristics, Debt Market, Outside Block-holders, and Control Variables}),$$

where the specific variables designed to capture Organizational Form, Limits on Voting Rights, Board Characteristics, Debt Market, and Outside Block-holders were discussed above. All of the regression results are based on White's heteroskedasticity corrected standard errors. Estimation of the above model is performed using OLS, which incorporates fixed-effects for each year.²⁰

5. Results

Our results are organized as follows. We provide summary statistics for the variables used in the regression tests (section 5.1) and then estimate a series of regressions to test

¹⁹ Because the Dutch Law on Disclosure of Shareholdings requires the notification of shareholdings when thresholds of 5%, 10%, 25%, 50%, or 66,7% are passed, we do not have information for shareholdings below 5%.

²⁰ Because we use a data set of pooled firm-year observations over the 1992-1996 period, our results may suffer from autocorrelation as we have multiple observations per firm. We discuss this potential problem at the end of this section.

the relationships hypothesized in section 3 (section 5.2). The regressions focus on organizational form, shareholder rights, the supervisory board and management board, ownership structure and relationships with lending institutions. Next, we isolate the impact the Peters Committee and its recommendations had on the relation between the corporate governance variables and Tobin's Q (section 5.3). Lastly, using event study techniques, we evaluate the impact of various corporate governance-related events and announcements related to the Peters Committee, Dutch government and European Union during the 1992-1997 period (section 5.4).

5.1. Summary statistics for the regression variables

Table 1 provides descriptive statistics for Tobin's Q and the independent and control variables for the 1992-1996 period. The descriptive statistics are calculated by pooling data over the entire five-year period.

Insert Table 1 Here

The mean (median) Tobin's Q is 1.353 (1.159). For the control variables, total assets are 3,263 (431) million NLG, growth is 0.302 (0.160) and leverage is 0.160 (0.140). Turning to the governance-related variables, on average, 13.2% of the firm-year observations are for firms cross-listed on UK and/or US stock exchanges. For the structured regime, 69.7% of the firm-years are classified as structured regimes and 8.1% of the firm-years comprise voluntarily structured regimes. Turning to voting right characteristics, which can serve as takeover defense mechanisms, priority shares, preference shares, certificates and limitations on voting are present in 40.9%, 64.7%, 38.4%, and 16.5% of the firm-years, respectively. The results for DEF3 and DEF4 show that firms have a mean (median) of 1.44 (2.0) takeover defenses from the set of three (priority shares, preference shares and certificates) and 1.61 (2.0) from the set of four (priority shares, preference shares, certificates, and limitations on voting).

For the variables measuring characteristics of the supervisory and management boards, we find that the mean (median) number of total board members is 8.146 (7.0) and that the mean (median) size and relative size of the supervisory board is 5.228 (5.0) and 0.659 (0.667) members, respectively. In addition, the mean (median) percentage of equity owned by the supervisory board is 2.88% (0%), the compensation for an individual supervisory board member is 34.54 (31.83) thousand NLG, and interlocking directorates per supervisory board member are 1.114 (1.0). For the management board, its mean (median) size and relative size are 2.918 (2.0) members and 0.341 (0.333), respectively. The mean (median) portion of equity owned by the management board is 3.84% (0%), compensation is 863.00 (746.00) thousand NLG per board member, and interlocking directorates per board member are 0.262 (0.0).

For the external monitoring variables we observe that the mean (median) bank debt is 6.1% (1.4%) of total assets and that banks have a mean (median) of 1.239 (0.0) interlocking directorates while financial institutions have 1.870 (1.0). For outside shareholder groups we find that the largest outside blockholder has mean (median) holds of 24.47% (17.71%) of the outstanding shares. Focusing on specific groups of outside

shareholders reveals that the mean (median) percent of shares held by financial institutions is 11.36% (7.12%) compared to 10.3% (0%) for industrial firms.

5.2. Regression results for the 1992-1996 period (pre-Peters Committee)

Our initial regression results are based on the 1992-1996 period which precedes the Peters Committee Report. These baseline regressions serve two purposes. First, they document the relation between the corporate governance variables and Tobin's Q prior to the Peters Committee Report. Second, they provide a means to assess the extent to which the committee's recommendations have had an impact on this relation, at least over the short-run (i.e., 1992-1996 and 1996 compared to 1997). The regressions we estimate are variations of the model described in section 4.3 with descriptions and results starting in Table 2.

Insert Table 2 Here

Consistent with prior research (see model 1), the coefficients on the control variables have the expected signs (negative for leverage and size and positive for growth) and all are significant. The disciplining aspects of international competition and the resulting increased scrutiny is confirmed as the coefficient on the cross listing (UK and/or US) variable is positive and significant at the 1% level.

Model (2) addresses the key issue of organizational form. Consistent with our most important hypothesis, the legally required structured regime has a significantly negative impact on Tobin's Q. The legally required structure regime reduces the firm's value by 22.3% in the regression. Furthermore, voluntary adoption of the structured regime has the expected positive impact on Tobin's Q. Note that voluntary adopters are principally Dutch multi-national firms that are exposed to the rigors of international competition.

The impact of takeover defenses and direct limits on shareholders' voting rights on Tobin's Q is also addressed in model (2). Unfortunately, the results are not definitive. While the coefficients on the priority shares and certificates variables are negative (as expected), neither is significant. Preference shares have a positive coefficient, opposite of that predicted, however the result is insignificant. Further, the coefficient on the limits on voting rights variable has a significant and positive coefficient, opposite of our prediction. To isolate the significance of the direct limitations on voting rights, we conducted two additional regressions; one with the variable DEF3 which combines the set of three takeover defenses (priority shares, preference shares and certificates) and another with DEF4 which simply adds the fourth (direct limits on shareholder voting). The results show that DEF4 is significant and that its significance is driven by the direct limits on shareholder voting rights. Later in the paper we consider the interaction of these defensive mechanisms with organizational form and ownership structure variables and find that they are important and in the way predicted.

Table 3 reports regression results addressing the implications of board structure on firm value. Model (1) and (2) analyze the supervisory board. Consistent with our hypotheses, the relative size of the supervisory board is negatively (and significantly) related to

Tobin's Q. However, the absolute size of the supervisory board is insignificant. Thus, it is the size of the supervisory board relative to the managerial board that matters, and as the relative size increases, the supervisory board becomes less effective. Turning to the interlocking directorates, this variable has a positive and significant effect on firm value. This is contrary to our prediction, but is consistent with the argument that professional board members have skills and relationships with other firms and that this is a benefit to the firm.

Insert Table 3 Here

Model (2) evaluates the interaction of all the supervisory board characteristics with organizational form. However, the number of observations is reduced in model (2) due to the availability of compensation data. Here we find that when interlocking directorates are combined with the structured regime, the number of interlocking directors has a negative and significant impact on Tobin's Q. This is consistent with the argument that the structured regime substantially reduces the supervisory board's accountability to shareholders. The results also show that the equity-holdings of the supervisory board are negatively related to firm value, which is contrary to our predictions. In addition, board compensation is significant and negatively associated with Tobin's Q, but positively and significantly associated with Tobin's Q under the structured regime. This is consistent with using board compensation as an incentive device under the structured regime. However, we cannot explain the negative relationship, in general, for supervisory board compensation and equity-holdings.

The results for the managerial board highlight the role of management compensation. From model (4), managerial compensation is positively and significantly associated with firm value. However, the number of observations is again reduced in model (4) relative to model (3) due to availability of compensation data. The compensation finding is independent of organizational form and consistent with our prediction about the influence of managerial compensation on firm performance. No other variables are significant at the 5% level. Model (3) shows that relative board size and its interaction with the structured regime significantly impacts firm value. The first effect is positive and the second is negative. However, managerial compensation mitigates the negative effects and dominates the positive effects associated with these corporate governance variables. Finally, equity-holdings of the managerial board are insignificant.

Table 4's regressions analyze ownership structure and relations with financial institutions. In model (1), we focus on the monitoring roles of the major block-holders by themselves and banks. The coefficients for the major outside shareholder and industrial block-holders are insignificant. However, financial institutions have a negative and significant effect on firm value. This is consistent with both the collusion story of Pound (1988) and the passive attitude of Dutch financial institutions (see footnote 15). Later in this section we provide additional evidence on the collusion story.

Insert Table 4 Here

The results also show that interlocking directorates with banks are negative and significant. Banks are a subset of the financial institutions; thus, the two are highly

correlated. To assess the implications of interlocking directorates with financial institutions, we conducted another regression that included (excluded) interlocks with financial institutions (banks). The coefficient was insignificant. Both of these results are inconsistent with our hypothesized monitoring relationships. However, model (1) does provide an explanation for the negative coefficient for leverage. In particular, the negative relationship between firm value and leverage is due to banks, measured by interlocking directorates and the long-term debt owed banks. Thus, rather than providing a monitoring role that increases firm value, Dutch banks appear to constrain firm behavior in such a way that their relationship reduces the value of the firm. This finding may also be caused by a sample selection problem, as banks may provide leverage and have interlocks with firms with lower performance (because their monitoring abilities are more valuable in these firms).²¹

Model (2) addresses the relationship between ownership structure and takeover defenses (including direct limits on shareholder voting rights). Here, ownership concentration may both increase entrenchment and provide monitoring. The coefficient associated with the major outside shareholder is positive and significant which is consistent with our monitoring hypothesis. The set of takeover defenses and limits on shareholder voting rights (DEF4) again has a positive and significant coefficient. However, when this set of defenses is interacted with outside ownership, the coefficient is negative and significant. We interpret this as an entrenched firm effect. For a given level of outside ownership, the supervisory and management boards can entrench themselves by adopting a set of takeover defenses. Limited entrenchment through either ownership concentration or takeover defenses has a positive impact on firm value, while the combination of the two forms of entrenchment has a significant and negative effect on firm value.

Model (3) investigates whether institutional investors “collude” with entrenched management and supervisory board members by focusing on an important situation where this could occur, takeovers. As noted above, preference shares are frequently placed with friendly institutional investors.²² Therefore, we expect that ownership by institutional investors is more likely to induce entrenchment in firms with preference shares. Specifically, we consider preference shares and its interaction with institutional holdings. However, neither is significant at any reasonable level. Thus, while equity holdings by financial institutions have a negative effect on firm value, there is no direct evidence of collusion between the boards and institutions in takeover situations.

5.2.1. Summary

²¹ The leverage variable is measured as long-term debt over total assets. We chose to exclude short-term debt because in many Dutch firms short-term debt is largely comprised of trade credit, and to a lesser extent bank debt and other forms of short-term credit. The disciplining role of leverage is more likely to result from long-term debt obligations. The bank debt variable is long-term bank debt to total assets.

²² P. de Vries, representative of the Dutch platform for investors, mentioned this institutional feature to us.

Our major result addresses the structured regime. For domestic Dutch firms, the structured regime has a negative impact on Tobin's Q that is both statistically and economically significant. For Dutch multi-nationals who voluntarily adopt the structured regime, their performance exceeds that of the other structured regime firms. Increases in Tobin's Q due to international competition is also apparent when firms cross-list their securities with UK and/or US stock exchanges.

For the supervisory board, it is the size of the supervisory board relative to the managerial board that matters, and as the relative size increases, the supervisory board becomes less effective. When combined with the structured regime, the number of interlocking directorates of the supervisory board has a negative and significant impact on Tobin's Q which is consistent with the argument that the structured regime substantially reduces the supervisory board's accountability to shareholders. It also appears that firms attempt to mitigate the adverse effects that the structured regime has on the supervisory board through supervisory board compensation. For the management board, the message is straightforward, managerial compensation mitigates the negative effects and dominates the positive effects associated with other corporate governance characteristics.

Focusing on the monitoring role of outside shareholders in conjunction with takeover defenses, outside shareholders have a positive and significant effect on firm value. However, outside owners, management and supervisory board members can and do entrench themselves by adopting defensive mechanisms that reduce firm value. One of the most surprising results is that Dutch banks appear to constrain firm behavior in such a way that their relationship reduces the value of the firm. This is contrary to the usual monitoring hypothesis associated with the debt market. Financial institutions also fail in their monitoring role, though there is no direct evidence of collusion.²³

5.3. Post-Peters Committee

5.3.1 Comparison of the 1996 and 1997 periods

We directly compare firm characteristics before and after the Peters Committee report. Specifically, for all variables described in the Table 1, we compare their 1996 values with their values in 1997. We focus on 1996 rather than the 1992-1996 period in order to mitigate the potential consequences of a gradual change over the 1992-1997 period that is not necessarily the direct result of the Peters Committee. Between 1996 and 1997, we

²³ We also performed some sensitivity analysis related to the regressions reported above. First, instead of pooling data across firms and years, the same regressions were run using five-year averages of the dependent and independent variables for each firm. While the significance of the coefficients was altered due to the reduction in sample size, the signs of the coefficients are essentially unchanged for the results related to organizational structure and limitations on shareholder rights, supervisory board structure, and ownership structure and relations with financial institutions. The results for the managerial board are that none of the signs changed for the managerial board characteristics that were significant at the 5% level in the original regressions and none of the coefficients that changed signs were significant. We also ran the regressions on a year-by-year basis. The results were comparable to the regressions using five-year averages. None of the significant coefficients changed signs and none of the coefficients that were significant at the 5% level in the basic regressions ever changed signs.

only find the increase in the proportion of firms that voluntarily adopted the structured regime to be significant (at the 10% level). The increase is likely due to increased international activities by Dutch firms. Thus, our finding suggests that to date the direct impact of the Peters Committee on governance structures is quite modest.

5.3.1 Regression results comparing pre- and post-Peters periods

In Table 5 we analyze regression results for the differences between the pre- and post-Peters periods. We choose to include two groups of variables in our regressions. First, we include variables that have a significant (at the 5% level or less) impact on Tobin's Q in the 1992-1996 period (see Tables 2 to 4). Second, we include variables that changed significantly (at the 5% level or less) from 1996 to 1997, i.e., there were none.²⁴ Finally, to avoid duplication of variables, we inter-acted the structured regime with the relative size of the supervisory board but not with the relative size of the management board. The relative size of the management board is one minus the relative size of the supervisory board.

Insert Table 5 Here

To test for coefficient differences between the 1992-1996 period and the 1997 period, we interact the governance variables with a dummy variable that has a value of 1 in 1997, and 0 otherwise. Therefore, the left column contains the coefficients for the 1992-1997 period and the right column contains the interaction terms of the variables with the 1997 dummy. In the right column, the coefficients for institutional holdings and interlocking directorates with banks are significantly negative. This implies that the negative impact of these variables on firm value was significantly more negative in 1997 when compared with the previous years. The other coefficients in the right column are insignificant at 5% or less. We ran the same regression again to assess the influence of supervisory and management board compensation and bank debt on institutional holdings and bank interlocks. Nothing changed except the significance levels dropped in some instances from 5% to 10%. Thus, governance and its impact on Tobin's Q have not significantly changed in the post-Peters period when compared to the pre-Peters period.

²⁴ The variables SB_COMP, MB_COMP and BANK_D are not included in this analysis due to missing observations. Not all firms report this information in their annual reports nor is it available from other sources; we checked both the REACH data set and individual company annual reports. However, we ran the regressions in Table 5 with the reduced data set (that included compensation and bank debt) and report the findings in the discussion below.

5.4. Stock price reactions to corporate governance events

5.4.1. Background

As the above regressions using Tobin's Q illustrate, it is difficult to assess the short-term impact (i.e., one year after its release) of the recommendations contained in the Peters Committee report. However, the Committee did not operate in a vacuum as there were additional Dutch government and European Union events with the potential to influence a firm's corporate governance structure and hence its value. In this section, we use "event study" techniques to assess investors' reactions to the various players and events associated with the evolution of corporate governance practices in the Netherlands during this period. In a sense, the analysis provides a direct test of the premise underlying the Peters Committee, namely that market forces via self-regulation are sufficient to promote changes in corporate governance that enhance shareholder value.

Appendix A presents a list of eleven events associated with corporate governance at the Committee, Dutch government and European Union level. Our data sources are the Dutch equivalent of the Financial Times (*Het Financieele Dagblad*), the preliminary and final version of the first report of the Committee and the monitoring report of the Committee.

5.4.2. Event study analysis

The "event study" method we use is an application of Zellner's (1962) Seemingly-Unrelated-Regression (SUR) methodology made popular in Schipper and Thompson (1983, 1985). To implement this approach we posit the following returns-generating process for each firm:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \sum_{k=1}^{11} \gamma_{ik} D_{ikt} + \epsilon_{it},$$

where R_{it} is the return to security i on day t , R_{mt} is the return to the market index on day t , D_{ikt} is a dummy variable that takes on a value of one on the day before and day of the announcement of event k ($k=1, 2, \dots, 11$) and zero on all other days, α_i is the model intercept of firm i , β_i is the slope coefficient or systematic risk of firm i , γ_{ik} is the abnormal return of firm i associated with event k , and ϵ_{it} is a random disturbance term assumed to be drawn from a multivariate normal population with a zero mean vector and constant covariance matrix. For each firm the disturbances are assumed independent and identically distributed over time, but may be heteroscedastic and correlated in cross-section. The returns-generating process for each firm is an extended version of the standard market model except that a firm's returns-generating process is allowed to shift at the time corporate governance related information is publicly announced. The firm-specific parameters of the model are estimated using daily stock return data from January 1, 1993 to December 31, 1996. The market index used is a value-weighted index of all firms traded on the Amsterdam Exchange. (We also performed our analysis using two other market indices (one excluding Royal Dutch Shell and another consisting solely of non-financial firms and obtained results similar to those reported below).

Within the SUR framework, we test two hypotheses about the mean abnormal returns of the sample firms at the time of the eleven corporate governance events. All hypotheses are formulated as linear restrictions on the firm-specific coefficients across equations. The first hypothesis focuses on the sum of the abnormal returns for each of the eleven corporate governance events. As a linear restriction on the firm-specific γ_{ik} , this hypothesis is:

$$H_{01} : \sum_{i=1}^N \mathbf{g}_{ik} = 0, \quad (k = 1, 2, \dots, 11),$$

where k denotes events and N denotes the number of firms in the sample. Since the sum is a scalar multiple of the cross-sectional average, this test is equivalent to a test on the cross-sectional average abnormal return and is in the spirit of typical event-studies that focus on the mean abnormal return associated with a particular event. In addition to using this hypothesis to assess the sample-wide price reaction to each event, we also use it to compare the abnormal returns for sub-samples of firms to each event (e.g., to compare the mean abnormal return of firms with a structured regime with those without a structured regime).

The second hypothesis is for a given event k , all firms have abnormal returns that are jointly equal to zero. As a linear restriction on the firm-specific γ_{ik} , this hypothesis is:

$$H_{02} : \mathbf{g}_{ik} = 0, \forall i, \quad (k = 1, 2, \dots, 11).$$

This hypothesis is more likely to be rejected than the sum test if some firms have non-zero abnormal returns while others do not. Both hypotheses are tested using the F-tests discussed in Schipper and Thompson (1985). In our setting of identical explanatory variables across firms, the test statistics have an exact F distribution.

5.4.3. *Event study results*

We treat the events in roughly chronological order (see Appendix A). Events 1 through 7 mainly pertain to the formation and activities connected with the Peters Committee. These include the formation and membership of the committee (events 1 and 3), its preliminary conclusions (event 4) and the final report (event 5). Just after the announcement of the committee's formation, the government and firms agreed on an arrangement over takeover defenses (event 2). Less than one year after the committee's final report, a small number of firms announced that they would initiate a private sector experiment in voting by proxy using a system designed and owned by the participating firms (events 6 and 7). For all of these events, we fail to reject either H_{01} or H_{02} . One interpretation of the market's assessment of the Peters Committee is that their recommendations are unlikely to be implemented or if implemented they would be ineffective.

The one event with significant share price reactions is Event 8, the release of the monitoring report and the related corporate governance information that was collected about the Dutch companies. The results, which are reported in Table 6, document that the mean (median) abnormal return to this event is -0.7% (-0.6%). The F-statistics for H_{01} and H_{02} are 6.80 (p-value = 0.0001) and 1.59 (p-value= 0.0001), respectively. The rejection of both H_{01} and H_{02} suggests a pervasive overall negative reaction to this event. This is consistent with the finding that 77% of the sample firms exhibit a negative stock price reaction to this event. Based on the corporate governance information released, one interpretation of these results is that the market was disappointed with the firms' lack of progress in improving their governance practices.

Insert Table 6 Here

Given the overall negative impact of event 8, we next address the cross-sectional variation in the reactions of the firms. Our starting point is shareholder voting rights. Shareholders must have them for self-regulation to be a viable monitoring mechanism. Without them, shareholders have no way to effectively monitor the behavior of the supervisory board and management, nor can they initiate change. This suggests cross-sectional variation in event 8 abnormal returns might be related to the characteristics of the voting rights of the sample firms. *Ceteris paribus*, relatively more rights imply better self-governance for a particular firm (i.e., less negative abnormal returns). To evaluate this hypothesis, we compare the mean abnormal returns associated with event 8 for various sub-samples of firms. The sub-samples are firms with and without: a structured regime, preference shares, certificates, priority shares, limitations on shareholder voting, and cross-listings on a UK or US exchange.²⁵ The sub-sample results are presented in Table 6 where we report the mean (median) abnormal return for each sub-sample along with F-statistics for the null hypothesis that the sub-sample mean abnormal return is zero and an F-statistic comparing the mean abnormal return of the various sub-samples.

Focusing first on the structured regime, the mean abnormal return for firms with a structured regime is -0.9%, compared to -0.6% for firms without and -0.2% for firms with a voluntary structured regime. Only the mean abnormal return of -0.9% for the required structured regime is significantly different from zero. However, the mean abnormal return for the required structure regime sub-sample is significantly more negative when compared to the no structured regime sub-sample and the voluntary structured regime sub-sample.

The results for cross-listing status reveal that firms that are (not) cross-listed exhibited a mean abnormal return of 0.5% (-1.0%). The -1.0% abnormal return for the non-cross-listed firms is significantly different from zero and significantly less than the 0.5% mean abnormal return for the cross-listed sub-sample.

²⁵ Cross-listing on the UK or US stock exchanges does not directly translate into voting rights. However, there is additional disclosure required with the cross-listing and this increases accountability. Thus, the indirect benefit could be better pricing but not necessarily higher firm value.

Turning to priority shares we find that firms with (out) such shares have a mean abnormal return of -0.3% (-1.0%). While the mean abnormal return for firms without priority shares is significantly different from zero, the mean return for firms with priority shares is not. Consistent with this, a comparison of the mean abnormal returns of the two groups reveals that they are significantly different. Specifically, firms without priority shares experienced a more significant negative stock price reaction than firms with priority shares. Similar results are observed for limits on shareholder voting in that the abnormal returns of both sub-samples are negative, but only the mean abnormal return of firms without limits on voting is significantly different from zero. In addition, the difference between the mean abnormal returns of the sub-samples is significant evidence that firms that do not have limits on shareholder voting exhibit a more negative price reaction.

The results for the remaining two constraints on voting rights are not as sharp as those above. In particular, the mean abnormal return for firms with (out) certificates is -0.9% (-0.6%) and while both abnormal returns are significantly different from zero, they are not significantly different from one another. Similar results are observed for firms with and without preference shares in that each sub-group exhibits a significant and negative mean price reaction, but their mean reactions are not significantly different from one another.

Thus, the market's reaction to the release of the monitoring report (event 8) is one of overall skepticism about or disappointment with substantive change through self-regulation. Further, the market appears to differentiate its reaction across firms in a manner dependent upon the existing set of shareholder rights currently in place within the firm. Except for priority shares, our results here are identical to those described in Table 2, which summarizes the effects that limitations on shareholder rights have on Tobin's Q. Consequently, if viable sub-samples (of sufficient size) could be constructed differentiated by voting limitations and outside ownership, we conjecture a differential reaction for entrenched firm versus firms that are not entrenched.

Event 10, which is the minister of finance's reply to the monitoring report given to parliament, lead to rejection of H_{02} , but not H_{01} . Since this announcement characterized the minister's reply as a "wish list" with no specific proposals, it is not surprising that the results are so weak. Moreover, none of the differences across the sub-samples categorized by shareholder rights are significant. Finally, event 9 and 11 fail to reject either H_{01} or H_{02} . Event 9 is the cabinet ministers' approval to introduce (in parliament) a proposal for proxy voting; event 11 is the new European Directive that allows certificates and preference shares in a firm's capital structure. These results are not surprising since shareholders need voting rights before voting by proxy can provide any benefit to them. Overall, the market is skeptical about the substantive evolution of corporate governance practices in the Netherlands through self-regulation.

6. Conclusions

The purpose of this paper was to gather evidence on the success of market forces in promoting investor interests through self-regulation. There is great interest in whether market forces alone are sufficient to monitor the managers of capital, or whether additional legal/political actions are required to write and enforce contracts between these managers and owners of the capital. The answer is fundamentally a mechanism design issue.

The Netherlands provided an ideal setting to investigate the role of self-regulation. The success or failure of self-regulation to implement corporate governance changes that enhance firm value is a significant issue to investors and policymakers. Its outcome directly affects a country's ability to attract capital for its restructuring and growth. As expected, the European Union and the Securities and Exchange Commission have closely followed the events in the Netherlands.

With a more extensive data set than is the usual situation, we are able to address the implications of a company's organizational form, shareholder voting rights, board characteristics, outside block-holders and debt characteristics on the company's value. This includes the market's assessment of the evolution of corporate governance practices in the Netherlands during the period of the private sector's focus on corporate governance through self-regulation. The details of our findings have been previously discussed. In addition, certain key general points emerge from those results.

For self-regulation to have a chance to succeed, shareholders must have voting rights. Under the "pure" form of the structured regime, shareholders lose their ability to directly monitor the supervisory and management boards. However, the market for corporate control still functions since shareholders vote on mergers and acquisitions. Once shareholders voting rights are restricted permanently or via takeover defenses, shareholders lose their ability to initiate change through the market for corporate control as well to monitor management on a day-to-day basis. With these points in mind, it is straightforward in the short term to understand our lack of findings associated with the Peters Committee and the market's skepticism about the evolution of corporate governance. It is doubtful whether the prospects are any different in the long run unless shareholders have voting rights (one of the major recommendations of the Peters Committee). With the supervisory and management boards already controlling the voting rights, it is equally doubtful that change will take place without legal/political action to restore the voting rights of shareholders.

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Appendix A

Key events related to Dutch corporate governance practices

The data sources are *Het Financieele Dagblad*; the preliminary and final report of the Peters Committee; and the monitoring report that assesses the impact of the final report of the Peters Committee (one-year after its release). The share price reactions to the events are presented in terms of the alternative hypothesis that the event was beneficial to shareholders unless otherwise indicated. The null hypothesis is no price reaction.

Event 1: On February 13, 1996 Van Ittersum, chairman of the Amsterdam Stock Exchanges announces a committee for code of best practice. A "+" share price reaction is expected for this event.

Event 2: On February 28, 1996 the Ministries of Finance, Law and Economic Affairs and VvdE (shareholders) and VEVO (exchange-listed firms) agree on an arrangement over takeover defenses. A "+" share price reaction is expected for this event.

Event 3: On March 15, 1996 there is an announcement of the members of Committee Corporate Governance (i.e., the Peters-1 Committee). Given Dutch consensus approach, all the parties are represented on committee. A "+" share price reaction is expected for this event.

Event 4: On October 28, 1996, the publication of the preliminary conclusions of Peters Committee ('Corporate governance in Nederland: een aanzet tot verandering en een uitnodiging tot discussie') took place. A "+" share price reaction is expected for this event.

Event 5: On June 25, 1997, the publication of the final conclusions of Peters Committee ('Corporate governance in Nederland; de veertig aanbevelingen') took place. The conclusions are similar to the preliminary report. A "+ or 0 (depending upon event 4)" share price reaction is expected for this event.

Event 6: On April 18, 1998, an announcement of a Communication channel for shareholders. A small group of firms from a private sector initiate or experiment in "voting by proxy" using a system designed and owned by the participating firms. A "+" share price reaction is expected for this event.

Event 7: On May 19, 1998, announcement of participating firms in the Communication channel for shareholders. A "+ or 0 (depending upon event 6)" share price reaction is expected for this event.

Event 8: On December 3, 1998 the Peters Committee monitoring report is presented and published. This is the major event as it contains all the corporate governance information that was collected by the monitoring committee on the companies. Jaap Peters presented the report to the Minister of Finance. During this meeting the Minister of Finance announces that legislation on proxy voting will be proposed. The proposed legislation is independent of the private sector initiative. A "+" share price reaction is expected for this event.

Event 9: On April 29, 1999, the proposal to introduce proxy voting is approved by 'Ministerraad' which means it is approved by the "cabinet" of ministers. A "+" share price reaction is expected for this event.

Event 10: On May 10, 1999 Minister of Finance replies to Peters in a 'nota' to the 'Tweede Kamer'(parliament): firms should provide more information on compensation and stock transaction by managers; proxy voting should be possible and limitations on voting power should be banned. However, no specific proposals are mentioned and the reply seems a 'wensenlijstje' (list of wishes). A "+" share price reaction is expected for this event.

Event 11: On June 23, 1999, a new European Union Directive is released which states that majority shareholders have to make a bid on the remaining shares of the company. Certificates and preferred shares are allowed in a firm's capital structure. A "+ or 0 share price reaction is expected for this event.

Table 1: Variable definitions and descriptive statistics: 1992-1996

Definitions and descriptive statistics for the full sample for the variables used. The sample consists of 570 observations for 132 firms in the 1992 to 1996 period.

Variable	Description	Variable Name	Mean	Median	Std.Dev.
Tobin's Q	Market value of total assets/replacement value of total assets	TQ	1.355	1.159	0.708
Total assets	Book value of total assets in 1,000,000 NLG	BVTA	3263	431	12459
Growth	Three-year historical growth of total assets	GROWTH	0.302	0.160	1.122
Leverage	Long-term debt/book value of total assets	LEV	0.160	0.140	0.125
Listing abroad	Dummy with value of 1 for listing on an stock exchange in the UK and/or US, 0 otherwise	XLIST	0.132	0	0.341
Structured regime	Dummy with value of 1 for presence of structural regime, 0 otherwise	SR	0.697	1	0.460
Voluntarily structured regime	Dummy with value of 1 for voluntarily presence of structural regime, 0 otherwise	SR_V	0.081	0	0.272
Priority shares	Dummy with value of 1 for presence of priority shares, 0 otherwise	PRIO	0.409	0	0.492
Preferred shares	Dummy with value of 1 for presence of preferred shares, 0 otherwise	PREF	0.647	1	0.478
Certificates	Dummy with value of 1 for presence of certificates, 0 otherwise	CERT	0.384	0	0.487
Limited shareholdings/voting	Dummy with value of 1 if shareholdings or voting are limited , 0 otherwise	LVOTE	0.165	0	0.371
Number of takeover defenses (3)	Number of takeover defenses from PRIO, PREF and CERT	DEF3	1.44	2	0.78
Number of takeover defenses (4)	Number of takeover defenses from PRIO, PREF, CERT and LVOTE	DEF4	1.61	2	0.94
Board size	Number of board members	SBMB_S	8.146	7	3.821
Supervisory board size	Number of supervisory board members	SB_S	5.228	5	2.233
Relative supervisory board size	Number of supervisory board members/number of board members	SB_RS	0.659	0.667	0.111
Shareholdings supervisory board	Blockholdings by supervisory board members	SB_EQ	2.88	0	12.10
Interlocks supervisory board	Interlocking directorates by supervisory board members/number of supervisory board members	SB_ILOCK	1.114	1	0.848

Variable	Description	Variable Name	Mean	Median	Std.Dev.
Compensation supervisory board	Total compensation to supervisory board members/ number of supervisory board members in 1,000 NLG (543 observations)	SB_COMP	34.54	31.83	19.44
Managerial board size	Number of managerial board members	MB_S	2.918	2	2.120
Relative managerial board size	Number of managerial board members/number of board members	MB_RS	0.341	0.333	0.111
Shareholdings managerial board	Blockholdings by managerial board members	MB_EQ	3.84	0	13.17
Interlocks managerial board	Interlocking directorates by managerial board members/number of managerial board members	MB_ILOCK	0.262	0	0.513
Compensation managerial board	Total compensation to managerial board members/ number of managerial board members in 1,000 NLG (408 observations)	MB_COMP	863.00	746.00	570.88
Interlocks with banks	Number of interlocks with banks	BANK_ILOCK	1.239	0	1.965
Interlocks with financials	Number of interlocks with financial institutions	FIN_ILOCK	1.870	1	2.550
Largest blockholder	Stake of the largest blockholder	OSIDE_EQ	24.47	17.71	20.23
Financial institution blockholdings	Stake of blockholdings by banks, insurance companies, pension funds and institutionalized venture capitalists	INSTI_EQ	11.36	7.12	12.31
Industrial blockholdings	Stake of industrial blockholders	INDUS_EQ	10.30	0	20.56
Bank debt	Long-term bank debt/book value of total assets (519 observations)	BANK_D	0.061	0.014	0.091

Table 2: Basic regression and limitations on shareholders' rights

Regression results for the basic and shareholder rights variables. The sample consists of 570 observations for 132 firms in the 1992 to 1996 period. The definitions and data sources of the variables are in Table 1. The dependent variable is Tobin's Q (TQ). The regressions contain year dummies (results not reported). The *t*-values are in parentheses. Significant coefficients are indicated by * (10% level), ** (5% level), and *** (1% level) based on a one-tailed test except for the constant.

Basic regression and shareholders' rights					
	Predicted Sign	(1)		(2)	
Constant		1.400	(10.06)***	1.401	(11.54)***
LOG(BVTA)	-	-0.056	(-2.53)***	-0.049	(-2.24)**
LOG(1+GROWTH)	+	0.894	(3.32)***	0.771	(3.12)***
LEV	-	-0.703	(-2.19)**	-0.652	(-2.09)**
XLIST	+	0.626	(3.92)***	0.548	(3.25)***
SR	-			-0.223	(-2.91)***
SR_V	+			0.274	(2.75)***
PRIO	-			-0.004	(-0.07)
PREF	-			0.079	(1.21)
CERT	-			-0.006	(-0.11)
LVOTE	-			0.285	(3.35)***
<i>Observations</i>		570		570	
<i>Adj. R²</i>		0.133		0.162	

Table 3: Board structure

Regression results for the board structure variables. The sample consists of 570 observations (543 and 408 when compensation is considered) for 132 firms in the 1992 to 1996 period. The definitions and data sources of the variables are in Table 1. The dependent variable is Tobin's Q (TQ). The regressions contain year dummies (results not reported). The *t*-values are in parentheses. Significant coefficients are indicated by * (10% level), ** (5% level), and *** (1% level) based on a one-tailed test except for the constant.

Board Structure									
		Supervisory Board				Management Board			
	Predicted Sign	(1)		(2)		(3)		(4)	
Constant		2.889	(5.99)***	2.878	(5.74)***	0.829	(3.71)***	1.846	(4.26)**
LOG(BVTA)	-	-0.108	(-2.44)***	-0.043	(-0.92)	-0.048	(-1.54)*	-0.226	(-3.73)**
LOG(1+GROWTH)	+	0.721	(2.76)***	0.529	(2.05)**	0.618	(2.37)***	0.517	(1.79)**
LEV	-	-0.783	(-2.58)***	-0.750	(-2.46)***	-0.749	(-2.45)***	-0.641	(-1.62)*
XLIST	+	0.534	(3.17)***	0.548	(2.94)***	0.531	(3.18)***	0.514	(2.80)**
SR	-	-0.687	(-1.59)*	-0.876	(-1.81)**	0.237	(1.06)	0.310	(0.99)
SR_V	+	0.273	(2.33)**	0.209	(1.79)**	0.308	(2.65)***	0.195	(1.11)
S(ize)	-	-0.022	(-0.58)	0.013	(0.33)	-0.034	(-1.25)	0.025	(0.79)
R(ative)S	-	-1.756	(-3.21)***	-2.002	(-3.40)***	2.134	(2.93)***	0.620	(0.91)
EQ	+	-0.005	(-3.27)***	-0.005	(-1.78)**	0.001	(0.33)	-0.001	(-0.69)
ILOCK	-	0.185	(2.25)**	0.339	(3.61)***	-0.259	(-1.56)*	0.346	(1.18)
S*SR	-	0.053	(1.63)*	-0.014	(-0.37)	0.067	(1.51)*	0.102	(1.55)*
RS*SR	-	0.621	(1.05)	0.957	(1.47)*	-1.512	(-1.67)**	-1.195	(-1.38)*
EQ*SR	+	0.004	(1.35)*	0.005	(1.18)	-0.004	(-0.72)	-0.004	(-0.68)
ILOCK*SR	-	-0.093	(-1.04)	-0.247	(-2.41)***	0.209	(1.24)*	-0.425	(-1.46)*
COMP	+			-0.014	(-4.23)***			0.0005	(4.27)**
COMP*SR	+			0.011	(2.95)**			-0.0001	(-0.80)
Observations		570		543		570		408	
Adj. R ²		0.194		0.206		0.182		0.189	

Table 4: Ownership structure and relations with financial institutions

Regression results for ownership structure and financial institution variables. The sample consists of 570 observations (519 when bank debt is considered) for 132 firms in the 1992 to 1996 period. The definitions and data sources of the variables are in Table 1. The dependent variable is Tobin's Q (TQ). The regressions contain year dummies (results not reported). The *t*-values are in parentheses. Significant coefficients are indicated by * (10% level), ** (5% level), and *** (1% level) based on a one-tailed test except for the constant.

Ownership structure and relations with financial institutions							
	Predicted Sign	(1)		(2)		(3)	
Constant		1.559	(8.89)***	1.201	(7.34)***	1.468	(10.19)***
LOG(BVTA)	-	-0.046	(-1.65)**	-0.054	(-2.33)***	-0.050	(-2.31)***
LOG(1+GROWTH)	+	0.915	(3.39)***	0.778	(3.21)***	0.781	(3.01)***
LEV	-	-0.246	(-0.60)	-0.628	(-1.99)**	-0.760	(-2.37)***
XLIST	+	0.569	(2.49)***	0.552	(3.24)***	0.559	(3.23)***
SR	-	-0.138	(-1.64)*	-0.159	(-1.89)**	-0.159	(-1.91)**
SR_V	+	0.287	(2.65)***	0.255	(2.48)***	0.253	(2.33)**
OSIDE_EQ	+	-0.001	(-0.73)	0.005	(1.98)**	-0.001	(-0.44)
INDUS_EQ	+ -	0.002	(1.28)	0.002	(1.02)	0.001	(0.94)
INSTI_EQ	+ -	-0.004	(-2.27)**	-0.003	(-1.47)*	-0.004	(-1.41)*
BANK_ILOCK	+	-0.052	(-2.24)**				
BANK_D	+	-1.642	(-4.02)***				
DEF4	-			0.192	(3.85)***		
OSIDE_EQ*DEF4	-			-0.004	(-2.68)***		
PREF	-					0.081	(1.14)
PREF*INSTI_EQ	-					0.0003	(0.11)
<i>Observations</i>		<i>519</i>		<i>570</i>		<i>570</i>	
<i>Adj. R²</i>		<i>0.180</i>		<i>0.166</i>		<i>0.144</i>	

Table 5: Regression analysis of changes of determinants of Tobin's Q between 1992-1996 and 1997

Regression results for the governance variables and their determinants between 1992-1996 and 1997. The sample consists of 684 observations for 132 firms in the 1992 to 1997 period. The definitions and data sources of the variables are in Table 1. The explained variable is Tobin's Q (TQ). The regressions contain year dummies (results not reported). The *t*-values are in parentheses. Significant coefficients are indicated by * (10% level), ** (5% level), and *** (1% level) based on a one-tailed test except for the constant.

	Predicted Sign	Results for 1992-1996 vs. 1997:			
		1992-1997		Interaction with dummy for 1997	
Constant		2.223	(5.15)***		
LOG(BVTA)	-	-0.092	(-2.99)***		
LOG(1+GROWTH)	+	1.116	(3.77)***		
LEV	-	-0.632	(-2.19)**	-1.352	(-1.13)
XLIST	+	0.607	(3.69)***	0.443	(0.86)
SR	-	-0.562	(-1.33)*	-1.083	(-0.55)
SR_V	+	0.231	(2.17)**	-0.159	(-0.60)
SB_RS	-	-1.530	(-2.92)***	-1.670	(-0.61)
SB_RS*SR	-	0.744	(1.20)	1.679	(0.58)
SB_EQ	+	-0.006	(-3.22)***	-0.0003	(-0.003)
SB_ILOCK	-	0.208	(2.87)***	0.008	(0.04)
SB_ILOCK*SR	-	-0.046	(-0.64)	0.162	(0.72)
DEF4	-	0.161	(3.07)***	-0.102	(-0.51)
OSIDE_EQ	+	0.008	(2.96)***	-0.005	(-0.44)
OSIDE_EQ*DEF4	-	-0.004	(-2.83)***	0.005	(0.69)
LVOTE	-	0.127	(1.50)*	-0.446	(-1.54)*
INSTI_EQ	+	-0.004	(-2.05)**	-0.012	(-1.67)**
BANK_ILOCK	+	-0.054	(-2.19)**	-0.153	(-1.84)**
<i>Observations</i>		684			
<i>Adj. R²</i>		0.264			

Table 6
Event Study Results of Proposed Changes in Corporate Governance Practices in the Netherlands

The results reported in the table are based on an application of Zellner's (1962) Seemingly-Unrelated-Regression (SUR). This approach is based on the following specification of the returns-generating process for each firm: $R_{it} = \alpha_i + \beta_i R_{mt} + \sum_{k=1}^{11} g_{ik} D_{ikt} + \epsilon_{it}$, where R_{it} is the return to security i on day t ; R_{mt} is the return to the market index on day t ; D_{ikt} is a dummy variable that takes on a value of one on the day before and day of the announcement of event k ($k=1, 2, 3, \dots, 11$) and zero on all other days, α_i is the model intercept of firm i ; β_i is the slope coefficient or systematic risk of firm i , γ_{ik} is the abnormal return of firm i associated with event k , and ϵ_{it} is a random disturbance term assumed to be drawn from a multivariate normal population with a zero mean vector and constant covariance matrix. For each firm the disturbances are assumed independent and identically distributed over time, but may be heteroscedastic and correlated in cross-section. The hypotheses that we test (as linear restrictions on the firm-specific coefficients) are that the average abnormal return for each corporate governance event is zero:

$\sum g_{ik} = 0$, ($k = 1,2,3,4,5,6,7,8,9,11$) and that for a given event k , all firms have abnormal returns that are jointly equal to zero: $g_{ik} = 0, \forall i$, ($k = 1,2,3,4,5,6,7,8,9,11$).

Sample	Mean Abn. Return	Median Abn. Return	F-statistic for H_{01}	F-statistic for H_{02}
Full Sample (N=114)	-0.7%	-0.6%	6.80***	1.59***
Sub-Sample				
Structured Regime Required (N=64)	-0.9%	-0.7%	8.08***	4.41**
No Structured Regime (N=28)	-0.6%	-0.6%	1.71	
Structured Regime Voluntary (N=16)	-0.2%	-0.6%	1.42	1.05
No Structured Regime (N=28)	-0.6%	-0.6%	1.71	
Structured Regime Required (N=64)	-0.9%	-0.7%	8.08***	8.59***
Structured Regime Voluntary (N=16)	-0.2%	-0.6%	1.42	
Certificates (N=46)	-0.9%	-0.6%	8.89***	0.01
No Certificates (N=68)	-0.6%	-0.7%	3.34*	
Preference Shares (N=63)	-0.7%	-0.7%	4.18**	0.02
No Preference Shares (N=51)	-0.8%	-0.5%	6.15***	
Priority Shares (N=42)	-0.3%	-0.8%	0.65	8.94***
No Priority Shares (N=72)	-1.0%	-0.6%	11.20***	
Limited Voting (N=12)	-0.5%	-0.5%	1.36	6.20**
No Limited Voting (N=100)	-0.7%	-0.7%	6.59**	
Cross-listed UK/US (N=18)	0.5%	-0.3%	0.90	12.71***
Not Cross-listed (N=96)	-1.0%	-0.8%	10.11***	