State Ownership and Corporate Governance

Empirical Evidence from Norway and Sweden

by

Stine Ludvigsen

A dissertation submitted to BI Norwegian School of Management
for the degree of PhD

Series of Dissertations 3/2010

BI Norwegian School of Management

Department of Public Governance

Stine Ludvigsen

State Ownership and Corporate Governance: Empirical Evidence from Norway and Sweden

Series of Dissertations 3/2010

ISBN: 978 82 7042 955 4
ISSN: 1502-2099

BI Norwegian School of Management
N-0442 Oslo
Phone: +47 4641 0000
www.bi.no

Printing: Nordberg

The dissertation may be ordered from our website www.bi.no
(Research – Research Publications)

Acknowledgements

In the process of writing this thesis, many people have provided me with invaluable help and support. First of all, I would like to express my greatest gratitude to my supervisor Dag Morten Dalen. Thanks for taking on the role as my supervisor in 2004, for generously giving of your time to provide me with in depth and constructive comments, and in particular for keeping me on track during the last year of the thesis work. Just as much as I value your great academic skills, I also appreciate you have been a most sympathetic discussion partner. I am also very grateful to my co-supervisor Nick Sitter who has invested major time and effort in my thesis – by regularly reading through and discussing with me numerous drafts, providing suggestions for improvements, and organising an exclusive "reading course" on the topic of political economy. Besides being an extraordinary talented researcher you have also provided me with great encouragement and friendship.

A special thank also goes to the chairman of the doctoral committee, Øyvind Bøhren, for providing me with constructive comments during my Proposal Defence and for serving as an exemplary academic role model. I would also like to thank Terje P. Hagen and Kaare Strøm for investing their time and effort to serve as committee members. Terje also provided me with useful comments during my Proposal Defence.

Throughout my years as a doctoral student at the Department of Public Governance I have been fortunate to become colleague and friend with some great people. A warm thanks to Ellen A. Jacobsen who has provided me with excellent administrative support, but even more important with continued encouragement and so much fun – you are really something special! I am also deeply indebted to Mona K. ("Maggie") Solvoll, Catherine B. Arnesen and Helene Hoggen who have provided me with great friendship, invaluable support as well as with extensive academic and non-academic input. Thanks to Anne Flagstad, my trusted conversation partner, with whom for many years I shared both office and research interests. Thanks to Lars C. Monkerud for answering endless questions about panel data methods and for many nice lunches. Thanks to Caroline Dale Ditlev-Simonsen for your hospitality and great care about your colleagues. I would also like to thank the *Inspirea* girls at the Department of Strategy and Logistics (Birgitte Grøgaard, Tale Skjølsvik and Helene Colman) for lots of constructive discussions and enjoyable lunches/dinners.

I would like to thank Rune J. Sørensen, Leif Helland, Kåre Hagen and Kjell Eliassen for their useful comments on an earlier version of the chapter on executive compensation. I would also like to thank Gerson Komissar for showing a continued interest for and belief in my work. Thanks also go to Ulf H. Olsson for discussing econometric issues with me (even at football matches); to Randi Lunnan for your support and input on an early stage of the thesis process; to Lars Thue for greatly sharing your sector knowledge with me; to Johan From for encouraging me to embark on the "PhD-road"; and to Bjørn Eriksen for generously helping me out on issues of employment conditions. Thanks to Trond Fevolden (Secretary General of the Norwegian Ministry of Education and Research) for your kind help in identifying and classifying Norwegian state-owned companies. I also appreciate the research assistance of Vilde G. Larsen in collecting board member data and the assistance of Torill Eide in preparing the manuscript for printing.

For financial support of the thesis I am grateful to both Telenor and the BI Norwegian School of Management.

Finally, thanks to my family and friends for continued love and support. I am privileged to have such good friends as Mone, Hilde, Bente, Ingunn and Tina who provide me with so much laughter and fun. Thanks to my parents and to Ellen and Morten for their unlimited support and assistance on all personal matters. My warmest thanks to Brede who has not only been patient with me throughout the processes of working with my first master thesis, my second master thesis, and my doctoral thesis, but who has also provided me with great encouragement and wonderful food! Last, but not least, thanks to our daughter Oda who, since she was born two years ago, has greatly enriched our lives.

May, 2010
Stine Ludvigsen

Abstract

Since the late 1990s, the corporate governance of state-owned companies (SOCs) has moved to the forefront of the political agenda in several Western European countries and elsewhere. Triggered by large corporate scandals, international corporate governance developments, and the recurring criticism of state ownership administration, we have seen political attempts to cope with issues of firm monitoring and control. Among the governance issues which have received the most attention are board appointments (who should serve as chairmen of SOC boards?), chief executive compensation contracts (how much should top managers be paid, and should incentive schemes be included in the compensation contracts?), and dividend payments (how much dividends should be extracted from SOCs?). In this thesis, I offer a comprehensive treatment of these issues insofar as I provide both thorough descriptive accounts and rigorous statistical analyses of the factors which might explain governance decisions. The empirical investigation draws on data from a broad sample of SOCs in the two Scandinavian countries of Norway and Sweden over the period 2000-2005.

From a theoretical perspective, the question of what happens to governance decisions in the case of state ownership relates to the motivation of key decision-makers (i.e., incumbent politicians and corporate directors). Probing the political economics and corporate governance literatures on this very issue, the thesis distinguishes between three models of government-owner motivation: Politicians care about creating a favourable reputation as professional representatives of shareholder welfare (reputation motive); maintaining their popularity among voters so as to keep their positions (re-election motive); or implementing their preferred party-policy (ideology motive). In a similar vein, corporate directors care about their reputation as competent representatives of the shareholder electorate (reputation motive), but also their prospects of being re-elected to current board seats (re-election motive). Moreover, I add to these models some institutional features and firm characteristics, which makes for a more realistic picture of governance decision-making.

While, in the area of SOC board appointments, theoretical ideas and actual practice seem in fact disassociated, the empirical results suggest that the governance models framing the explanation of CEO compensation contracts and dividend payments capture important aspects of reality. Indeed, the empirical findings provide support for both the reputation and the re-election model. In all three studies, the results are also sensitive to the institutional system and national context within which SOCs operate. The results have

important implications for public policy and practice insofar as the scope for political influence seems to produce governance decisions which are possibly not conducive to efficiency.

Table of Contents

Chapter 1 Introduction 1

1.1 The Broad Plan of the Thesis 3
1.2 Contributions to Research 5
1.3 Theoretical Foundations 8
1.3.1 Why do we need corporate governance? 10
1.3.2 Which governance mechanisms? 13
1.3.3 What motivates politicians? 15
1.3.4 Some final remarks on the notion of self-interests 17
1.4 What is a State-owned Company? 17
1.5 A Comment on Omitted Variables 19
1.6 The Structure of the Thesis 20

Chapter 2 What Motivates Politicians and Corporate Directors to Engage in Corporate Governance? 22

2.1 The Motivational Concerns of Politicians 23
2.1.1 The reputation model 24
2.1.2 The re-election model 25
2.1.3 The ideology model 27
2.1.4 Discussion 28
2.2 The Motivational Concerns of Corporate Directors 29
2.2.1 The reputation model 30
2.2.2 The re-election model 31
2.2.3 Discussion 31
2.3 Summary 32

Chapter 3 Institutional Framework and Firm Characteristics 33

3.1 Institutional Framework 34
3.1.1 Constitutional and parliamentary aspects 34
3.1.2 The Companies Act and other legislation 35
3.1.3 Principles of corporate governance 37
3.1.4 Guidelines concerning the use of governance mechanisms 39
3.1.5 Implications for corporate governance 41
3.2 Firm Characteristics 42
3.2.1 What kinds of objectives do SOCs pursue? 43
3.2.2 Who owns the SOCs? 47
3.2.3 Who else control the SOCs? 52
3.2.4 The societal and economic importance of SOCs 55
3.3 Summary 57

Chapter 4 How to Explain Governance Decisions? 58

4.1 Board Appointments 58
4.1.1 Politicians care about their professional reputation 61
4.1.2 Politicians seek to stay in office 62
4.1.3 Politicians pursue ideological goals 66
4.1.4 Interaction effects 66
4.1.5 How do nation-specific characteristics affect board appointments? 67
4.1.6 Final remarks 67
4.2 CEO Compensation Contracts 68
4.2.1 What kinds of CEO compensation contracts do politicians prefer? 71
4.2.2 Political influences on CEO compensation contracts 73
4.2.3 Corporate directors care about their reputation 75
4.2.4 Moderating effects 79
4.2.5 Managerial influences on executive compensation contracts 80
4.2.6 How do nation-specific characteristics affect CEO compensation? 82
4.3 Dividend Payments 82
4.3.1 Do politicians prefer dividends over retained earnings? 84
4.3.2 Politicians and corporate directors care about their reputation 87
4.3.3 Political influences on dividend payments 88
4.3.4 Moderating effects 90
4.3.5 How do nation-specific characteristics affect dividends? 91
4.3.6 Final remarks 92
4.4. Summary 92

Chapter 5 Data and Methods 94

5.1 National Context 94
5.2 Sample, Variables and Data Sources 96
5.2.1 Sampling approach 96
5.2.2 Variable definitions and data sources 100
5.2.3 Data adjustments 104
5.2.4 Data sources 105
5.3 Governance Equations 106
5.4 Econometric Specifications 107
5.4.1 Why use panel data? 108
5.4.2 How to analyse panel data? 109
5.4.3 How to handle endogeneity problems? 111
5.5 Logit Model for Binary Dependent Variables 113
5.6 Final Remarks 114

Chapter 6 Board Appointments: Empirical Evidence 116

6.1 Theory, Data and Method: Recap and Specifications 116
6.2 Who Chairs the SOC Boards? 122
6.3 Empirical Analysis 126
6.3.1 How to explain political board appointments? 138
6.3.2 How to explain chairmen's sector affiliation? 141
6.4 Summary and Conclusions 143

Chapter 7 Chief Executive Compensation Contracts: Empirical Evidence 147

7.1 Theory, Data and Method: Recap and Specifications 148
7.2 How do the CEO Compensation Contracts look like? 151
7.2.1 Compensation levels 153
7.2.2 Incentive schemes 154
7.2.3 Golden parachutes 158
7.3 Empirical Analysis 160
7.3.1 Political influences 170
7.3.2 Economic criteria 172
7.3.3 Managerial influences 174
7.3.4 Is there still room for political influences? 175
7.3.5 Nationality and time effects 178
7.3.6 Some further issues of interpretation 181
7.4 Summary and Conclusions 183

Chapter 8 Dividend Payments: Empirical Evidence 189

8.1 Theory, Data and Method: Recap and Specifications 189
8.2 Basic Facts about SOC Dividend Payments 192
8.3 Empirical Analysis 199
8.3.1 Economic criteria versus political influences 211
8.3.2 National differences 215
8.4 Summary and Conclusions 216

Chapter 9 Summary and Conclusions 219

9.1 What Have we Learned from the Analyses? 220
9.2 Directions for Future Research 224
9.2.1 Unravelling motivational concerns 225
9.2.2 Effects on corporate behaviour and firm performance 226

Literature 228

Appendix

Appendix A: Definition of variables used in the empirical analysis 240
Appendix B: Board chairmen and political representation in Norwegian and Swedish SOCs over the years 2000-2005 247
Appendix C: The basic components of annual bonus plans 252
Appendix D: Interaction effects in multivariate regression models 257
Appendix E: Marginal effects for logistic regression models 268
Appendix F: Governance decisions and sector breakdown 278

List of Tables

Table 2.1. Governance models: The case of politicians. 29
Table 2.2. Governance models: The case of corporate directors. 32
Table 3.1. The Norwegian State's principles of good corporate governance. 39
Table 3.2. Corporate objective. 45
Table 3.3. Stock market listing. 45
Table 3.4. Sector classification. 46
Table 3.5. Full versus partial state control with SOCs. 49
Table 3.6. State control in partly state-owned firms. 50
Table 3.7. Co-investors' ownership concentration 50
Table 3.8. The number of co-investors and the average equity fraction of the *n*'th largest co-investor 51
Table 3.9. The identity of the largest co-investor and the number of co-investors 52
Table 3.10. Sponsor ministry. 54
Table 3.11. Debt ratio. 55
Table 3.12. Regional presence and firm size 56
Table 5.1. List of state-owned companies in the sample. 98
Table 6.1. Summary of variable definitions and theoretical predictions. 118
Table 6.2. Political representation on SOC boards 123
Table 6.3. The political affiliation of board chairmen. 124
Table 6.4. The board chairman's principal occupation 125
Table 6.5. Political representation and sector affiliation on SOC boards 126
Table 6.6. Descriptive statistics: Means and standard deviations 127
Table 6.7. Correlations among variables. 129
Table 6.8. Random-effects logistic regression analysis with political experience as dependent variable. Main effects, full sample. 133
Table 6.9. Random-effects logistic regression analysis with sector affiliation as dependent variable. Main effects, full sample 134
Table 6.10. Random-effects logistic regression analysis by state control subsamples 135

Table 6.11. Random-effects logsitic regression analysis by government party subsamples.....136
Table 6.12. Random-effects logistic regression analysis by nationality subsamples 137
Table 7.1. Summary of variable definitions and theoretical predictions 149
Table 7.2. Summary statistics for the CEO compensation variables. 152
Table 7.3. Descriptive statistics: Means and standard deviations.....161
Table 7.4. Correlations among variables. 162
Table 7.5. Random-effects regression analysis for the compensation measures. Main effects, full sample.....166
Table 7.6. Random-effects regression analysis for the compensation measures by SOC chairman subsamples. 167
Table 7.7. Random-effects regression analysis for the compensation measures by state control subsamples. 168
Table 7.8. Random-effects regression analysis for the compensation measures by nationality subsamples.....169
Table 8.1. Summary of variable definitions and theoretical predictions 191
Table 8.2. Summary statistics for dividend measures and payouts to shareholders…….....193
Table 8.3. Descriptive statistics by firms' dividend-paying status.. 200
Table 8.4. Descriptive statistics of dividend-paying firms: Means and standard deviations.....202
Table 8.5. Correlations among variables. 204
Table 8.6. Random-effects and pooled OLS regression analysis for the dividend payment ratios. Main effects, full sample.....207
Table 8.7. Random-effects and pooled OLS regression analysis for the dividend payment ratios by state control subsamples.....208
Table 8.8. Random-effects and pooled OLS regression analysis for the dividend payment ratios by SOC chairman subsamples.....209
Table 8.9. Random-effects and pooled OLS regression analysis for the dividend payment ratios by nationality subsamples.. 210

List of Figures

Figure 1.1. The firm hierarchy under state ownership.....9
Figure 7.1. Level of total CEO cash compensation, by nationality 154
Figure 7.2. Percentage of SOCs using incentive schemes, by nationality 158
Figure 7.3. Percentage of SOCs adopting golden parachutes, by nationality 159
Figure 8.1. Percentage of potential and actual dividend-payers, by nationality 195
Figure 8.2. Total level of dividend payments, by nationality 196
Figure 8.3. Average and median levels of dividend payments, by nationality 197
Figure 8.4. Median dividend payment ratios, by nationality 199
Figure 9.1. The corporate governance procesess.....224

Chapter 1

Introduction

Over the past decades, the corporate governance of state-owned companies (SOCs) has been the subject of major public interest and political debate.[1] The broad issues in this debate are how politicians (when acting in their capacity as government-owners) and corporate directors should monitor, control, and incentivise the behaviour of corporate managers in SOCs. More precisely, discussions often revolve around governance decisions like: Who should be appointed to sit on the SOC boards? Should incentive schemes be included in managerial compensation contracts, and how much should SOC managers be paid? How much dividends should be extracted from SOCs? For instance, in Norway, the exercise of high-value stock options on the part of some SOC managers has raised considerable public concern about fairness, morale, and social responsibility. Attempting to satisfy public opinion, this prompted government-owner intervention in the design of managerial compensation contracts. Likewise, in Sweden, the government-owner has strongly recommended that incentive schemes directed at the top managers in SOCs should be avoided. There has also been dispute about board appointments (do politically affiliated corporate directors have the necessary competence to take seats on SOC boards, and would they be inclined to serve self-interested politicians rather than the interests of the firm?) as well as dividend payments (do high dividends make it difficult for SOCs to carry out profitable investment projects?).

Within a political context, corporate governance is often seen as a relatively new phenomenon. But surely, issues related to state ownership have always spurred political debate, if for no other reason that the question of state versus private ownership reflects party-political concerns. What is 'new' about corporate governance is that, since the late 1990s, governments have paid more systematic attention to their ownership role. Why is that? First, it might be seen as an honest attempt to comply with the often-made criticism that SOCs suffer just as much from passive state ownership as from undue political ownership interference (OECD, 2005). To afford politicians

[1] In the literature, state-owned companies are also referred to as state (-owned) enterprises, state (-owned) firms, and even as public firms. While I return to the definition of a state-owned company in Section 1.4, these terms are considered to be interchangeable and will be used as such.

increased legitimacy in their ownership role, a binding commitment to principles of 'good corporate governance' has therefore been hailed as a possible solution. In general, such compliance is supposed to make the management of state ownership portfolios more transparent and predictable. More specifically, improved professionalism is deemed necessary to enhance confidence in the neutrality of the government in those sectors where it acts both as owner and regulator, like in telecommunications and energy (OECD, 2003). Increased transparency and predictability is also seen as necessary to assure that the state as a dominant shareholder will not exploit the interests of co-investors (Becht et al., 2003).

Second, the focus on corporate governance reflects a general trend in the business society towards focusing on shareholder activism. In particular, the political debate on corporate governance was fuelled by some large corporate failures surfacing in the Nordic, Western European, and US region alike. While these scandals ultimately led to enquiries, new legislation, and recommendations (as illustrated by the Cadbury Code, 1992; the Sarbanes-Oxley Act, 2002; and the OECD Principles of Corporate Governance, 2004), they also had the accompanying effect that the media nowadays regularly reports instances of 'governance failures'. Clearly, few public commentators can resist populist attacks on, say, 'excessive' pay levels. To avoid harmful voter reactions, politicians may therefore attempt to prevent seemingly unpopular governance decisions from being made.

Third, although there is little party-political struggle over the need for making corporate governance issues more explicit, the debate has activated a left-right dimension on the substance of corporate governance. While left-wing parties emphasise the need for political control, right-wing parties tend to argue that political concerns should not be confused with business concerns. There is therefore an ideological dimension to corporate governance as well, which becomes particularly manifest in the debate about whether politicians might benefit from mimicking the corporate governance practices of privately owned firms.

This strong practical interest into the issue of corporate governance certainly encourages researchers to take a closer look at what happens to governance decisions in the case of state ownership. Accordingly, this thesis asks: What factors might explain some of the key governance decisions that are made by either politicians or corporate directors? More precisely, I want to know whether we might possibly trace governance decisions to some distinct sets of motives carried by politicians and corporate directors. Moreover, I would like to explore whether governance decisions are influenced by the institutional context in which SOCs operate and some of the basic firm characteristics distinguishing firms under state control.

The chapter proceeds as follows. First, Section 1.1 elaborates on the broad plan of the research project. Next, Section 1.2 clarifies how the thesis contributes to the literature on state ownership and corporate governance,

while Section 1.3 places the research topic in its broader theoretical context. Section 1.4 gives a thorough definition of the term 'state-owned company'. Then, Section 1.5 comments on an omitted variable which is conventionally included in corporate governance research. Finally, Section 1.6 presents the different parts of the thesis.

1.1 The Broad Plan of the Thesis

Consistent with the basic idea of corporate governance, the essential task of politicians and corporate directors is to deal with the presumed self-serving behaviour of corporate managers. For this purpose, they might rely on certain governance mechanisms, such as the board of directors (e.g., to ratify major strategy plans and to select, compensate, and evaluate top managers), chief executive officer (CEO) compensation contracts (to incentivise and attract managerial talents), and dividend payments (to limit the financial discretion of corporate managers). The aim of this thesis is to investigate what factors can explain the use of such governance mechanisms. Thus, the empirical study raises three specific questions: Who gets appointed to SOC boards, and why? Why are some CEOs paid more and differently (e.g., in terms of incentive-pay) than others? Why do some SOCs pay higher dividends than others?

Before proceeding, we should note that there is certainly more to corporate governance than this thesis looks at, including some more informal or less regularly observed forms of governance mechanisms.[2] Examples of the latter include Parliamentary discussions on the long-term strategies and financial plans of SOCs (relevant for some fully state-owned firms only), the possibility that the government-owner may use the general assembly for issuing political directives, as well as formal and informal contact between Parliamentary committees/members and firm representatives. The reason for not including such governance mechanisms relates to the fact that they are either not observable (at least not on a regular basis) or applicable to all SOCs. For instance, most of the board's activities are unobservable, which means that any attempt to isolate the influence of corporate directors on governance decisions have to concentrate on their observable actions (Weisbach, 1988) – and one striking board action is the setting of CEO compensation contracts (Fama and Jensen, 1983a). Thus, the thesis focuses

[2] It should also be noted that there is more to the ownership function than corporate governance. In fact, the basic function of shareholders is to provide capital to the firm. Also, some shareholders provide the firm with competence and networks. In the case of state ownership, it is not very controversial to argue that most politicians have no special competence or networks to offer SOCs. Thus, the function of corporate governance stands out as the most viable candidate for empirical investigation.

on observable governance mechanisms for which publicly available information is regularly disclosed.

How can we explain the above governance decisions? At its most basic level, the question of what happens to governance decisions in the case of state ownership has to do with the motivation of those people responsible for making such decisions. As far as the government-owner is concerned, this is a non-trivial issue, since politicians have no direct cash flow rights from the firms in which they hold ownership stakes. Therefore, we might expect politicians to pursue other goals than profit maximisation as such. Indeed, we might infer from the political economics literature that politicians who are currently in office care about creating a favourable reputation as professional representatives of shareholder welfare (reputation motive), maintaining their popularity among voters so as to keep their positions (re-election motive), or implementing their preferred party-policy (ideology motive). Likewise, corporate directors are likely concerned about their reputation as competent representatives of the shareholder electorate (reputation motive), but also their prospects of being re-elected to current board seats (re-election motive). While these motivational concerns in some cases overlap, they might also conflict. Therefore, I keep them analytically distinct. Using these motives as baseline models, we might possibly make some more specific conjectures of what governance decisions will be made. Interestingly, we already note the possibility that governance decisions might in fact serve other purposes than to curb managerial opportunism.

However, making inferences about how decision-makers' motivation affect governance decisions provides only one part of the governance story. In addition, we should account for the fact that both politicians and corporate directors operate within some broader institutional framework, which both constrains and enables certain types of behaviour. For instance, in firms under partial state control, the government-owner is legally prohibited from exploiting the interests of co-investors. On the other hand, Norwegian company law also gives the government-owner certain privileges in fully state-owned firms. Naturally, the institutional framework applies irrespective of motivational concerns, but its effect might differ according to decision-makers' motivation. Moreover, it is reasonable to assume that different types of governance decisions are optimal for different types of SOCs. For instance, politicians who care about their re-election prospects would probably find it more important to exert some influence upon the governance decisions in highly visible SOCs (e.g., in terms of firm size) than in those SOCs that are less visible to the voters. Or, there is the case in which corporate directors who care about their reputation would consider how commercial SOCs have different needs than non-commercial SOCs. Thus, not only do institutional features and firm characteristics interact with motivational concerns, but they might also contribute to explain why governance decisions vary across the state ownership portfolio.

In sum, therefore, the thesis seeks to explain governance decisions by first differentiating between the motivational concerns of key decision-makers; that is, politicians and corporate directors. The next step is then to examine how governance decisions are influenced by various institutional features and firm characteristics, and how these interact with motivational concerns. To empirically investigate these issues I use a broad sample of SOCs in the two Scandinavian countries of Norway and Sweden over the period 2000-2005. As regards the survey period, we note that it coincides with the controversy over corporate governance, thereby providing a sample that is affected by recent shareholder activism. However, such activism would only be problematic if being biased towards one particular motive. But, as I expect that politicians who care about their reputation would be equally more attentive to issues of corporate governance as would politicians who care about being re-elected or those preoccupied with ideology concerns, the sample period does not prevent from us from drawing valid conclusions.[3]

1.2 Contributions to Research

In the literature, the topic of state ownership and corporate governance has received far more theoretical interests than empirical evaluation. The reason for this empirical scarcity is quite comprehensible, since data on both SOCs and corporate governance are usually not available in public registers. Any serious attempts to collect data on these matters are thus highly valuable for descriptive as well as explanatory purposes. Admittedly though, there is already a small but intriguing literature which has grown to test hypotheses on the determinants of governance decisions in the case of state ownership (on the issue of CEO compensation, see Greve, 1997; Wolfram, 1998; Cragg and Dyck, 2003; on the issue of dividend payments, see Megginson et al., 1994; Boubakri and Cosset, 1998; D'Souza et al., 2000; Gugler, 2003). Broadly stated, the research strategy of these studies has been to portray politicians as the key decision-making authority, who are being motivated by their re-election prospects only; to look for variation across the state ownership portfolio by comparing firms under full state control to partly state-owned firms; to focus on single governance mechanisms; and to perform their tests on single-country or very large-country samples. Undoubtedly, this research provides valuable insights into various issues of corporate governance. Not surprisingly, however, it also leaves several questions open for empirical enquiry. In short, the most pressing among these questions are the following:

[3] Note that the same argument applies to corporate directors.

i) Should we conceive of politicians as being motivated solely by their chances of staying in office – or is it possible that they pursue other objectives as well?
ii) What is the role of the board of directors in making governance decisions?
iii) Do governance decisions differ across the state ownership portfolio as a function of other features than only the state ownership structure?
iv) What are the relationships between different governance mechanisms?
v) Do governance decisions depend on the national context?

It is precisely the attempts to fill these voids in the literature that provide the more specific contributions of this thesis. First, I find it reasonable to question whether politicians, when acting in their capacity as shareholders, only worry about voter popularity. Probing the broader literature on political economics, I have already suggested that we broaden our scope of political motivation to also include other concerns. More precisely, the thesis takes on the rather straightforward insights that politicians are motivated not only by their re-election prospects, but also by the chances of implementing their preferred party-policy or by the prospects of reputation-building.

Second, I argue that we cannot achieve a complete understanding of corporate governance under state ownership without taking into account the impact of the board of directors. Indeed, there is a growing interest in the role of boards within a public sector context (Farrell, 2005). With regard to the special organisational form of SOCs, however, the literature has been focusing on the government-owner as the key decision-making authority whereas boards' influence is a largely neglected issue (but, see Wolfram, 1998). Importantly, this is at odds with real-world business, where only a small part of governance decisions is made by shareholders themselves. In fact, the government-owner (like any other shareholder) is required by company law to delegate much of its decision-making authority to a board of directors, which then acts as the fiduciary representative of the government-owner and potential co-investors.[4] Accordingly, this suggests that we study not only the motivation of politicians, but also the motivation of corporate directors. Like politicians, I suggest that corporate directors care about both their reputation and re-election prospects.

The third major contribution from this study has to do with the institutional framework in which corporate governance is exercised and the great heterogeneity of the state ownership portfolio. Somewhat surprisingly,

[4] The board of directors has thus a dual function in that itself represents a governance mechanism but is also responsible for making governance decisions on its own, like deciding on CEO compensation contracts.

institutional features and firm characteristics are little emphasised in the literature, with some exceptions in the theoretical work by Aharoni (1986) and Vickers and Yarrow (1991). Yet, the idea of such approach is appealing. For instance, if we start from the premise that politicians only care about their re-election prospects, we might ask if political considerations are likely modified by the presence of co-investors, and if it does matter whether co-investors are of private or public type? Moreover, are politicians likely to be more attentive to the governance decisions of large SOCs (whose actions are visible to, and even personally affect, many voters) than that of small ones? In general, these examples point toward an interesting dynamic: Governance decisions depend not only on the motivation of politicians and corporate directors, but also on various factors on the institutional and firm level.

Fourth, the thesis contributes to shed light on the multidimensional task of corporate governance by exploring whether different governance mechanisms are internally related. In the corporate governance literature, examples of such approach for firms other than SOCs are provided by Rediker and Seth (1995), Agrawal and Knoeber (1996), Crespi et al. (2004), and Bøhren and Ødegaard (2006). Reflecting the main ideas of these works, this thesis empirically investigates a comprehensive set of governance mechanisms, such as board appointments, CEO compensation contracts, and dividend payments. To give just one example: If the government-owner worries that high-value compensation packages give raise to voter concern about fairness and morale, could the appointment of politically affiliated chairmen plausibly be causing lower levels of executive compensation? Seeking the answers to such questions, I attempt to explore some broader trends of corporate governance in the context of state ownership.

Finally, the thesis seeks to clarify whether governance decisions depend on the specific national context in which politicians and corporate directors perform their governance function. This is a vital issue, since the corporate governance literature demonstrates the importance of nation-specificity (Thomsen and Pedersen, 2000; Gugler, 2001). Yet, in the few large-country studies of SOCs, attention has been directed to the broad patterns of corporate governance rather than cross-country variation. The latter is deemed important, however, as there might be different, and often history-specific, legal and regulatory frameworks that guide corporate governance. To explore this issue I use a broad sample of SOCs in the two Scandinavian countries of Norway and Sweden, which differ in terms of the institutional framework within which the government-owner and board of directors are to influence upon corporate governance. Being rather similar in most other respects, the two countries of Norway and Sweden are yet highly comparable. Thus, it should be possible to make sound inferences about the causal effects of nation-specific institutional arrangements on governance decisions.

1.3 Theoretical Foundations

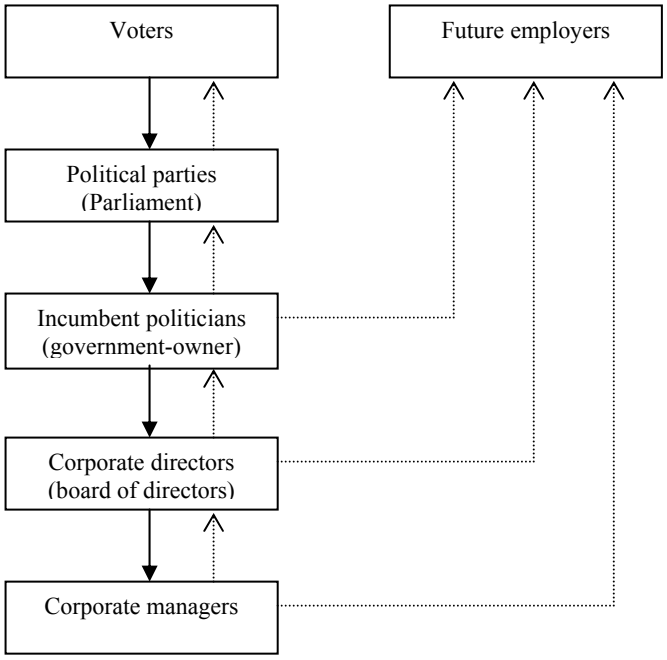
Having pinpointed the very details in the literature about state ownership and corporate governance, it is time to step back and trace the theoretical roots of this research. The purpose of this exercise is two-fold. First, it offers the reader an introduction to the theoretical building blocks on which this thesis rests: The overall perspective is grounded in an agency conception of SOCs, which hinges on the assumption of self-interested individuals, a contractual perspective on corporate relationships, analysis via principal-agent models, and a focus on how to curb self-serving behaviour. Second, it demonstrates how we might combine insight from two related, yet distinct, research fields to improve our understanding of a topic that lies on the intersection of politics, finance, and economics. Broadly stated, the thesis combines insights from the research fields of corporate governance (why do we need corporate governance, and which governance mechanisms are available to limit self-serving behaviour?) and political economics (what is the distinctive character of state ownership, and how does it influences governance decisions?).[5]

To set the scene for the theoretical discussion, we start by illustrating the firm hierarchy in the case of state ownership, which appears at the left-hand side of Figure 1.1. In conventional terms, the firm hierarchy concerns the relationships among shareholders (those people who invest their money in the firm), corporate directors (those people who act as fiduciary representatives of the shareholder electorate), and corporate managers (those people who run the firm). In firms where the state holds ownership rights, even more actors are involved. More precisely, the citizens/taxpayers are the ultimate owners of SOCs, who then vote for political parties to represent their interests. Thereafter, the party (or coalition of parties) with the majority of Parliamentary seats appoints a government to act on voters' behalf. In practice, this means that voters delegate their ownership rights to the government through elections. For that reason, we normally refer to the government as the actual owner of SOCs.[6]

[5] It should be noted that there are other conceptions of corporate governance than the one pertaining to the firm level. In fact, corporate governance research spans today several levels of analysis, from within the firm to the nation-state and beyond (Davis and Useem, 2002).

[6] In practice, this firm hierarchy is even more complex as it also includes the bureaucrats who, in support of their ministers, oversee the state ownership portfolio on a daily basis.

Figure 1.1. The firm hierarchy under state ownership.



According to this figure, we note three specific characteristics of the firm hierarchy. First, there is an extensive delegation of control rights, from voters to politicians and down on the hierarchy to the corporate managers (as shown by the dense arrow lines). Second, every actor in the firm hierarchy is held accountable by their superiors (as shown by the dotted arrow lines). Third, although often unspoken, the very same actors are held accountable also by future employers in the sense that their current professional achievements are evaluated by the external job market (note that political parties as such are not held accountable by future employers, only their party-members can be). In the economics literature, the above relationships are usually modelled as principal-agent (or, simply, agency) relationships.[7] Formally, an agency relationship is defined as "…a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent" (Jensen and Meckling, 1976, p.

[7] The landmark papers on this issue are due to Jensen and Meckling (1976), Fama (1980), Fama and Jensen (1983a, 1983b).

308). In terms of Figure 1.1, we note that aside from the ultimate principals (voters, but also future employers) and ultimate agents (corporate managers) every actor in the firm hierarchy occupies a dual role in which they serve both as principal and as agent. That is, our key decision-makers (incumbent politicians and corporate directors) are both delegating authority and being held accountable by their superiors.

Importantly, there is a good reason why the principal wants to delegate the power to decide: As a specialist in his or her area, the agent is more likely than the principal to have the experience, judgment, and information to decide wisely (Maskin and Tirole, 2004).[8] Moreover, if we assume away any interest conflicts between principal and agent, delegation could perfectly well bring about the desired results for the principal. The agent will simply be prepared to carry out the instructions from the principal, and his or her effort is reimbursed directly (Hart, 1995a). But, can we really trust the agents in the state firm hierarchy to act in the principals' interests? If we were to believe the theoretical perspectives underlying this thesis (and, not to forget, a vast amount of real-world cases) the answer is certainly 'no'. In what follows, I will elaborate on this position and show how the described theoretical elements come into play in the present context.

1.3.1 Why do we need corporate governance?

According to corporate governance theory, the most striking feature of the firm hierarchy is the separation of ownership from management, which means that those people who bring equity to the firm are not the same people who make decisions about corporate behaviour on a daily basis (Berle and Means, 1932). Portraying this separation as an agency relationship between shareholders and corporate managers, the shareholders are the principals who then contract with the corporate managers (the agents) to act on their behalf.

Perhaps not very surprising, the contractual relationship between shareholders and corporate managers carries a built-in delegation problem – most often referred to as the *agency problem*. One part of the agency problem is that corporate managers have private information – about their 'true type' (e.g., their motivation and skills) or their actual behaviour (e.g., on-the-job-consumption) – that are largely unavailable to the shareholders.[9] The other part is that that every individual acts to maximise his or her own utility, which makes us likely to experience cases in which the interests of

[8] Maskin and Tirole (2004) use this argument to explain why the citizens delegate decision-making powers to elected representatives. Apparently, this logic applies equally well in most other agency relationships.

[9] In the principal-agent literature, these cases are known as 'adverse selection' (hidden knowledge) and 'moral hazard' (hidden action), respectively.

shareholders and corporate managers do not coincide. A few examples might contribute to illustrate the agency problem. For instance, corporate managers may undertake certain actions (e.g., providing favours to business companions or enjoying extravagant business trips) which are difficult for shareholders to observe. Accordingly, shareholders have no possibility for raising their voice against corporate managers. Or, there is the case in which corporate managers perform highly observable actions (e.g., they pursue an acquisition strategy), but the shareholders cannot know for sure what are managers' motivation for doing so or, even, what are the possible effects on shareholder value. In fact, corporate managers might decide on firm strategy mainly as a means to increase their power and status (caring less about the effects on shareholder value), or as a means to look competent in the eyes of present and future employers (which necessitates that they positively influence shareholder value). But, since shareholders are typically little informed about corporate managers' factual motivation (and, perhaps, even their talent), this also makes them less prone to interfere in firm activities. In sum, therefore, the agency problem is due to asymmetric information and potential interest conflicts between shareholders and corporate managers.

Is there so any possibility for shareholders to alleviate the agency problem? Viewing the firm as a nexus-of-contracts, it is tempting to suggest that the agency problem might easily be resolved by way of including in the contract some clauses against potential shareholder abuse. But unfortunately, improved contracting alone is not a sufficient solution. This presumption is due to the very nature of contracting: Because it is extremely expensive, if not impossible, to write and enforce contracts which deal with all aspects of the shareholder-manager interaction, shareholders are likely to give up any specific control rights over corporate management. Instead, they end up purchasing the *residual control rights*, which include all control rights except those given away in any initial contracts. In practice, this means that shareholders have to accept those contractual agreements which the firm has made with, say, employees and debt holders. Apart from this, however, shareholders are given almost carte blanche to intervene in those company matters which are not regulated by any preceding contracts (Grossman and Hart, 1986; Hart and Moore, 1990; Hart, 1995a, 1995b). But also, company legislation provides an effective impediment to shareholder intervention in that it prescribes a clear division of roles between shareholders, the board of directors, and corporate management.

Leaving aside the impact of company legislation (to which we return in Section 1.4 and, later, in Section 3.1), it seems intuitive to expect that shareholders will use their residual control rights to actively intervene in corporate decision-making, since this would make them capable of acquiring at least *some* valuable information and thereby ease the agency problem. But for this to happen, shareholders need both be capable and willing to engage in corporate issues. One might easily argue, however, that most shareholders

have neither the possibility nor desire to perform this task on a day-to-day basis. For one thing, this might be due to the simple fact that shareholders lack the time and competence necessary to engage in corporate decision-making. Recalling from above, this is exactly why shareholders delegate decision-making authority to corporate managers in the first place. As to government-owners, this argument is particularly valid as politicians are generally not specialists in corporate issues. Additionally, state ownership is only one among several important policy areas which demand political attention. For another, shareholders' ownership stakes might be too small for active intervention to pay off, or they simply lack enough power to influence corporate managers. While these arguments are certainly not applicable to government-owners, who by virtue of their sheer ownership stakes at least have the necessary power to engage in corporate decision-making, politicians might abstain from involvement for other reasons. Perhaps most importantly, non-intervention is necessary to the extent that state ownership is administered under Parliamentary responsibility. Thus, for the Parliament not to hold the government responsible for company-related decisions, the government-owner needs to refrain from intervention in corporate decision-making. Moreover, we have already noted the fact that the state may in some sectors act both as an owner and a regulator. To avoid role conflicts and charges against the government-owner for intervening in firm activity to the detriment of competitors, this suggests that significant control rights are delegated to corporate managers. Finally, the government-owner might abstain from intervention in order to prove that it will not exploit potential co-investors, whose interests might possibly conflict with political interests. In sum, therefore, there exist strong arguments as to why shareholders in general and government-owners in particular should normally refrain from direct intervention in the decision-making of SOCs and leave room for managerial discretion.

Yet, it is hard to believe that shareholders totally give up on their residual control rights, only hoping for the possibility that corporate managers will not take advantage of their position. By contrast, we often observe that shareholders spend large amounts of effort and ingenuity attempting to influence corporate behaviour. The point is, however, that shareholders normally do not exercise their control rights by observing and adjusting the behaviour of corporate managers on a daily basis. Instead, they rely on a set of closely defined *governance mechanisms*, which use is regularly decided upon by shareholders themselves or by corporate directors. Thus, shareholders *do* exercise control, but this happens by way of some finer mechanisms which do not take up too much of shareholders' time or interfere with managers' decision-making authority.

1.3.2 Which governance mechanisms?

The above discussion leads naturally to the question: How can shareholders curb managerial opportunism? Following corporate governance theory, shareholders most efficiently discipline corporate managers by way of providing them with some kinds of incentives, which may take the form of implicit or explicit inducements. Implicit incentives are normally present in the form of career concerns inside or outside the firm, which means that corporate managers can only hold on to their jobs if keeping an eye on a certain threshold of utility for the shareholders (Fama, 1980; Holmström, 1982; Dewatripont et al., 1999a, 1999b). Thus, while corporate managers might get away with some types of self-seeking behaviour, their concern for future employment within and outside the firm provides a major motivation for pleasing shareholders. Within the firm hierarchy it is but not the shareholders themselves who hold corporate managers accountable. Instead, shareholders delegate this task to the board of directors, which means that the major responsibility of corporate directors is to make sure that corporate managers strive to fulfil shareholders' objectives. Basically, shareholders thus use the board of directors as a governance mechanism to alleviate the agency problem.

Yet, in reality, the managerial labour market is not fully competitive, due to both informational problems and sticky labour contracts. Therefore, even though career-concerns do motivate corporate managers to increase shareholder welfare, we cannot expect that implicit incentives will entirely solve the agency problem.[10] But shareholders normally rely on some other governance mechanisms as well, which use is decided upon by shareholders themselves or by the board of directors. Among these governance mechanisms, most attention has been devoted to explicit incentives, which are associated with financial rewards such as bonuses, profit sharing, stock options, shareholdings, and so on (Prendergast, 1999). Additionally, the agency problem might be successfully handled by placing some outright boundaries on corporate managers' discretionary behaviour – for instance, by restraining the cash available for managerial spending on corporate activities. However, there may still be incentive aspects to such a disciplinary device if shareholders are prone to lessen their control when corporate managers identify profitable investment projects.

From this, it follows that shareholders may rely on three types of governance mechanisms to discipline corporate managers, which includes

[10] In principle, shareholders may also rely on the market for corporate control to mitigate the agency problem. In this case, corporate managers are disciplined by the threat of takeovers, which involves hostile bidders acquire control of poorly performing firms and remove corporate management. But like the labour market, the takeover market is not fully competitive. Even more important, however, the takeover threat does not apply very well to most SOCs, whose ownership structure is rather persistent over time.

the board of directors, CEO compensation contracts, and dividend payments. According to the literature, these governance mechanisms should be decided upon so that the following criteria are met: First, shareholders should appoint corporate directors who possess the necessary competence to represent the interests of the firm (overviews of the economic literature on the board of directors are given by Becht et al., 2003; Hermalin and Weisbach, 2003). Although fulfilling the competence requirements, however, the agency view suggests that corporate directors will not necessarily act as *loyal* representatives of the shareholders. Ironically, the upshot of this is that shareholders must strive to discipline the behaviour of not only corporate managers, but also that of corporate directors. But like corporate managers, it seems reasonable to suggest that also corporate directors are motivated by career-concerns inside and outside the firm. Therefore, corporate directors are likely kept accountable by implicit incentives in terms of re-election prospects and the possibility of being nominated for other directorships or managerial positions in the private or public sector.[11] Moreover, to facilitate the board selection process, shareholders will normally rely on some personal characteristics (e.g., professional background) of board candidates to proxy for their competence and loyalty. Overall, this suggests that who is appointed by the shareholders to serve on the SOC boards is vital to ensure that corporate managers are held accountable to shareholders' interests.

Second, the board of directors should decide on the level and structure of CEO compensation contracts so that corporate managers are encouraged to behave according to shareholders' interests (for an overview of the economic literature on executive compensation, see Murphy, 1999). As to the salary level, theory simply predicts that CEOs should be paid no more than what is justified by market considerations (Finkelstein and Hambrick, 1988, 1995; David et al., 1998). The other part of this argument states that if firms are offering salaries which are significantly below market-efficient levels, they are likely to experience difficulties in the recruitment of managerial talents. Moreover, theory posits that corporate directors most efficiently protect shareholders' interests by offering CEOs high-powered incentive schemes (see, for example, Shleifer and Vishny, 1997; Tirole, 2001). Finally, some management perquisites, like golden parachute contracts, mainly reflect an agency cost associated with inefficient board control and should therefore be avoided – if not explicitly invoked on business grounds (Wade et al., 1990). In short, therefore, theory suggests that shareholders should put pressure on the board of directors to offer the

[11] Although more rare in a Scandinavian context, it might also be the case that corporate directors are being offered explicit incentives (e.g., stock options and shareholdings) by the shareholders.

CEO a market-clearing salary level, performance-based pay components, and make restrictions on the use of management perquisites.

Finally, the board of directors (or, in some cases, the shareholders) should extract enough dividends from the firms so as to restrain corporate managers' financial discretion (for an overview of the dividend literature, see Correia da Silva et al., 2004). This argument is derived from the theoretical prediction that the worst agency problem occurs in equity-based firms with poor investment opportunities and excess cash, which would imply that shareholders pressure low-growth firms to pay earning out as dividend rather than retain it (Jensen, 1986). While dividend payments certainly help to limit firms' financial discretion, such governance decisions might also have an important incentive effect. Normally, this would be the case if firms with good growth prospects are allowed to keep enough money to invest in profitable projects.

To this broad picture, the corporate governance literature suggests that a number of factors might have an effect on governance decisions. In particular, some of the special characteristics of SOCs indicate that governance decisions cannot simply be explained by conventional economic arguments. But, even more basic, we cannot explain governance decisions without also asking what motivates politicians when acting in their capacity as shareholders.

1.3.3 What motivates politicians?

So far, I have surveyed the very essence of corporate governance research: Why do we need corporate governance, and what can shareholders do to best protect their interests? In this stream of research, one most often starts from the assumption that shareholders' primary motivation is to maximise profit. Naturally, most shareholders care about getting a return on their investments. But, as some authors point out, "[t]he assumption that all external shareholders are equally concerned with profit maximisation…is overly simplistic and ignores the differing incentives the various external shareholders will face" (Short, 1994, p. 228). Accordingly, we should expect that the *identity* of shareholders will have important implications for their objectives and how they engage in corporate governance (Thomsen and Pedersen, 2000). In particular, this thesis will discuss how the government-owner is quite different from other types of shareholders.

Considered the fact that corporate governance theory is rather silent about the identity issue in general and state ownership in particular, I turn to the research field of political economics for further insights. As the term signifies, political economics straddles the disciplines of economics and political science (Dunleavy, 1991). More precisely, it carries the use of economic tools to study policy decisions and, ultimately, how different

policies affect economic outcomes.[12] The core assumption of this theoretical framework is that politicians, like anyone else, act in pursuit of their private interests. Making qualified assumptions about these interests is thus a first step towards our goal of achieving a richer understanding of corporate governance in the case of state ownership.

Following the theory of political economics, politicians derive their utility from the power, rents, and policy influences that go with the job (see, for example, Persson and Tabellini, 2000). If we keep in line with the motivational concerns of other actors in the firm hierarchy (i.e., corporate managers and corporate directors), it thus seems natural to interpret these objectives as if politicians are motivated by their within-politics career prospects. In terms of Figure 1.1, we note that in order for politicians to hold on to their positions, this means they have to please both the party-group and, ultimately, the voters. To complete the line of reasoning of such career-concern motivation, we should take into account the possibility that politicians also care about their non-political career prospects (Alesina and Tabellini, 2007, 2008).

Interestingly, though, mainstream political economics suggests that political motivation does not necessarily correspond to that of the career-concern model. In fact, politicians are assumed to care about policy influences for other reasons than to preserve the loyalty of the party-group and the voters – for instance, for the sake of increasing the welfare of particular groups in society. From this view, we should therefore distinguish between the cases in which politicians' motive is simply that of re-election (which allows them to maintain their power and/or extract rents) or that of implementing their preferred policies (Alesina et al., 1999; Persson and Tabellini, 2000). Importantly, the distinction between the re-election motive and the ideology motive is crucial not only to the discourse about political motivation, but for analytic purposes as well. This is because the two motivational concerns might induce different behaviour. In fact, if politicians do only care about issues of power and rents, they would mainly seek to please the voters (when also keeping an eye on a lower threshold level of support from the party-group). By contrast, if politicians are exclusively concerned with policy influences (as we assume is also the primary objective of the party-group), this means they might be willing to sacrifice office so as to preserve ideological commitments.

While, in the political economics literature, these motivational models are mainly used to study policy decisions in other areas than that of corporate governance, they might certainly prove relevant to the latter as well. However, in order to render the models valid descriptions of corporate governance issues, some refinements are needed: As regards the re-election

[12] Note, however, that political economics (often also referred to as 'political economy') has been used in various contexts to refer to different intellectual projects (Besley, 2005).

motive, we need to make some assumptions about voters' rationality (including voter preferences and voter information) on the issue of corporate governance. As to the ideology motive, we should convincingly argue that different political parties follow distinct corporate governance policies and thereby differently attempting to influence upon governance decisions when in office. Finally, as regards the reputation motive, we need to identify what are the preferred governance decisions from the point of view of future employers.

1.3.4 Some final remarks on the notion of self-interests

At the start of this theoretical discussion, we introduced the assumption of self-interested individuals. Although this assumption is today standard, some authors have found it necessary to note that there is nothing inconsistent between self-interested and altruistic behaviour (Jensen and Meckling, 1994; Jensen, 1994). Naturally, most people do not care only about their own welfare, but also about the welfare of others. Also, people might care about their own welfare in ways that stretch beyond that of pecuniary implications. From this view, I add two more remarks to the notion of self-interest. First, I assume that self-interest tends to dominate altruism, which means that people mostly think about their own wellbeing rather than the wellbeing of others. Second, I do recognise, however, that self-interests may appear in many forms; for instance, as a matter of achieving material benefits or increasing individuals' self-esteem. As we return to these issues in Chapter 2, suffice it to say here that it is possible to incorporate more considerations of individual motives into our models without loosing any precision in predicting empirical outcomes.

1.4 What is a State-owned Company?

In practice, state ownership takes a number of forms ranging from entities that are functionally, but not legally, distinct from the state to incorporated companies. In this thesis, the label state-owned company is confined to those firms that are organised as separate legal entities distinct from the government, with the freedom to dispose of their own capital and income. Moreover, attention is drawn to those firms in which shareholders' responsibility is limited to the capital they have invested; that is, limited liability companies. As a shareholder in limited liability companies, the government can thus only be held accountable for company debts equivalent

to the invested amount.[13] We also note that the term state-owned company is used to embrace both those firms in which the state is the single owner and those firms in which the state owns less than 100% of the stock.[14] Thus, a company is denoted as state-owned irrespective of the state equity fraction being large or small. Finally, the thesis concentrates on those companies that are directly administered by the government. Accordingly, it excludes the wide range of firms which are indirectly owned by the state, through subordinate governmental agencies or state institutional investors, like the Norwegian Folketrygdfondet and Norges Bank Investment Management.

In both Norway and Sweden, there are two types of limited liability companies – public and private.[15] The two company types differ regarding the rules that regulate the firm's ownership structure. More precisely, a publicly held company is obligated to raise new capital through a public offering. By contrast, a privately held company can raise capital from existing shareholders only, unless otherwise is stated in the firm's articles of association. In addition, publicly held companies are subject to some special requirements regarding the size of capital and board composition, amongst others. Norwegian and Swedish firms that are listed on the national stock exchanges are all publicly held. As regards the government-owners in Norway and Sweden, they are engaged in both publicly and privately held companies. Firms that are fully owned by the state are naturally considered

[13] While the limited liability company (*aksjeselskap*) is the company type most commonly used for Norwegian SOCs, the latter can also be organised as companies subject to special laws (*særlovsselskaper*) and as companies with a more sectoral profile (*statsforetak*). Yet, studies have shown that there is no close match between the legal status and the arguments used by politicians to decide on a specific company type (Statskonsult, 1998). Until year-end 2002, the major difference between the company forms related to the fact that the state guaranteed for the company debt in *statsforetak*. As to the governance mechanisms relevant for this thesis, there are few differences between the three company types. In principle, therefore, all Norwegian SOCs are subject to inclusion in the data set. Today, Norwegian policy sets out as a general rule that the limited liability company should be chosen as the appropriate company type. As regards Swedish SOCs, they are all organised as limited liability companies.

[14] In many countries, partly state-owned companies (also known as mixed enterprises) are a very common owner type. As the term suggests, partly state-owned companies involve a partial divestment of the firm to non-governmental shareholders or the set-up of a new firm partly owned by non-governmental shareholders and partly owned by the state (see, for example, Boardman and Vining, 1989; Bös, 1991). Note that, in the literature, partly state-owned companies are most often referred to as partly *privatised* companies. Using instead the term partly state-owned, this thesis recognises that potential co-investors can be of any type – public as well as private.

[15] Note that these terms do not imply anything about the ownership of firms. Therefore, publicly held companies should not be confused with state-owned companies. As will be described, state-owned companies may be organised as either private or public limited liability companies.

as privately held companies, since the stock is not traded. In those limited liability companies in which the state co-invests with others, SOCs can be of private or public type, depending on whether the SOC is listed or not.

While the company legislation governing limited liability companies is discussed later in this thesis, suffice it to say here that there should be a clear division of roles between the shareholders, the board of directors, and the corporate management. Obviously, this role division is a direct implication of the fact that shareholders can only limit their responsibility if also withdrawing from taking active part in the firm's business operations. Interestingly, this argument adds some institutional reality to the theory described above, which suggests that shareholders freely delegate large part of their control rights to corporate managers while at the same time attempting to discipline managerial behaviour by relying on some adequate governance mechanisms. In practice, therefore, shareholders do not delegate decision-making authority only because they like to, but because the limited liability company form compels them to do so. In the case of state ownership, the broad implication is that corporate managers in SOCs are shielded from direct political intervention in their daily operations insofar as the government-owner should engage in corporate governance through formal corporate bodies, such as the general assembly.

1.5 A Comment on Omitted Variables

In the process of selecting variables to be included in the empirical analysis, the aim of this thesis is to fortify the theoretical and policy debates on state ownership and corporate governance. For one thing, this means I include in the analysis those variables which are deemed the most obvious candidates when putting theoretical ideas to empirical tests. For another, some of these variables also represent key issues in the political debate about corporate governance (e.g., how large state ownership share is needed to influence upon governance decisions, or what are the effects of drawing a sharp distinction between commercial and non-commercial SOCs?). The interest also lies in whether some basic variables are (non-)significant predictors of more than one type of governance decisions.

In the very same process of selecting variables, I consciously ignore a wide range of potential determinants of governance decisions. As there are clearly some econometric caveats associated with omitted variables (these issues are discussed in Chapter 5), the purpose is here to draw attention to one special variable of interest which is conventionally included in corporate governance research, but excluded from this analysis; namely, that of firm performance. Notably, firm performance constrains and enables certain types of behaviour, and is thereby important to most organisational activities. Yet, there are sound reasons why firm performance is not included in this study.

Most importantly, the heterogeneous nature of the state ownership portfolio means that there is no commonly accepted indicator of firm performance. In fact, since SOCs are typically assigned very different objectives and operate in completely different industries or sectors, the task of designing reliable SOC performance measures would represent by itself a vital contribution to the literature. To avoid running into the problem of comparing the incomparable, firm performance is therefore subsumed under the umbrella of omitted variables.

1.6 The Structure of the Thesis

The rest of this thesis is organised in eight chapters. Chapters 2 through 4 provide the theoretical framework. Chapter 5 describes the data and discusses the econometric methods. Chapters 6 through 8 discuss the empirical results. Chapter 9 summarises the results and concludes. To further clarify the structure of the thesis, we take a look at each chapter in some more detail.

Chapter 2 provides a thorough discussion of motivational models and asks what encourages politicians and corporate directors to engage in corporate governance. Probing the political economics literature, it seems reasonable to distinguish between three types of political motivation: The motive to build a professional reputation; the motive to become re-elected; and the motive to implement party-policies. As regards corporate directors, the corporate governance literature suggests that they are motivated to become re-elected or to build a professional reputation. While there are certainly some grey areas between these models, they are also possibly in conflict. Therefore, the models are kept separate when discussing their broader implications for corporate governance.

Chapter 3 takes into account the fact that politicians and corporate directors do not operate in a vacuum. By contrast, they are affected by both institutional features and firm characteristics. The chapter describes the institutional framework that applies to state ownership in Norway and Sweden. Additionally, the chapter looks at what theory has to say about the influences of firm characteristics on corporate governance. The theoretical discussion is accompanied by descriptive accounts of the state ownership portfolios in the two countries.

With the basic theory in place, the aim of Chapter 4 is to build some richer models of governance decision-making. Discussing how motivational concerns interact with institutional features and firm characteristics, the chapter develops some specific hypotheses about what governance decisions are made in the areas of board appointments, CEO compensation contracts, and dividend payments.

Chapter 5 deals with the data and method that are used to test the empirical hypotheses. First, the chapter provides answers to why Norway and Sweden represent suitable cases to examine the topic of state ownership and corporate governance. Second, the chapter gives a careful description of the sampling approach, variable definitions, and methods for data collection. Third, attention is given to specification of the econometric methods that are used to analyse panel data, and how to resolve some inherent problems in the present data set.

Chapter 6 presents the results from the empirical analysis of SOC board appointments. As to the question of who chairs the SOC boards, the analysis shows that the fraction of political representatives is rather similar in Norway and Sweden. However, the fraction of political chairmen who are appointed by their own government is significantly larger in Norway. Moreover, while in Norway, the majority of SOC chairmen are recruited among private sector employees, the opposite pattern holds for Sweden. The results of the multivariate analyses indicate though that theoretical ideas and actual practices are weakly associated. Despite of some significant partial effects, the models have all low explanatory power. Additionally, nearly all significant results are nation-specific, which make the governance models less applicable across national boundaries.

Chapter 7 presents the empirical results on the topic of CEO compensation contracts. As to the very content of pay packages, the overall finding it that CEO pay packages differ across both firms and countries, as well as over time. One noteworthy result is that CEOs do not seem to incur any particular risk with their pay insofar as there are mostly upside effects related to the use of incentive schemes. Besides, CEOs are commonly generously compensated for the risk of being dismissed. The findings from the multivariate analyses show that CEO compensation design is affected by a wide range of factors, including economic criteria, political forces, managerial influences, and even nationality and time effects. Although the results are broadly consistent with some distinct motivational logics, it thus not seems that the pay design of firms under state control is easily explained by a single governance model.

Chapter 8 presents the empirical findings in the area of dividend payments. The results indicate that more than half of the SOCs in sample are candidates for paying dividends, and that a great majority of these are actual dividend-payers. The major result from the multivariate analyses is that nation-specific legal systems matter to dividend payments. Generally, and in line with theoretical expectations, the Norwegian results are consistent with the re-election model, while the Swedish case supports the idea of the reputation model.

Finally, Chapter 9 provides a summary of the empirical findings and discusses how these results match up with theoretical ideas. The chapter ends with a view to the future research agenda.

Chapter 2

What Motivates Politicians and Corporate Directors to Engage in Corporate Governance?

How do the government-owner and the board of directors seek to monitor, control, and incentivise the top management in SOCs – if, in fact, this is really what they are trying to do? As a first step to answer this question we look at the motivation of politicians and corporate directors to engage in corporate governance. As far as political motivation is concerned, we start from the assumption that politicians only care about their reputation – they want to appear competent to outside observers. In line with this reputation model, politicians are likely to choose those governance decisions that display conformity to normative benchmark criteria about corporate governance, since such behaviour would signal their talent. Alternatively, we might assume that politicians care solely about their re-election prospects. The essence of this re-election model is that politicians have no policy preferences of their own, so they choose the kinds of governance decisions that maximise their chances of electoral victory. Finally, we make the assumption that politicians strictly care about political ideology. According to this ideology model, politicians would decide upon corporate governance in line with partisan profiles.

From the perspective of political economics, both the re-election and the ideology models represent well-known views of political motivation (an introduction to these models is provided by Alesina et al., 1999, Chapter 1; Persson and Tabellini, 2000, Chapter 1). By contrast, the reputation model represents a less-standard position (see, in particular, Maskin and Tirole, 2004; Alesina and Tabellini, 2007, 2008). While all three models capture important aspects of reality, there are some ambiguous issues and intermediate cases between the models. For analytical purposes, however, the models clearly help to identify how different motivational concerns have different implications for corporate governance.

As regards corporate directors, we might safely assume that they are motivated by some of the similar concerns which apply to politicians. In particular, we assume that corporate directors are concerned about their reputation, which means they would choose those governance decisions that are most likely to signal their talent (the reputation model). Alternatively, we might assume that corporate directors care about their chances of being re-

elected to current board positions, which makes them inclined to vote for the kinds of governance decisions that please the government-owner and potential co-investors (the re-election model).

While, in a research context, the motivation of corporate directors has received less attention than the issue of political motivation, we need only confer with the classical literature on corporate governance to suggest that corporate directors are likely concerned about their reputation and career prospects both within and outside the firm (Fama, 1980; Fama and Jensen, 1983a). From a theoretical point of view, therefore, both the reputation model and the re-election model seem appropriate candidates for understanding the motivation of corporate directors. Whereas, also in this case, there might be some grey areas within and between the models, their distinctions are important since they carry different implications for corporate governance.

Without being specific about what kinds of governance decisions that are likely to be made (we deal with this issue in Chapter 4), this chapter explores the motivational models in some more detail. Section 2.1 lays out the three motivational concerns that apply to politicians and discusses some general implications for corporate governance. Likewise, Section 2.2 looks at the motivational concerns of corporate directors and considers some broader implications pertaining to these models. Section 2.3 provides a brief summary.

2.1 The Motivational Concerns of Politicians

While the motivational concerns of politicians are drawn from the broader literature on political economics, only some of these insights have been applied in the literature on state ownership and corporate governance. Perhaps most surprisingly, very little attention has been paid to the ideology model, which focuses upon the impact of party differences on governance decisions. Nor has much attention been paid to the reputation model, which builds on the idea that politicians are concerned about signalling their competence. Thus, research provides little guidance into the issue of how politicians will choose governance decisions that are considered right for the society in general and the business community in particular. By contrast, most research on corporate governance in the context of state ownership has been carried out within the framework of the re-election model, which elevates the idea that politicians are concerned with how they might insure themselves against negative voter reactions. More precisely, this literature focuses attention on how the government prefers those governance decisions which are most likely not to stir up controversy among interest groups and the general public – even if they are at odds with the public interest. In the following, we take a closer look at each motivational model.

2.1.1 The reputation model

As a starting point for analysis, we assume that politicians care about their reputation in the sense that they want to signal their competence to outside observers. Interestingly, there are several reasons why politicians might seek to behave as reputation-builders. The most intuitive reason is that they want to appear talented to the voters, since voters might use information about past performance to select the most competent politicians (Persson and Tabellini, 2000, see in particular pp. 81-87; see also Wittman, 1995). As I will discuss in the next section, however, there are sound reasons why we may doubt the notion of effective voter-control on the issue of corporate governance. Accordingly, we might expect that politicians care about their reputation for other reasons – perhaps primarily because they want to appear talented to the outside (non-political) labour market (Alesina and Tabellini, 2007, 2008). In fact, it seems very reasonable that politicians care about the perception of their ability in the eyes of those that may offer them alternative job opportunities, since any incumbent politicians are conditional on loosing office. Moreover, we cannot ignore the possibility that politicians care about their reputation as a matter of self-image, pride or legacy, irrespective of the immediate career implications (Maskin and Tirole, 2004).[16]

If accepting the assumptions underlying the reputation motive, we are naturally led to ask: What are the implications for corporate governance? In general terms, we expect that politicians' concern for their reputation as being competent would induce them to act in the public interest, since this is the normative benchmark for policy-maximising in a political context. This means we first have to pin down the public interest in the context of state ownership, which is ultimately given by the publicly stated (statutory) objectives of SOCs. Thereafter, we have to identify the normative criteria which guide the choice of specific governance decisions that might further these objectives. Unfortunately, however, economic theory has not provided any conclusive insights into what these normative criteria are. Nor has empirical research provided any decisive evidence of which governance decisions are in the best interest of specific SOCs. Still, we might expect the ideas of economic theory to affect the climate of public opinion within which such decisions are made (Vickers and Yarrow, 1991), insofar as the dominant voices in the debate about corporate governance include business school researchers, financial sector representatives, and policy consultants (e.g., the OECD). Therefore, we should expect that the governance decisions which are most likely to signal competence are those that display conformity to prevalent ideas about corporate governance – as these are reflected in the

[16] The same argument is applied by Alesina and Tabellini (2007, 2008) when modelling the motivational concern of bureaucrats. Certainly, the argument applies equally well to politicians, bearing resemblance to the legacy motive of Maskin and Tirole (2004).

academic literature and practical guidelines. Nonetheless, we should also note that there is a possibility for the public interest not to coincide with the interests of the firm. This is likely the case if the aggregate effects of certain governance decisions, which are deemed well-founded from the point of view of the firm, might have negative consequences on the economy as a whole. Therefore, it seems more precise that we refer to politicians who care about their reputation as taking care of the public interest instead of the interests of single SOCs – even though these interests are likely to converge.

2.1.2 The re-election model

Now, assume instead that politicians care only about winning the upcoming election, which is the standard motive in the political economics literature. The desire to stay in office is mainly because politicians might have a taste for wielding power or that they like to enjoy the perquisites that come with the job (Maskin and Tirole, 2004). In any case, the main concern of politicians is how to satisfy the wider public so as to increase their chances of being re-elected. In the ideal case, such responsiveness to voter demands would imply that politicians choose those actions which they believe is right for society. As suggested above, however, the notion of effective voter-control has been severely criticised in mainstream political economics theory. More precisely, this literature claims that, on many policy issues, we cannot expect the electorate to collect information and learn about the optimality of policy decisions before the next the election takes place. Instead, voters are seen to have either poor or biased information and they have usually little interests in learning about the effects of prior decisions. Obviously, this notion of voter-control carries dismal predictions for policy-making in the sense that politicians who care only about holding office are likely to make decisions that reflect the imperfect or prejudiced information of voters.

But why, really, do we believe that voters are so badly informed, and what are the implications for corporate governance? Probing the political economics literature on state ownership, we may distinguish between three models of informational problems. The first model leans on Down's (1957) hypothesis about 'rational voter ignorance'. The idea is that since acquiring information on various political issues is costly for voters, and the impact of any voter on the election outcome is marginal, individual voters are in fact acting rationally when choosing to stay uninformed. When also taking into account the more specific argument that voters have no direct cash flow rights from SOCs, this suggests that voter-control will be rather weak on the ownership issue (Vickers and Yarrow, 1991). But if voters are little engaged in questions about corporate governance, this also suggests that the control efforts of politicians have a large opportunity cost as political efforts can be more efficiently used for other relevant (i.e., more voter-sensitive) purposes

(McCubbins et al., 1987). Thus, as we cannot expect voters to be vigilant monitors of the government as shareholder, the latter has weak incentives to actively engage in corporate governance. The upshot of this is that ownership issues are offered only low priority by politicians, and the resulting governance decisions should therefore not be interpreted as the outcome of any concerted strategy. Besides, weak political engagement suggests that both corporate directors and corporate managers are left with considerable discretion to influence upon corporate governance.

Our second model emphasises instead the differential information among voters. Specifically, the literature on state ownership suggests that some voter groups will be more attentive towards corporate governance than others (Vickers and Yarrow, 1991; Shleifer and Vishny, 1994; Boycko et al., 1996; Hart et al., 1997; Shleifer, 1998). This is likely the case as the effects of governance decisions are normally concentrated among a few stakeholders, like SOC employees and their trade unions. For organised interest groups, therefore, we might expect the cost/benefit calculation of engagement in corporate governance is positive, which means they are willing to supply politicians with money and votes if they get what they want. In contrast, few other voter groups are directly affected by governance decisions, making such policy issues relatively unimportant. The notion that interest groups are more responsive to governance decisions than the average citizen therefore leads to the expectation that, in order for politicians to become re-elected, they need to cater to the demands of these interest groups. In other words, the tendency is for politicians to make policy decisions which concentrate benefits on the well-organised and well-informed interest groups in the short run, and disperse the costs among the unorganised and ill-informed voters in the long run.

Finally, our third model claims that voters are victims of biased information. One interpretation of biased information is that media reports on certain governance decisions so as to exaggerate its negative effects (Wittman, 1995). For instance, to attract the voters' attention, media might report on SOC managerial compensation contracts which have led to great amounts of pay. For those who read this, such anomalies are understood to be very common, while the possible positive effects are underreported. From this view, we should expect that politicians who care about their re-election prospects are likely to abstain from those governance decisions that lead to high media exposure. Another interpretation of the biased information problem starts from the notion that voters continuously will update their beliefs about the government's preferences on various issues. But since voters are always left with less than perfect information about the real preferences of politicians, they will use governance decisions (and several other policy decisions) as a sign (Dalen et al., 2000). For instance, from the decision to compensate SOC managers by potential high-value incentive contracts, voters might draw the conclusion that the government pays less

emphasis to distributional concerns. The implication is that politicians who seek re-election will take the signalling effects of its actions into account, and thereby avoid certain governance decisions. In accordance with both interpretations of the biased information problem, we might therefore expect that politicians abstain from unpopular governance decisions and pander to public opinion, even if this means that economically rational decisions are deprived.[17]

Importantly, the three interpretations of the voter-control problem carry different implications as to whether politicians behave passively versus actively towards corporate governance. However, the models are not incompatible. Rather, they might be combined in the following argument, which also forms the basis for the political economics' critique of state ownership: In their capacity as shareholders, politicians are normally only weakly motivated to engage in corporate governance, but might become activated in situations of interest group dissatisfaction or strong public attention to governance issues. For the most part, therefore, politicians are likely to take action toward corporate governance only on matters which have caught the attention of interest groups or which have received intense public attention through media coverage. To conclude, the re-election model thus carries the prediction that politicians are more likely to adopt a strategy of 'fire-alarm' control rather than 'police-patrol' oversight in order to protect themselves against misjudgements and criticisms (McCubbins and Schwartz, 1984).

2.1.3 The ideology model

A third competing view of what motivates politicians concerns their ideological orientation, with the simple claim of the ideology model being that different parties pursue different partisan profiles when in office. As to the reasons why politicians care about ideology, they might care about the well-being of particular groups in society and choose policy so as to increase their social welfare (Hibbs, 1977). Alternatively, politicians might be driven by a sense of what is just or legitimate that transcends individual benefits (Persson and Tabellini, 2000). In any case, this means that we can only properly understand the outcomes of corporate governance if we take into account party-political differences on the socioeconomic dimension.

In considering the implications for corporate governance I draw on insight from Lijphart's (1984) comparative analysis of partisan conflicts. One of the basic lessons from this research is that political parties differ from

[17] Note that the argument of pandering can also be interpreted within the framework of Down's (1957) median voter model, which suggests that politicians will offer a moderate policy to gain re-election.

each other along multiple policy dimensions, including the one of socioeconomics. In fact, the socioeconomic dimension tends to dominate the political debate and carries a clear left-right division. Of particular interest to the present study, Lijphart emphasises three leftist versus rightist party positions on socioeconomic policy: (i) Government versus private ownership of the means of production; (ii) a strong versus weak governmental role in economic planning; and (iii) support of versus opposition to redistribution of wealth from the rich to the poor. More specifically, this leads us to expect that left-wing governments would be concerned about securing political control of SOCs, whereas right-wing governments would seek to avoid unwarranted political interference in the governance of SOCs. Moreover, we might expect that whereas left-wing governments are likely to emphasise the social and distributional aspects of SOC behaviour and performance, right-wing governments are more inclined to stress economic aspects. Importantly, Lijphart concludes that the distance between the political parties on the left-right spectrum appears to be greatest in (amongst others) the Scandinavian countries. Thus, in both Norway and Sweden, socioeconomic issues like corporate governance are likely of high salience, which proves the relevance of the ideology model.

2.1.4 Discussion

Thus far, it seems clear that the three motivational models (which, in the following, are labelled *governance* models) carry different implications for corporate governance. Table 2.1 summarises the key insights of the different governance models. One crucial point to note from the above discussion is that, within each governance model, the ultimate reason why politicians care is not clear. For instance, I have pointed to the possibility that politicians might care about their reputation due to pride, but also because this might enhance their career prospects in the outside labour market. Also, politicians might care about holding office not (only) due to perceptions of status and power, but because this allows them to extract material benefits. Thus, the main rationale(s) that lie behind the different motives is not clear. In the following analysis, I will not make any attempt to identify the 'true' motivation of politicians. Instead, the purpose has simply been to make some convincing arguments for which broader concerns that might possible motivate politicians, and to elucidate these ideas in the context of corporate governance. It is naturally of great importance, however, that it has no bearing on corporate governance outcomes whether, say, politicians who care about their reputation do so out of concern for their future employment opportunities or for their self-image.

Table 2.1. Governance models: The case of politicians.

Governance model	Motivational concern	Implications for corporate governance
Reputation	Politicians seek to build a reputation for being talented	Politicians engage in corporate governance so as to look competent to outside observers
Re-election	Politicians seek to stay in office	Politicians engage in corporate governance so as to insure themselves against negative voter reactions
Ideology	Politicians seek to implement party-political goals	Politicians engage in corporate governance so as to strengthen partisan profiles

Yet, there is not only uncertainty about politicians' underlying rationale within the confines of each governance model. More importantly, we also need to take into account the aforementioned possibility that there are intermediate cases between the three models. For instance, it is possible that politicians seek to get re-elected in order to implement their desired policies, which suggests some blurry lines between the re-election model and the ideology model. In this case, politicians would pander to popular opinion on some issues which have caught strong public attention, so that they come in position to pursue their partisan profiles on (for the politicians concerned) other important areas. Essentially, this might lead to cases where the rhetoric of right-wing governments might resemble that of left-wing governments, if only for the purpose to comply with popular concerns. Or, there is the case in which politicians who care about holding office are obliged to implement party-policies – because of the need to preserve their voters' loyalty (Persson and Tabellini, 2000) and/or to secure support from their own party group. While these caveats point to a large grey area between models of political motivation (Persson and Tabellini, 2000; Alesina and Tabellini, 2007, 2008), the present analysis does not allow direct empirical testing of such complex political trade-offs. Nevertheless, the three governance models are clearly useful as a first important step to identify how different types of political motivation have different implications for corporate governance.

2.2 The Motivational Concerns of Corporate Directors

The corporate governance literature suggests that corporate directors are concerned about both their reputation and career prospects, which imply that

they would attempt to please both present and future employers. In principle, the reputation concern and the re-election concern would be one and the same. That is, in order to get re-appointed, corporate directors need to appear competent. But, as we are now well acquainted with the possibility that the government-owner might not (solely) care about satisfying the public interest, this suggests that politicians put less emphasis on the talent of corporate directors when selecting board members. What it takes to get re-elected by the government-owner might therefore differ from what it takes to build a reputation for acting competent. In what follows, I elaborate on these views.

2.2.1 The reputation model

Intuitively, it seems easy to accept the assumption that corporate directors care about their reputation for being competent in their jobs. In particular, this motivational concern is forcefully stressed in the corporate governance literature, which suggests that corporate directors will use their directorships to signal talent to internal and external job markets (see, for example, Fama and Jensen, 1983a; Weisbach, 1988; Zajac and Westphal, 1996). Indeed, for most business people, the value of their human capital greatly depends on their performance as corporate directors. From this view, therefore, it seems likely that corporate directors want to appear talented to both politicians and potential co-investors, since shareholders might use information about past performance in future hiring decisions. However, as corporate directors cannot rely on the government-owner to emphasise competence exclusively, it seems more likely that corporate directors care about their reputation as a means to signal their talent to the non-political job market. But also, like in the case of politicians, it is quite possible that corporate directors care about their reputation as a matter of self-esteem or pride, regardless of the direct career implications.

In considering the implications for corporate governance, we would generally expect that corporate directors' concern for reputation-building lead them to act in the best interest of the SOC (which, we recall from above, are given by the firm's statutory objectives). As previously discussed, however, academic and practical debate has provided us with few normative criteria with which to choose governance decisions in the context of state ownership. Yet, we might expect that corporate directors will behave in accordance with economic theory, which have strongly affected the climate of public opinion within the business sector. In line with our prior ideas, therefore, it seems likely that corporate directors will signal competence by choosing those governance decisions which display conformity to prevalent views about corporate governance.

2.2.2 The re-election model

Alternatively, we assume that corporate directors care only about being re-elected to current board positions. Naturally, this concern would make corporate directors very much attentive to shareholders' interests insofar as they are voted into office by the shareholders and have a fiduciary responsibility to protect their interests (Shivdasani and Yermack, 1999). As to the shareholder interests, we note that, in principle, the government-owner's interests are given by the SOC statutory objectives, which are broadly agreed upon across party-political lines. Even so, politicians might be motivated by quite different concerns which carry different implications for corporate governance, like when politicians care about their popularity among voters and would so adjust to short-term pressure from interest groups regarding critical board decisions (e.g., on downsizing). The problem arises, therefore, when the government-owner communicates different messages about its interests. Related to this it seems likely that, in cases which the state co-invests with others, the shareholder electorate might display different motives for engaging in businesses. For instance, whereas the government-owner might be concerned about public reactions to apparently unpopular governance decisions, private co-investors might deem the same decisions being rational on business grounds. Out of concern for their own re-election prospects, this suggests that corporate directors will choose to obey political interests in those firms which the state is the single owner, but are possibly more attentive to the interests of co-investors in firms under partial state control.

2.2.3 Discussion

Once more, we have discussed how the engagement in corporate governance depends on the motivation of key decision-makers. In the case of corporate directors, Table 2.2 summarises the key points associated with the reputation model and the re-election model. Like in the case of political motivation, we note that it is difficult to identify the ultimate rationale that lies behind the motivational concerns. Thus, I cannot convincingly say whether corporate directors seek to ensure the effective running of SOCs because this signals their competence to the markets, because such behaviour is vital to their self-image, or both. Yet again, our most important task has been to make a clear distinction between different governance models, which each carry different implications for corporate governance. Provided that the ultimate interests of corporate directors have no bearing on what governance decisions are made within the confines of each model, I consider this to be an open question.

Table 2.2. Governance models: The case of corporate directors.

Governance model	Motivational concern	Implications for corporate governance
Reputation	Corporate directors seek to build a reputation for being talented	Corporate directors engage in corporate governance so as to look competent to outside observers
Re-election	Corporate directors Politicians seek to stay in position	Corporate directors engage in corporate governance so as to fulfil the interests of the government-owner and/or potential co-investors

More important, however, is the above-discussed possibility of intermediate cases between the governance models. To illustrate this, it might be the case that corporate directors dispute political signals in order to signal their professional competence. However, corporate directors might also ignore political signals in order to get re-elected to SOC board positions in firms where co-investors hold major stakes. With these caveats in mind, the governance models are considered as helpful building blocks to identify how different motivational concerns have different implications for corporate governance.

2.3 Summary

To explain governance decisions in a state ownership context requires that we have a proper understanding of the motivation of decision-makers. Accordingly, this chapter raised the question: What are the reasons for politicians and corporate directors to engage in corporate governance? Probing the broader literatures on politics economics and corporate governance it was possible to identify a set of reasonably distinct governance models, which each reflect important aspects of reality. Yet, although the different governance models carry different implications for why decision-makers engage in corporate governance, there is the problem that various models might bring about fairly similar governance decisions. For instance, as will be shown later in this thesis, politicians can extract high dividends from SOCs out of concern for their re-election prospects as well as their reputation for being competent. Attempting to discriminate between the various models, it seems therefore necessary to add some more complexity to the world in which politicians and corporate directors operate. In view of that, the next chapter looks at the institutional framework governing state ownership and some of the firm characteristics that are likely to affect governance decision-making.

Chapter 3

Institutional Framework and Firm Characteristics

In a stylized world, we assume that politicians and corporate directors pursue a well-defined set of objectives. As concerns politicians, they care about becoming re-elected or implementing their preferred party-policy, or perhaps about creating a reputation in the external labour market for acting professionally. As concerns corporate directors, they care about being re-appointed to SOC board positions or creating a good job reputation that might qualify for additional directorships in the private sector. While these motivational concerns are not necessarily in conflict, they might in some cases be so. Therefore, we prefer to keep them analytically distinct. To put more flesh to the bone, however, it is now time to add some institutional and corporate features to the world in which politicians and corporate directors operate. Obviously, the inclusion of such features makes for a more realistic picture of governance decision-making. In addition, it makes it possible to explain why governance decisions are not the same across different SOCs. Most important, however, we might use this insight to differentiate between the various governance models.

Seeking to explore the issues of institutional framework and firm characteristics, this chapter first asks: What are the constitutional, legislative, and other formal aspects pertaining to corporate governance in the case of state ownership? I address this question in Section 3.1, providing descriptive accounts of the institutional context that surrounds state ownership administration in Norway and Sweden. Given the motivational concerns of politicians and corporate directors, I also suggest some general implications for corporate governance. Thereafter, I take a closer look at the heterogeneity of the state ownership portfolio. Thus, Section 3.2 asks: By what firm characteristics are SOCs likely to differ? In order to make this matter even more specific, I also provide descriptive accounts of SOCs in Norway and Sweden. Moreover, I make some brief comments on how the different firm characteristics interact with the motivation of decision-makers and point to some broader implications for corporate governance. As to the more specific questions of how institutional features and firm characteristics are brought into play for the purpose of discriminating between various governance models, and what are the effects on particular governance decisions: I save these for the next chapter. At this point, the aim is simply to

highlight those factors other than motivational concerns that might affect corporate governance.

3.1 Institutional Framework

The institutional framework governing state ownership in Norway and Sweden is manifested mainly in four aspects.[18] First, the government's administration mandate is laid down by the Constitution, which also states the division of roles between the government and the Parliament on ownership matters. Second, the fiduciary duties of the government-owner and the board of directors are laid down in company law and other legislation. Third, both politicians and corporate directors should comply with some commonly accepted principles of 'good corporate governance'. Finally, in making governance decisions, politicians and corporate directors are directed by certain guidelines concerning the specific governance mechanisms. The following section offers some more detailed descriptions of this institutional framework. Thereafter it broadly discusses how the various institutional aspects are likely to affect corporate governance.

3.1.1 Constitutional and parliamentary aspects

According to both Norwegian and Swedish Constitution, the state's funds and other assets are at the disposal of the government. The Parliament should, however, determine the bases for the administration of the state's property.[19] More precisely, the government is required to consult the Parliament in the event of significant changes of direction by SOCs, dilution of ownership, capital contributions, incorporation, and the sale and purchase of shares. Even so, the Parliament may authorise the government to make certain changes on these matters – normally within a certain time-span. In this respect, it should be noted that a decision by the Parliament is not required by acquisitions, disposals or close-downs that SOCs carry out within the direction of operations decided upon by the Parliament. Also, the Swedish government is authorised to sell the state's shares in firms where

[18] Information concerning the institutional framework that applies to Norwegian SOCs is drawn from NOU 2004:7, the State Ownership Report 2005, and White Paper (*St.meld.*) no. 13 (2006-2007). Information about the institutional context relevant to Swedish SOCs is drawn from the State Ownership Policy 2005 and the Annual Reports on State-Owned Companies over the years 2000-2005.

[19] Cf. Articles 3 and 19 of the Norwegian Constitution, and Chapter 9, Articles 8 and 9 of the Swedish Constitution.

the state has less than half of the votes for all the shares or participation rights in the firm unless the Parliament has decided otherwise.

As to the administration of state ownership within the government, the prime minister delegates responsibility to the respective ministers.[20] The ministers then exercise state ownership rights under constitutional and parliamentary responsibility. Yet, the government normally acts as a uniform decision-maker on very important and/or controversial ownership issues. To ensure that the ministers have performed their duties as administrators of state interests in accordance with the Parliament's resolutions and intentions, the National Audit Offices in Norway and Sweden are both entitled to scrutinise the government's activities.[21]

3.1.2 The Companies Act and other legislation

In both Norway and Sweden, SOCs are subject to the same legislation as privately owned firms, such as the Companies Act, the legislation on competition, the accounting legislation, the Securities Trading Act (Norwegian firms only), and the Insider Information Act (Swedish firms only). Additionally, firms active in a particular sector may be subject to special sector legislation, such as the Postal Services Act and the Electronic Communications Act. Finally, both SOCs and privately owned firms need to comply with the EU provisions on government assistance.[22]

The basic rules governing the exercise of state ownership rights are provided by the Companies Act.[23] Considering the special characteristics of state ownership, two aspects pertaining to this Act are of particular importance. The first aspect concerns the division of responsibility between

[20] Cf. Article 12 of the Norwegian Constitution, and Chapter 7, Article 5 of the Swedish Constitution. According to the latter, the prime minister has delegated special responsibility to the Minister for Industry, Employment and Communications on matters which make demands for a uniform owner policy or which concern board nominations.

[21] Cf. Article 75k of the Norwegian Constitution and the Act on Auditing of Government Accounts. See also Article 20-7 of the Norwegian Companies Act. In the Swedish case, see Chapter 12, Article 7 of the Swedish Constitution and the Act on Auditing of State Activities. See also Chapter 9, Article 8 of the Swedish Companies Act.

[22] In the case of capital contributions from the government to SOCs operating in the competitive market, the market economy investor principle should be applied. Normally, this principle is complied with if the capital contribution is provided on conditons and terms that would also have been acceptable to a private investor.

[23] Cf. Chapter 1, there are two types of limited liability companies – public and private. In Sweden, all limited liability companies are governed by the Companies Act (*Aktiebolagslagen*). In Norway, there are two acts relating to limited liability companies. The Limited Liability Companies Act (*Aksjeloven*) applies to private companies whereas the Public Limited Liability Companies Act (*Allmennaksjeloven*) applies to public companies. In what follows, both Norwegian laws are referred to as the Companies Act.

the shareholders, the board of directors, and the corporate management. Recalling from Chapter 1, the limited liability company form offers shareholders the benefit of limiting their responsibility to the capital they have invested in the firm.[24] In return, shareholders are compelled to give up their rights to directly intervene in the firm's daily operations. Instead, shareholders exercise ownership rights through formal corporate bodies, such as the general assembly.[25] At these meetings, shareholders give their consent, among others, to the selection of board members and the distribution of dividends. Yet, the Norwegian Companies Act gives the government-owner certain privileges as some special provisions apply to firms that are 100% controlled by the state.[26] For instance, the board members are appointed by the general assembly (i.e., the minister) also in those SOCs that are required to have a corporate assembly.[27] Moreover, in the area of dividend payments, the Norwegian government-owner is not bound by the recommendations of the board. Instead, the government-owner establishes the dividend payments for fully state-owned firms. As the dividends are set through the state budget, this implies that, in the case of minority governments, it is in fact the political majority in the Parliament who decides on dividend payments. By contrast, regular company law strictly forbids the Swedish government-owner to approve a higher dividend than the board proposes or accepts, since there are no special rules in the Swedish Companies Act that apply to SOCs (except the provision for insight by the National Audit Offices).

The second important aspect of the Companies Act concerns the protection of co-investors' interests.[28] In the case of state ownership, this means that the government-owner should not negatively affect the rights or economic interests of other shareholders through its conduct. Yet, the government-owner is entitled to use its voting rights to influence corporate activities – provided that it keeps with the general direction of the firm as

[24] Cf. Article 1-2 of the Norwegian Companies Act and Chapter 1, Article 3 of the Swedish Companies Act.

[25] Cf. Article 5-1 of the Norwegian Companies Act and Chapter 7, Article 1 of the Swedish Companies Act.

[26] Cf. Article 20-4 of the Norwegian Companies Act. See also Articles 20-5 – 20-7 (Ibid.).

[27] Following Article 6-35 of the Norwegian Companies Act, a company with more than 200 employees is required to have an elected corporate assembly with 12 members. Shareholders elect two thirds of the members of a corporate assembly through the general assembly, and one third are elected by and among the employees.

[28] Cf. Articles 4-1, 5-21 and 6-28 of the Norwegian Companies Act. Cf. Chapter 4, Article 1 and Chapter 7, Article 47 of the Swedish Companies Act.

stated in the SOC's articles of association. From this view, we should also be aware of certain threshold levels of shareholder influence.[29] Basically, most corporate decisions are taken by a simple majority of the votes, including the approval of annual financial accounts and dividend payments. Interestingly, we note that the Swedish Companies Act prescribes only relative majority of the votes for decisions about board appointments, while the Norwegian counterpart lays down simple majority on the board issue. For other decisions, a super-majority of the votes (i.e., two thirds of the voting rights) are needed. In both Norway and Sweden, this is the case for very important corporate decisions, such as the amendments of articles of association, mergers and demergers, and the increase or reduction of share capital.[30] The other side of this coin is that a shareholder can oppose the same type of decisions by holding negative control (i.e., more than one third of the voting rights). In sum, this means that the government-owner can exert influence upon corporate decisions by holding voting rights which marginally exceeds 33.33% (negative control) or 50% (simple majority) of the stock, or which at least equals 66.67% (super-majority) of the stock.

3.1.3 Principles of corporate governance

Over the years, government-owners have frequently been criticised for both undue political interference in SOC behaviour and totally passive ownership (OECD, 2005). Attempts to improve on the management of state ownership portfolios beyond the requirements set by company legislation are therefore deemed as necessary to justify continued political control of SOCs. Related to this, the recent upsurge in the field of corporate governance has inspired government-owners and political consultants to establish sets of 'best practices' or 'codes of conducts', which are to guide politicians in their ownership role.

At the international level, both Norwegian and Swedish state bureaucrats have participated in development of the OECD Guidelines on the Corporate Governance of State-owned Enterprises (2005).[31] The guidelines cover a range of areas, including the state ownership function, the

[29] In its extreme form, some governments have retained some sort of decisive voting rights in partly state-owned firms even after a majority of the voting rights have been sold. For instance, in the United Kingdom, the government has been able to retain a golden share, which made it possible for politicians to veto mergers, liquidations, asset sales, and other major corporate events (Bortolotti et al., 2001, p. 47). Nowadays, the EU allows this type of ownership only in special occasions.

[30] Note that Norwegian and Swedish law differ somewhat as regards which issues require simple versus super-majority decisions. For instance, firm dissolutions require simple majority in Sweden, but super-majority in Norway.

[31] These guidelines add to the OECD's general Principles of Corporate Governance (2004).

government-owner's relationship with co-investors and other stakeholders, transparency and disclosure, and the responsibilities of SOC boards. For instance, it is recommended that the state's ownership functions are carried out by a centralised ownership entity, or through effectively coordinated entities. Interestingly, this prescription reflects current trends in both Norway and Sweden, in which the government-owners have reassigned the administration of several SOCs from sectoral ministries to a more professional 'ownership ministry'. Moreover, on the issue of board representation, the OECD guidelines urge that the government-owner should respect the independence of SOC boards, and focus its attention on the nomination and appointment of board members through transparent procedures. In this respect, it should be noted that, as of 2003, the Swedish government-owner has delegated responsibility for *all* board appointments to the Minister of Industry, Employment and Communications (the ownership ministry) – a policy practice that possibly enhances coordination and transparency in the board selection processes. This practice contrasts with that of previous years as well as Norwegian policy practice, which maintains that every minister is responsible for board appointments in those SOCs that sort under his or her administrative control.

Similar efforts towards improving the administration of state ownership have taken place at the national level. In both Norway and Sweden, codes for corporate governance have been produced by expert groups consisting of representatives of the business community.[32] With the aim of acting in a credible and predictable way, the government-owners consider these codes as part of their framework for owner administration.[33] In addition, both Norwegian and Swedish government-owners have established their own principles for good corporate governance of SOCs. To illustrate this, Table 3.1 gives an overview of the Norwegian state's corporate governance principles. Since the codes for corporate governance are to be applied in accordance with the principle 'comply or explain', such efforts may actually increase politicians' credibility on ownership matters.

[32] The Swedish Code for Corporate Control deals with the decision-making system by which the owners directly or indirectly control the firm. The Code was to be applied by the Stockholm Stock Exchange from 1 July 2005. Similarly, the Norwegian Code of Practice for Corporate Governance focuses more comprehensively on the division of roles between shareholders, the board of directors, and corporate management than is required by company legislation. Being issued in December 2004, it applies to all firms listed on the Oslo Stock Exchange.

[33] Also note that, in Norway, the basis for government administration of state ownership is set forth in Article 10 of the Regulations on financial management within central government. Pursuant to this provision, the government-owner is required to establish written guidelines for the way in which state ownership is to be administered.

Table 3.1. The Norwegian State's principles of good corporate governance.
Source: The State's ownership report 2005.

1. All shareholders shall receive equal treatment.
2. There shall be transparency in State ownership of companies.
3. Ownership decisions/resolutions shall be taken/adopted at the annual general meeting.
4. The State, in cooperation with other owners when relevant, shall set performance targets for the companies; the boards shall be responsible for achieving these targets.
5. The capital structure of the company shall be consistent with the objective of the ownership and circumstances of the company.
6. The composition of the board shall be characterised by competence, capacity and diversity, and reflect the distinctive characteristics of the company.
7. Wage and incentive schemes shall be formulated so that they promote value creation in the companies and are perceived as reasonable.
8. On behalf of the owners, the board shall exercise independent control of the company management.
9. The board shall adopt a plan for its own activities and work actively to develop its own competencies.
10. The company shall be aware of its responsibility to society at large.

3.1.4 Guidelines concerning the use of governance mechanisms

In addition to the general codes of corporate governance, both Norwegian and Swedish government-owners have established some more specific guidelines concerning the use of governance mechanisms. As to board appointments, the Swedish government-owner is represented on the SOC boards by presently serving politicians or state bureaucrats. By contrast, Norwegian policy practice prohibits current political representatives and civil servants in the central government from serving on SOC boards. The fact that Norwegian ministers or state bureaucrats are not allowed to take SOC board seats implies that the Parliament does not hold the government-owner responsible for business-related decisions that fall under the authority of the firms as stipulated in corporate legislation. However, rather than interpreting the Norwegian policy practice as an earnest attempt to avoid political interference in the boards' work, it has actually been shaped by a concern with scandal prevention following the 'Kings Bay affair' in 1963.[34]

With regard to CEO compensation contracts, both Norwegian and Swedish government-owners have issued advisory guidelines concerning terms of employment. The terms include recommendations relating to salary

[34] The 'Kings Bay affair' refers to the historical tragedy that many employees lost their lives in the state-owned coal mines at the Svalbard islands. As a result, the mines were closed and in 1963 the population left. The prime minister at the time, Einar Gerhardsen, had to resign after a no-confidence vote in the Parliament on this very issue.

levels, incentive schemes, and severance (golden parachute) pay.[35] While the guidelines primarily pertain to companies that are fully owned by the state, they should be applied as far as possible also in partly state-owned firms, following a dialogue with the other shareholders. In practice, therefore, the government-owner expects the board of directors to comply with these terms of employment when deciding on CEO compensation contracts.

Probing the specific parts of the compensation contract, both Norwegian and Swedish government-owners recommend that salaries and other benefits to persons in executive positions should be competitive but not wage-leading in relation to comparable firms. As concerns the use of incentive schemes, the Swedish 1999 guidelines state that if an incentive scheme is introduced there should be a direct link between the targets which form the basis for reward and the SOC's overall business goals. However, the government-owner signals a cautious approach to incentive schemes in stating that the guidelines should not be interpreted as that the government recommends that such schemes be introduced. The Swedish government-owner's reluctance to adopt incentive schemes was made even more explicit from year-end 2003, as the new guidelines strongly recommend that incentive programmes directed at the CEO should be avoided – allegedly in response to some major corporate failures in the Swedish business community. By contrast, in the period covered by this study, the Norwegian guidelines draw no particular attention to incentive schemes. According to the State's principles for good corporate governance it only says that incentive schemes "shall be formulated so that they promote value creation in the companies and are perceived as reasonable". As in the Swedish case, it should therefore be a clear relationship between the SOC's business targets and the targets in the incentive programme. Moreover, the Norwegian and Swedish government-owners have rather similar views on the adoption of severance pay. The Swedish guidelines state that if notice of termination is given on the part of the firm, severance pay may be payable to at most 18 monthly salary payments excluding the period of notice (which should not exceed six months). In similar terms, the Norwegian government-owner recommends that the severance pay do not exceeds 12 months salary payments. Accordingly, it seems that the government-owners are willing to guarantee the managers security during a transitional period.

[35] The Norwegian guidelines relevant for the sample period include those terms of employment adopted by the Bondevik II-government on 28 June, 2004, which replaced the previous guidelines adopted by the Stoltenberg I-government on 3 September, 2001. The Swedish guidelines include those terms of employment adopted by the Persson-government on 9 October, 2003, which replaced previous guidelines concerning compensation terms adopted 5 December 1996 and guidelines for incentive schemes adopted 25 November 1999 (both adopted by the Persson-government). Note that both Norwegian and Swedish guidelines also concern pension terms, which are not covered by this thesis.

Finally, guidelines concerning dividend payments are articulated in terms of the dividend policy that is set for individual firms – and are normally only established for SOCs with commercial objectives. In formulating the long-terms expectations regarding dividends a number of criteria are normally assessed, among which the dividends' disciplinary effect on managerial spending is only one criterion. Other criteria include firm-specific conditions, such as the firm's strategy, growth opportunities and life cycle, capital structure, investment history, and potentially weak developments in the rate of return. In addition, the government-owners consider the dividend policy in comparable firms. The ministry's expectations for the dividends of individual SOCs are usually formulated as a percentage of the annual earnings and are valid for a period of three to five years. Interestingly, the government-owners in Norway and Sweden have chosen some different practices as regards the communication of dividend policies. In the annual reports on SOCs, the Swedish government-owner clearly announces the dividend policy for each firm. By contrast, the Norwegian ownership reports do not convey any information about dividend policies. In certain cases though, dividend policies are communicated in the budget document for fully state-owned firms. However, there is no uniform ownership policy pertaining to Norwegian SOCs concerning the communication of dividend policies.

3.1.5 Implications for corporate governance

Regardless of what motivates politicians and corporate directors, we should account for the fact that they operate within an institutional framework which both constrains and enables their engagement in corporate governance. As to the constitutional framework governing state ownership, this manifests the government as the key political authority on ownership issues. However, both the Norwegian and the Swedish Constitution also emphasise the authority of Parliament on issues like capital contributions and the sale of state shares. Following company law, the Norwegian Parliament is given authority even on the issue of dividend decisions – as the dividend is set through the state budget for fully state-owned firms. By contrast, in Sweden, a decision by the Parliament is not required for dividends since this is part of normal company administration.

Besides some special provisions that apply to Norwegian firms under full state control, both the Norwegian and Swedish Companies Acts carry two important implications for the exercise of state ownership rights. First, they prohibit direct political intervention in company matters, since the government-owner (like every other shareholder) is required to raise its voice through formal corporate bodies. Second, in both countries, the law affords co-investors the right to protect their interests. Taken together, this implies that the government-owner needs to rely on formal governance

mechanisms instead of direct intervention and abstain from promoting any political interests that do not serve the interests of the shareholder electorate.

As for corporate governance principles, these have little direct effect on what governance decisions are made other than providing some general guidance on the division of roles between shareholders, the board of directors, and the corporate management that goes beyond that of company legislation. Indirectly, however, these prescriptions might indeed have a significant influence on governance decisions. For instance, we might expect that certain governance decisions are more efficiently handled when administered by a professional ownership ministry. From this perspective, the decision to let the Swedish Minister of Trade and Industry act as the state's representative on all board appointments might possibly result in some different board recruitment patterns than is the case when board appointments are delegated to the respective ministries.

As for the guidelines pertaining to specific governance mechanisms, these are likely to have profound effects on corporate governance insofar as they provide more or less explicit indications regarding what governance decisions should be made. Additionally, there are some important national differences related to these guidelines. For instance, there is reason to believe that the Swedish practice of including state representatives on SOC boards presumably enforces the government-owner to take responsibility for its priorities. Accordingly, we might also presume that Swedish SOCs would be more attentive to, say, compensation guidelines than is the case for Norwegian SOC boards.

Finally, we should note that the extent to which these institutional features have an actual impact on corporate governance hinges on both the motivation of decision-makers and the strength of institutional constraints. Considering the example of politicians who are only capable of pleasing the voters if they deliberately ignore institutional constraints, it would of course be easier for the government-owner to go along with such behaviour if this means that politicians only have to disregard their own codes of conducts than if they have to disobey the legal duty to respect the interests of co-investors. Accordingly, we might expect that the Companies Act is more likely than non-legal institutional features to restrain political influences on corporate governance.

3.2 Firm Characteristics

State ownership portfolios are often very heterogeneous, which means that SOCs display a range of different firm characteristics. Importantly, such firm characteristics are likely to have a profound impact on corporate governance for two reasons. First, some firm characteristics, like the presence of large co-investors or debtholders, might effectively constrain what types of

governance decisions can be made. Second, some firm characteristics might have an effect on corporate governance simply because the government-owner and corporate directors might perceive different governance decisions to be optimal for different types of SOCs. This section turns the focus to some of the firm characteristics which are likely to influence upon corporate governance. More specifically, I will discuss how SOCs differ in terms of their (i) corporate objective, (ii) ownership structure, (iii) other types of control structures, and (iv) societal and economic importance. Certainly, there are numerous other firm characteristics which may also have an impact on corporate governance (some will be discussed in connection with specific governance mechanism) – but these are chosen as they seem to be relevant predictors of more than one type of governance decisions. To empirically illustrate the issue of SOC heterogeneity I also provide descriptive accounts of the state ownership portfolios in Norway and Sweden.

3.2.1 What kinds of objectives do SOCs pursue?

In general, the rationale for state involvement in the production of goods and services falls into two main parts: On the one hand, SOCs are instruments for achieving societal objectives, such as distributional justice, national interest protection, and the creation of employment. On the other, SOCs are instruments for generating profit for the state, which may then be spent for welfare purposes, like social insurances. While most SOCs are continuously required to balance business considerations against their broader societal role, it seems reasonable to say that some SOCs are engaged in commercial activities, others, in non-commercial activities.[36]

The deeper question is how SOC corporate objectives come to be identified in the first place, if we also recognise that SOCs are basically the ultimate stakeholder-society organisations being instructed to balance the welfare of many different interest groups (Tirole, 2001, p. 28).[37] In principle, this would imply that SOCs should strive to internalise the wellbeing of *all* stakeholders, including shareholders, employees, customers, suppliers, debtholders, local communities where the firm's plant is located, and so forth. In reality, however, there is a major shortcoming to this argument

[36] It should also be noted that the reasons why governments initially engaged in production activities might be quite different from today's corporate objective. For instance, technological developments in infrastructure-based sectors, like telecommunications and energy, eventually led to an opening-up of markets in sectors that were previously considered to be natural monopolies. The implication is that some of those SOCs that were formerly perceived to be societal instruments should now fight for market shares and provide an acceptable rate of return to the government-owner.

[37] Tirole uses this argument to describe the government itself, but the same notion clearly applies to SOCs.

insofar as unless different stakeholders have almost identical preferences, which are highly unlikely, it would be extremely difficult (if not to say impossible) to aggregate preferences into a consistent welfare function (Sappington and Stiglitz, 1987). But, of course, this problem is not very different from other policy decisions within the realm of politics. In fact, to make qualified decisions about which interests should be favoured is the very essence of politics. Thus, it is ultimately the responsibility of elected politicians to decide on which objectives the SOCs should pursue. Whereas this goal-formulation might certainly hinge on political motivation (e.g., politicians who worry about their re-election prospects might be concerned that certain stakeholders, like SOC employees, would oppose a business orientation of the firm), it actually seems that the formal objectives of SOCs are broadly agreed upon across party-political lines and over time. For all practical purposes, therefore, we might conceive of the corporate objectives of SOCs as exogenously given within the sample period.

Looking at the state ownership portfolios in Norway and Sweden, the SOCs are broadly classified as commercial or non-commercial.[38] While commercial SOCs operate under market conditions and requirements, non-commercial SOCs primarily have special societal interests to fulfil. Table 3.2 shows the fraction of SOCs which are oriented towards commercial and non-commercial objectives in the two countries. From this table, we note that, in Norway, there is a larger portion of non-commercial SOCs than commercial SOCs, whereas, in Sweden, there is an opposite pattern (also note that the number of yearly observations differ due to winding-ups, state sell-outs, and founding of new firms, amongst others). By and large, however, there is a reasonably good mix between SOCs that engage in business versus societal activities.

[38] Cf. The State Ownership Reports from the Norwegian Ministry of Trade and Industry, 2003-2005, and Swedish Government Offices' Annual Reports on State-Owned Companies, 2000-2005.

Table 3.2. Corporate objective.

	Norway			Sweden		
Year	Commercial	Non-commercial	*n*	Commercial	Non-commercial	*n*
2000	44	56	34	50	50	36
2001	41	59	39	54	46	39
2002	37	63	46	57	43	40
2003	38	62	53	60	40	40
2004	37	63	54	60	40	40
2005	35	65	51	62	38	39
Total	38	62	277	57	43	234

Note: The table shows, for every sample year, the fraction of SOCs which are commercially versus non-commercially oriented in Norway and Sweden, respectively. *n* is the number of observations.

Moreover, among those SOCs which are commercially oriented (and which are partly owned by the state), some are listed on national and international stock exchanges. In general, the stock market promotes reliance on share prices and shareholder return as bases for more competitive product, labour and takeover markets. Also, the listing of SOCs raises stock liquidity on the part of co-investors as the firm's shares are easily bought and sold. By contrast, state shareholdings in listed firms are normally rather persistent over years, since the sale of (large fractions of) state shares is a long-term political process. Table 3.3 shows the fraction of listed versus non-listed firms under partial state control.

Table 3.3. Stock market listing.

	Norway			Sweden		
Year	Listed	Non-listed	*n*	Listed	Non-listed	*n*
2000	13	87	15	33	67	9
2001	20	80	20	40	60	10
2002	18	82	22	40	60	10
2003	17	83	24	44	56	9
2004	26	74	23	44	56	9
2005	27	73	22	44	56	9
Total	21	79	126	41	59	56

Note: The table shows, for every sample year, the fraction of listed versus non-listed firms under partial state control in Norway and Sweden, respectively. *n* is the number of observations.

Notwithstanding the fact that the distinction between commercial and non-commercial SOCs is very intuitive, the objective function of SOCs certainly stretches beyond our simple classification. Because of this very

heterogeneity, however, it seems difficult to provide a meaningful breakdown of SOCs into homogeneous sector groups. Yet, if we were to conduct an informal sector classification, it seems from Table 3.4 that the activities of SOCs are mainly industrial.[39] This is not surprising, since one major rationale behind state involvement has traditionally been to establish and control industries which are deemed to be of strategic and economic importance to the country, like defence, steel and transportation. Moreover, another fairly large group of SOCs is classified into the sector of consumer discretionary, which includes cultural institutions like theatres and speciality retailing like distribution of wine and liquor. The most striking difference between Norway and Sweden concerns state involvement in the health care sector, which is due to the 2001 Norwegian Health Authority Reform. The major result of this reform, which was achieved by establishing five Regional Health Authorities, was the transfer of publicly owned hospitals from the county level to the state level. By contrast, Swedish hospitals are owned by the counties. Also, we note that, when compared to Norway, there is a larger proportion of Swedish SOCs in the financial sector, which is due to a great number of specialised financial services. Among the other sectors, there are only minor differences between the two countries.

Table 3.4. Sector classification.

	Norway		**Sweden**	
Sector	Percent	*n*	Percent	*n*
Energy	5	12	0	0
Materials	3	8	4	10
Industrials	25	70	37	87
Consumer discretionary	18	50	13	30
Consumer staples	4	10	5	12
Health care	11	31	0	0
Financials	10	29	30	71
Information technology	4	12	0	0
Telecommunication services	3	9	5	12
Utilities	6	16	3	6
n/a	11	30	3	6
Total	100	277	100	234

Note: The table shows the fraction of SOCs by sector according to sector classification by Global Industry Classification Standard (GICS). n/a indicates that information is not applicable in the sense that the firm does not belong to any of the sectors in the table. *n* is the number of firm-year observations.

[39] The classification is made according to the Global Industry Classification Standard (GICS), which is perceived as a widely recognised data interchange standard for the identification of industry sectors.

As regards the broader implications for corporate governance which relate to the corporate objective of SOCs, it seems reasonable to believe that this firm characteristic would be emphasised mainly by politicians and corporate directors who care about acting in the best interest of the firm, and less by those who are motivated by other concerns. This reasoning complies with the aforementioned argument that when politicians and corporate directors pursue other motivations than reputation-building, they might benefit from making governance decisions that overrule the public interest.

3.2.2 Who owns the SOCs?

Previously, we have established that the government is the factual owner of SOCs, although the ultimate ownership rests with the taxpayers. Yet, there are also other important aspects of the state ownership structure that might have an effect on corporate governance. More precisely, we should ask: Is the state typically the single shareholder in SOCs? Moreover, when co-investing with others, does the state normally holds dominant ownership stakes? Are co-investors' shareholdings concentrated or dispersed? What types of owners are likely to co-invest with the state? From a research perspective, the state ownership structure is by far the most explored among the firm characteristic pertaining to SOCs. Evidently, this rests on the idea that co-investors have profound influence on the corporate governance of SOCs, which, in turn, might lead to significant differences between firms under full state control and firms under partial state control, but also within the group of partly state-owned firms.

Regarding the more specific role of co-investors in influencing corporate governance, we have already learned that the Companies Act prohibits any large owner exploiting the interests of its co-investors. In the case of state ownership, this means that political influences on corporate governance are constrained by law. Therefore, to the extent that politicians and co-investors pursue different goals, it is expected that governance decisions will differ between partly state-owned firms and those firms that are fully owned by the state. But the legal right of co-investors is only one part of the story. More importantly, we need to ask whether co-investors will actually defend their ownership rights vis-à-vis the government-owner. That is, are all co-investors owners willing to spend the necessary efforts in pursuing their goals?

In general, shareholders' eagerness to have their interests fulfilled lies in the size of their ownership (the stock-size argument is vividly discussed in the literature; see, for example, Shleifer and Vishny, 1986). With dispersed non-governmental ownership, we might expect that no single co-investor has incentives to effectively defend their ownership rights, thus leaving considerable scope for government-owner to exert influence upon corporate governance. By contrast, a concentrated non-governmental

ownership often means that major financial values are at stake. Any large co-investor has therefore strong incentives to oppose those kinds of governance decisions that might harm shareholder value. Moreover, a concentration of non-governmental shareholding also creates the opportunity for concerted action by major co-investors, which delimits political influences upon governance decisions. From the government-owner's point of view, the very same arguments imply that large state ownership stakes make it both more important and easier for politicians to have an impact on corporate governance. By comparison, small state ownership stakes indicate that the government-owner might both have weaker incentives and less power to affect governance decisions.

The ownership issue is made even more complicated if we also recognise that different types of co-investors might actually be differently inclined to protect their interests (for reasons of simplicity, the latter are assumed to match the corporate objective of SOCs). Most importantly, we would expect that private shareholders (e.g., institutional investors) are more concerned about securing influence upon corporate governance vis-à-vis the government-owner than is the case for public shareholders (e.g., local/regional authorities or non-profit organisations). For one thing, this is due to the belief that many types of private shareholders are more professional monitors of the firms in which they invest than the average public shareholder (see, for instance, Thomsen and Pedersen, 2000; Bøhren and Ødegaard, 2001). For another, we expect that public co-investors are more likely than private co-investors to accept the possibility that the government-owner pursue other objectives than the corporate objective. This is so because public owners might draw special benefits from co-investing with the state, like in the case when regional authorities cannot attract enough private capital to provide cultural services. Additionally, it might be the case that public owners are more accustomed to the political game than are private shareholders.

Focusing our attention on how the state ownership structure looks in practice, Table 3.5 shows, for every sample year, the fraction of firms which are fully versus partly owned by the Norwegian and Swedish state, respectively. As the table reveals, both states tend to hold full control of SOCs. But we also note that the Norwegian state is more likely to co-invest with others insofar as it holds partial ownership in 45% of the total cases. By contrast, the Swedish state co-invests with others in 24% of the total cases.

Table 3.5. Full versus partial state control with SOCs.

	Norway			Sweden		
Year	Fully state-owned	Partly state-owned	*n*	Fully state-owned	Partly state-owned	*n*
2000	56	44	34	75	25	36
2001	49	51	39	74	26	39
2002	52	48	46	75	25	40
2003	55	45	53	77	23	40
2004	57	43	54	77	23	40
2005	57	43	51	77	23	39
Total	55	45	277	76	24	234

Note: The table shows, for every sample year, the fraction of SOCs which are fully versus partly owned by the Norwegian and Swedish state, respectively. *n* is the number of observations.

Concentrating on those firms which are partly owned by the state, Table 3.6 displays that there is cross-country variation as regards the legal aspects of state power. Noticeably, the Norwegian state tend to hold very dominant ownership positions as it retains a super-majority of the voting rights when selling state shares or when establishing new firms with co-investors. By contrast, the Swedish state seems apparently content with holding simple majority stakes. Moreover, the Norwegian state holds somewhat more negative control positions than minority posts, which gives the government-owner the legal right to oppose several important corporate decisions. By contrast, the Swedish state holds roughly as many minority positions as negative control posts. Overall, however, we note that, in a single year, there are only a small number of firms within each category, which prevents us from drawing firm conclusions on the state's likelihood to hold certain ownership positions.

Table 3.6. State control in partly state-owned firms.

	Norway						Sweden					
	State control						State control					
Year	Super maj.	Simple maj.	Neg. cont.	Min. post	Mean	*n*	Super maj.	Simple maj.	Neg. cont.	Min. post	Mean	*n*
2000	40	7	33	20	55	15	11	33	23	33	42	9
2001	45	5	30	20	55	20	10	30	30	30	43	10
2002	41	9	32	18	55	22	0	40	30	30	43	10
2003	41	17	25	17	56	24	0	33	33	33	40	9
2004	40	17	26	17	54	23	0	33	33	33	39	9
2005	36	14	32	18	53	22	0	33	33	33	39	9
Total	41	12	29	18	55	126	4	34	30	32	41	56

Note: The table shows, for every sample year, the fraction of partly state-owned firms in which the state holds super-majority (i.e., the state ownership stake is < 100% and ≥ 66.67%), simple majority (i.e., the state ownership stake is < 66.67% and > 50%), negative control (i.e., the state ownership stake is ≤ 50% and > 33.33%), or minority posts (i.e., the state ownership stake is ≤ 33.33%) in Norway and Sweden, respectively. The table also shows the mean state equity fraction and the number of observations (*n*).

Turning to the non-governmental ownership structure, we start by looking at whether co-investors' shareholding is dispersed or concentrated. Table 3.7 presents summary statistics of the shareholding pertaining to the largest co-investor. From this table, we note two striking patterns. First, co-investors' shareholding is highly concentrated. In fact, the largest co-investor holds, on average, 24% and 29% of the stock in Norway and Sweden, respectively. However, there is great variation in co-investors' ownership concentration, ranging from 0% (<0.0) to 66% in Norway, and from 2% to 90% in Sweden.

Table 3.7. Co-investors' ownership concentration.

	Norway					Sweden				
	Co-investor ownership concentration					Co-investor ownership concentration				
Year	Mean	Median	Min.	Max.	Std.	Mean	Median	Min.	Max.	Std.
2000	22.7	25.5	0.0	51	15.4	31.2	25.0	2.5	90	27.7
2001	22.8	22.6	0.0	66	17.7	29.1	21.1	2.8	90	27.0
2002	25.3	25.4	0.0	66	18.5	28.9	21.1	2.3	90	27.2
2003	26.3	26.2	0.0	66	19.6	27.5	12.0	2.8	90	29.1
2004	23.6	20.0	0.0	54.1	18.0	27.5	12.0	2.3	90	29.2
2005	21.6	17.3	0.0	54.1	17.4	27.4	12.0	2.5	90	29.2
Total	23.8	22.6	0.0	66	17.7	28.6	17.1	2.3	90	26.9

Note: The table provides, for every sample year, statistics of co-investors' ownership concentration in Norway and Sweden, respectively. The columns show the mean, median, minimum and maximum equity fraction held by the largest co-investor. Also shown is the standard deviation. All numbers in percent. The number of observations (*n*) equals that of Table 3.6.

The fact that co-investors' shareholding is highly concentrated points to an interesting conjecture; namely, that the number of co-investors are fairly small. Table 3.8 confirms this expectation as it shows that the state often co-invests with a single investor or with a small number of co-investors (2-10 co-investors). Moreover, as would be expected, there is a negative correlation between the equity fraction held by the *n*'th largest co-investor and the number of co-investors, with the lowest equity fractions being held by co-investors in publicly traded SOCs (i.e., the number of co-investors > 100).

Table 3.8. The number of co-investors and the average equity fraction of the *n*'th largest co-investor.

	Norway						**Sweden**					
	Average equity fraction held by ___ the *n*'th largest co-investors __					*n*	Average equity fraction held by ___ the *n*'th largest co-investors __					*n*
Number of co-investors	1	2	3	4	5		1	2	3	4	5	
1	36.1	n/a	n/a	n/a	n/a	32	57.9	n/a	n/a	n/a	n/a	21
2-10	29.0	20.2	9.3	5.5	2.5	51	18.5	18.5	5.0	5.0	5.0	12
11-100	13.8	8.2	6.1	2.5	0.6	16	n/a	n/a	n/a	n/a	n/a	n/a
>100	5.4	3.6	2.8	2.3	1.8	27	7.2	3.9	3.0	2.6	2.2	23
All	23.8	13.1	5.4	3.3	1.7	126	28.6	8.9	3.4	3.1	2.8	56

Note: The table shows the average equity fraction held by the *n*'th largest co-investor in firms under partial state control ($n = 1,\ldots,5$), when controlling for the number of co-investors. Data is drawn from all sample firms over the period 2000-2005 in Norway and Sweden, respectively. *n* is the number of firm/year observations.

To further explore the ownership structure of partly state-owned firms, Table 3.9 cross-tabulates the number of co-investors with the identity of the largest co-investor. According to this table, public owners dominate in SOCs with a single or only few co-investors, while financial and international owners typically hold ownership positions in listed SOCs. Corporate owners co-invest just as well with the state alone as together with others. Overall, public owners are by far the most dominant co-investors in Norway, while corporations are the investor type most likely to co-invest with the Swedish state. In addition, we note that international owners rarely hold large ownership positions in Swedish SOCs, but are somewhat more likely to do so in Norway.

Table 3.9. The identity of the largest co-investor and the number of co-investors.

	Norway					Sweden				
	_____ Number of co-investors ____					_____ Number of co-investors ____				
Largest co-investor	1	2-10	11-100	>100	*n*	1	2-10	11-100	>100	*n*
Financial	0	0	33	67	15	0	0	0	100	16
Corporate	44	24	24	8	25	58	23	0	19	26
International	0	29	0	71	21	0	0	0	100	2
Public	32	60	8	0	65	50	50	0	0	12
Total	25	40	13	21	126	38	21	0	41	56

Note: The table shows the frequency (in percent) by which different types of shareholders are the largest co-investor, when also controlling for the number of co-investors. Data is drawn from all sample firms over the period 2000-2005 in Norway and Sweden, respectively. *n* is the number of firm/year observations.

In sum, the above discussion suggests that there are important differences between fully and partly state-owned firms as regards the effects on corporate governance. Additionally, the ownership structure of partly state-owned firms indicates that corporate governance may differ according to co-investors' ownership concentration and co-investor identity. Primarily, the ownership structure of SOCs is a factor which provides scope for political influence. Conversely, the ownership structure also puts some constrains on the scope for politicians and corporate directors to pursue other objectives than the corporate objective. Yet, the ownership structure of SOCs might also be deemed important based on the argument that different firms have different needs. Most importantly, it may provide important guidance to decide upon which governance decisions are in the best interest of the firm. All in all, therefore, ownership characteristics might possibly have an impact on governance decisions regardless of what is the primary motivation of decision-makers.

3.2.3 Who else control the SOCs?

Eventually, state control rights to SOCs rest with the government-owner. In practice, however, most ownership issues are handled by state bureaucrats in the sponsor ministries of SOCs, who provide politicians with the information and advice necessary to make governance decisions.[40] Given this ability to interfere in corporate governance, it seems that the sponsor ministry itself might have an impact on what governance decisions are made by politicians.

[40] On many occasions, state bureaucrats are also delegated the authority to engage in governance decision-making, like when they are given the mandate to vote on the general assembly in partly state-owned firms.

The question then arises whether different sponsor ministries might have different effects on corporate governance? In answering this question we note that, traditionally, the ownership of SOCs has been distributed among a number of ministries. During the past decade, however, governments have begun to transfer SOCs from sectoral ministries to one particular 'ownership ministry'. While this reorganisation is partly seen as a necessary device to separate the state's regulatory tasks from its ownership function, it might also be interpreted as an attempt to improve the state's management of its ownership portfolio. One important consequence of this increasing specialisation in the management of state ownership is the rise in the ownership ministry's competence and power. More specifically, we would expect the ownership ministry to take a leading position in the process towards increased 'professionalism' of corporate governance – for instance, by taking part in national and international collaboration on this very issue. Thus, as issues of corporate governance increasingly gain political priority and popular attention, this will also be reflected in the regular activities of the ownership ministry. Also, the aggregate equity holdings of the ownership ministry suggest that it gains power from coordinated action to influence upon corporate governance. Overall, therefore, it seems reasonable to expect that, in contrast to sectoral ministries with smaller ownership portfolios to administer, the ownership ministry will more likely subscribe to issues of 'good corporate governance' in terms of codes of conduct and the more specific guidelines for corporate governance.

Looking at state ownership administration in Norway and Sweden, Table 3.10 documents the trend toward transferring ownership of SOCs from sectoral ministries to the ownership ministry. The numbers show, however, that this specialisation is much more prevalent in Sweden than in Norway. In fact, by year-end 2005, the Swedish ownership ministry administers as much as 72% of the SOCs, whereas its Norwegian counterpart administers 35% of the SOCs (for the sample period as a whole, the overall numbers amount to 63% and 32%, respectively).

Table 3.10. Sponsor ministry.

	Norway			Sweden		
Year	Ownership ministry	Sectoral ministries	*n*	Ownership ministry	Sectoral ministries	*n*
2000	24	76	34	42	58	36
2001	28	72	39	46	54	39
2002	35	65	46	70	30	40
2003	32	68	53	72	28	40
2004	35	65	54	72	28	40
2005	35	65	51	72	28	39
Total	32	68	277	63	37	234

Note: The table shows, for every sample year, the fraction of SOCs which are administered by the 'ownership' ministry versus sectoral ministries in Norway and Sweden, respectively. *n* is the number of observations.

Another controlling force of SOCs is that of debtholders. In general, debt financing increases monitoring by the capital markets (Jensen, 1986) insofar as the defining feature of debt is the ability of debtholders to exercise control (Shleifer and Vishny, 1997). In principle, the role of debtholders resembles that of shareholders, since both have investments in the firm and want to get a return on their money (Shleifer and Vishny, 1997). Unlike shareholders, however, debtholders are taking on risk without the compensatory returns from corporate success (Short, 1994). As to the implications for corporate governance, we might therefore expect that debtholders strictly focus on the debt-paying ability of SOCs rather than the fulfilment of their corporate objective. While the mere presence of debtholders is a very rough (and some would say inadequate) proxy for external influences, consideration should also be given to the type of debt and to the concentration and identity of debtholders. As to the latter issues, the argument is that there are different incentives attached to the control function of debtholders depending on whether debtholding is short-term or long-term, dispersed or concentrated, bank-owned or not (Short, 1994; Shleifer and Vishny, 1997).

Unfortunately, the data used in this thesis does not cover detailed information about the debt structure of SOCs. Though, we might rely on the debt ratio to proxy for the influence of debtholders on corporate governance, since the proportion of a SOC's assets that is financed with debt gives an indication of the likelihood that the firm is closely monitored by outside parties. The summary statistics pertaining to SOC debt ratio is displayed in Table 3.11. According to this table, the average debt ratio for Norwegian and Swedish SOCs is 61% and 58%, respectively. In a comparative view, these numbers are fairly similar to those of listed Norwegian firms, for which is reported an average debt ratio of 57% (Bøhren and Ødegaard, 2001). Moreover, as the debt ratio varies considerably across SOCs (as shown by

the quartile numbers and the standard deviation) there are strong reasons to expect that the external influences on corporate governance might also vary. Finally, it might be interesting to know whether the debt ratio correlates with other firm characteristics, like corporate objective and state ownership structure. According to subsample statistics there are no major differences between the subgroups, except for the fact that the average debt ratio is somewhat higher for commercial SOCs and partly state-owned firms than for non-commercial SOCs and fully state-owned firms, respectively.

Table 3.11. Debt ratio.

	Mean	Q1	Q2	Q3	Std.dev.	*n*
Nationality subsample						
Norway	61.2	49	61	77	23.9	276
Sweden	58.3	38	62.5	78	27.7	234
Corporate objective subsample						
Commercial SOCs	62.5	50	65	79	25.5	240
Non-commercial SOCs	57.6	41	58	76	25.7	270
State ownership structure subsample						
Fully state-owned firms	56.5	35.3	61	77	26.8	328
Partly state-owned firms	66.0	53	63	80	22.3	182

Note: The table shows the SOC debt ratio (debt to total assets) for three subsamples: nationality, corporate objective and state ownership structure. The columns show the mean, quartiles, and the standard deviation of the debt ratio. Q1, Q2 (median) and Q3 refer to the 25th, 50th, and 75th percentile, respectively. *n* is the number of firm/year observations.

There are therefore sound reasons to believe that non-owners might influence upon corporate governance as they can effectively constrain the discretion of the government-owner and the board of directors. More precisely, it seems that in those cases which SOCs are administered by the ownership ministry and/or being controlled by debtholders, politicians and corporate directors might be constrained from taking actions that are not in the best interest of the firm in general and debtholders in particular. But not only does debt financing limits the scope for political influences, it might also be the case that politicians and corporate directors who care about their reputation believe that firms with a high debt ratio will have different needs than firms with a low debt ratio.

3.2.4 The societal and economic importance of SOCs

Obviously, SOCs differ in their societal and economic importance to the country, although the importance of firms might have different magnitudes and mean different things for various stakeholders (Aharoni, 1986, p. 16).

One ingredient of importance is the physical area in which the SOC operates. A firm which is located in district areas might attract stakeholders' attention differently from a firm which is located in the capital city: for instance, if the former is a cornerstone company in the local community. Another point of importance is the size of the SOC. The larger the firm, the greater the likelihood that it represents a substantial part of the country's employment, capital, and economic performance. Besides the fact that large SOCs are often more visible to the voters than small SOCs (e.g., because they serve many customers, like the postal services), they also signify that substantial values are at stake.

Table 3.12 presents summary statistics pertaining to four variables which signify SOCs' societal and economic importance to the country. From this table, we note that, in Norway, 55% of the SOCs are located in district areas, which means they employ a regional workforce (note, however, that the headquarters are often located in the capital city). The similar number for Swedish SOCs amounts to 63%. Moreover, we note that, in both countries, there are significant skewness in the firm size variables (including number of employees, book value of equity, and total assets), with standard deviations significantly exceeding the mean values. Again, therefore, there is strong empirical evidence that state ownership portfolios are very heterogeneous.

Table 3.12. Regional presence and firm size.

	Norway						Sweden					
	Mean	Q1	Q2	Q3	Std.	*n*	Mean	Q1	Q2	Q3	Std.	*n*
Regional employment	0.55	0	1	1	0.50	277	0.63	0	1	1	0.48	234
Number of employees	4634	63	232	3072	9260	277	5530	83	571	3153	10853	234
Book value of equity	6822	20	520	3054	17184	277	8335	162	1190	4145	21997	234
Total assets	27066	70	1472	11876	91331	277	79313	463	4274	15012	348118	234

Note: The table provides summary statistics of four variables which signify SOCs' societal and economic importance to the country. Regional employment is a dummy variable equal to one if the SOC employs a regional workforce, zero otherwise. The number of employees is reported in absolute numbers. The book value of equity and total assets are expressed in 2005 million NOK and adjusted for Consumers' Price Indexes. The columns show the mean, quartiles, and the standard deviation of these variables. Q1, Q2 (median) and Q3 refer to the 25th, 50th, and 75th percentile, respectively. *n* is the number of firm/year observations.

Regardless of what motivates politicians and corporate directors, it seems reasonable to expect that the above factors have implications for corporate governance. For instance, in the case which politicians and corporate directors attempt to impress their superiors, they are more likely to focus

their attention on large SOCs (which possibly also employs a regional workforce) than on small ones – perhaps because larger firms are more visible or perhaps because they generate more money. Accordingly, this means they would recognise that different governance decisions are optimal for different types of SOCs. But also, degree of importance signifies that SOCs face different challenges, which suggests that SOCs' societal and economic influences are also important indicators as to which governance decisions are right for the public in general and the firm in particular.

3.3 Summary

In this chapter, I have directed attention to the institutional framework governing state ownership and to some of the firm characteristics by which SOCs differ. As to the institutional aspects, they differ in terms of their ability to constrain political influences on corporate governance. For instance, we should expect that company legislation would have more influence on what governance decisions are made than codes of conducts, since the latter are merely advisory. Importantly, this suggests that legal aspects might effectively constrain politicians and corporate directors from taking actions that are not in the best interest of the firm. As regards firm characteristics, I have suggested that corporate governance might vary as a function of corporate objective, the state ownership structure, other control structures (i.e., sponsor ministry and debtholders), and the societal and economic importance of SOCs. Besides, there are of course several other factors which are likely to have an impact on specific governance decisions. While this chapter has provided only some rough guidance to the question of how institutional features and firm characteristics interact with the motivation of decision-makers, this issue is explicitly dealt with in the next chapter where I discuss what factors might explain particular governance decisions.

Chapter 4

How to Explain Governance Decisions?

Any attempts to describe the essence of corporate governance ultimately come down to the question of how to deal with the possible conflicts of interest that arise from the separation of ownership and management. In this chapter, I take a closer look at the governance mechanisms suitable for this purpose, and the factors that might affect their usage. As shown in the previous chapters, the motivational concerns of politicians and corporate directors represent one key factor to explain corporate governance. Moreover, there are various institutional features and firm characteristics that are likely to have an effect on corporate governance. Taking stock of this insight, it is now time to be more specific about what governance decisions we expect to be made. Accordingly, I proceed to discuss questions like: If politicians are primarily motivated to stay in office, and they pander to public opinion, what kind of corporate directors would they like to chair the SOC boards? Are private co-investors capable of dampening political influences on board appointments? If corporate directors care about their reputation, how would they design managerial compensation packages so as to signal their competence to professional peers? What are the effects on dividend payments following from the legal right of the Norwegian government-owner to intervene on this issue? Making qualified predictions about these and other empirical questions ultimately result in a set of specific hypotheses about governance decisions.

The chapter is organised as follows: Sections 4.1 – 4.3 discuss board appointments, CEO compensation contracts, and dividend payments, respectively. In each section, I first look into the research on the specific governance mechanism which is deemed relevant in the context of state ownership. Then, for each governance mechanisms I apply the baseline governance models that describe the motivational concerns of decision-makers. Concurrently, I discuss the influences of institutional aspects and firm characteristics. Section 4.4 summarises the discussion.

4.1 Board Appointments

Following corporate governance theory, the primary check on corporate managers is provided by the board of directors. Who is elected to sit on the

boards thus represents one key governance decision made by the shareholders. As regards the board composition of SOCs, there is today considerable public debate about what kind of corporate directors should be appointed by the government-owner. A particular source of contention is the appointment of current or former politicians as board members. Even if the government-owner is acting completely within its legal rights when doing so, critics have pointed out that boards with political representatives are more likely exposed to undue political interference in their decision-making. For one thing, this makes it difficult to hold the board accountable for its actions. For another, the fact that some corporate directors are (rightfully or not) perceived as political representatives might lead co-investors raise the question if such directors are likely to make decisions which benefit the government-owner at the their expense. From this view, there are sound reasons why the government-owner should abstain from appointing political representatives to sit on the SOC boards. A counter-argument to this critique says that (at least) in firms where the state holds 100% of the shares, the government-owner has an obligation to its voters to maximise its impact on public policy. Thus, it is not necessarily so that political representatives on the SOC boards are bad for practice.

Despite the above concerns, the issue of SOC board composition has received only limited research attention. It is interesting, though, that the few studies that look into SOC boards their observations differ as regards who are most likely to be recruited as corporate directors. Whereas descriptive accounts of Danish SOCs indicate that corporate directors are increasingly recruited among business executives (Grønnegård Christensen and Pallesen, 2001), prior observations from Norwegian SOCs suggest that there does not seem to be a clear-cut trend towards bringing in business executives from the private sector to SOC board positions (Statskonsult, 1998).[41] Moreover, the Danish case reveals that current or former politicians rarely chair the SOC boards. By contrast, Norwegian SOC boards are often headed by people with political experience.

Data about board appointments becomes, however, even more interesting if attempts are also made to *explain* the observed recruitment patterns. But so far, little is known empirically about how corporate directors actually get selected. Yet, this is not surprising, given the thin formal literature on boards in general (Becht et al., 2003; Hermalin and Weisbach, 2003) and SOC boards in particular. Specifically, the selection process of corporate directors is largely an unexplored issue (Hermalin and Weisbach,

[41] The Danish study uses data from 1975, 1985, and 1995. The Norwegian study describes some broader trends pertaining to some of the major SOCs in the late 1990s.

1998).[42] Attempting to fill this void in the literature, this thesis looks at the professional background of corporate directors and the factors that might explain board appointments.

To empirically investigate this issue, I focus on who gets selected as the chairman of SOC boards. The reasons for not also including the general composition of SOC boards are two-fold. First, it proved difficult to obtain relevant information on all SOC board members concerning the empirical proxies described below. Second, the chairman is deemed the most important person at the board. In fact, critical decisions are rarely made without the consent of the chairman. For instance, the chairman normally heads the compensation committee, whose task is to propose how the CEO should be compensated. Also, anecdotal evidence shows that conflicts about who is appointed to sit on the SOC boards mainly concern the chairman position. With these qualifications, the thesis looks at two aspects related to the chairman's professional background. First, is the chairman a current or former political representative? Second, is the chairman employed in the private or public sector at the time of appointment?[43] Naturally, the two aspects are not independent of each other in the sense that both private and public sector employees might have political experience or not (note that current politicians per definition belong to the public sector). Attempting to keep the discussion at an intuitive level, however, the aspects of political experience and sector affiliation are treated separately.

The professional background of chairmen indicates what type of competence they can offer the firm. Moreover, it is a strong possibility that chairmen's professional background may signal their motivational concerns. The question is then what kind of people the government-owner prefers to hold the chairman position. In line with the basic ideas of this thesis, the answer to this question hinges on the motivation of politicians. To develop hypotheses about board appointments I therefore start by assuming that politicians are only preoccupied with reputational concerns. I then move on to discuss how the selection of chairmen would be like if politicians instead care about winning the upcoming election. Thereafter, I ask who are most likely to get selected as chairmen in the case which politicians pursue party-political goals. In discussing these motivational concerns, I concurrently

[42] Among the few studies which have examined board appointments, the focus is on *board independence*; that is the appointment of inside versus outside board members and CEO involvement in board selection processes (see, for instance, Zajac and Westphal, 1996; Shivdasani and Yermack, 1999), where insiders are broadly defined as corporate directors who have personal ties to the firm or to the executive managers. More generally, the board composition issue has been dealt with in relation to its effect on governance decisions (e.g., CEO compensation contracts) and firm performance (see, for instance, Weisbach, 1988; Hermalin and Weisbach, 1991; Core et al., 1999; Randøy and Jenssen, 2004).

[43] In the public sector is included the government ministries, subordinate agencies, and SOCs.

include the impact of institutional features and firm characteristics. In addition, I look at some possible moderating effects due to interactions between the different governance models. Lastly, I consider some potential effects on board appointments following from nation-specific arrangements.

4.1.1 Politicians care about their professional reputation

Imagine that politicians care about their reputation for being competent – for instance, as a means to increase their outside career prospects. For politicians who seek to act in the public interest, the fundamental prerequisite of board composition is to make sure that the SOC boards have the necessary competencies to carry out their function. Thus, politicians need to emphasise what type of board competence is right for the firm. Aside from the possibility that such board selection processes might signal competence, they are likely to offer politicians the additional benefit of building relations with future employers in both the public and the private sector.

Generally, each particular firm faces some specific challenges that require the SOC board to constitute a body of expertise pertinent to these conditions. As a proxy, however, the corporate objective of SOCs provides some useful guidance to what kind of competence that is deemed suitable for different groups of SOCs. In particular, it is possible to distinguish firms for which the state makes market requirements for earnings and return, from firms that are primarily set up to fulfil societal objectives. From the point of view of commercially oriented SOCs, the expectation is simply that business (private sector) experience would be a more important qualification than political and/or public sector experiences. Conversely, we might think of politically experienced persons and public sector employees as being more appropriate candidates to the chairman position in SOCs which are instructed to pursue objectives that are distinct from profit-maximisation. Conceivably, this reasoning makes sense as political representatives and public sector employees are typically more disposed than non-politicians and private business people to balance the welfare of different stakeholders. Yet, we should not interpret these suppositions as saying that the boards in commercial (non-commercial) SOCs might not benefit from the skills and information provision of political representatives and/or public sector employees (non-politicians and/or private sector employees). Instead, the idea is simply to highlight what kind of competence is perceived to be the *most* relevant for the SOC's fulfilment of its objectives. Accordingly, our first hypothesis suggests that:

> *Hypothesis 1: Political representatives and/or public sector employees are more likely to chair the boards in non-commercial SOCs than in commercial SOCs.*

Among those SOCs that are commercially oriented, some are also listed on the stock exchange. As to the effect of stock market listing on board appointments, it is undeniably so that the immense attention from the capital market promotes reliance on highly developed business skills on the part of corporate directors in general and chairmen in particular. As a shareholder in publicly traded firms, the government-owner therefore has considerable interest in appointing chairmen who possess extensive knowledge about business strategy and market structures, while devaluing political experience and public sector occupation. For this reason, hypothesis 2 states that:

> *Hypothesis 2: Political representatives and/or public sector employees are less likely to chair the boards in listed SOCs than in non-listed SOCs.*

Naturally, several more firm-specific features would normally be considered in any real-life board selection process, such as the firm's financial performance, the existence of any personal ties between the chairman and the CEO, and the board composition as a whole. However, as the aim is here to trace whether politicians seek to act in accordance with their own 'codes of conduct', attention is exclusively paid to those variables which prescribe focus on the type of activity preformed by the SOCs.

4.1.2 Politicians seek to stay in office

Think instead of politicians whose primary motivation is to stay in office. What type of people would such politicians appoint to the SOC chairman position? To answer this question, first note that most voters are unlikely to have any strong preferences about *who* is appointed to sit on the SOC boards. On the other hand, voters surely have views about some of the major *decisions* that are made by these boards – for instance, on issues like down-sizing and closure of businesses. For that reason, politicians need to ensure that the chairmen will be attentive to voters' interests, since the electorate is eligible to hold only the government-owner responsible for unpopular board decisions.

Obviously, politicians currently in office are most likely to get what they want by chairing the SOC boards themselves – or by appointing as chairmen some of their party-members in the Parliament. If, for some reasons, current politicians are prohibited from taking board positions (like in Norway), we might instead expect them to appoint former political affiliates. However, politicians might also benefit from appointing current or former politicians who sympathise with rival political parties, which helps the government-owner escape the critique of political opposition for appointing its 'own' representatives. In any case, the reason why politicians

concerned with their re-election prospects would prefer current or former politicians to chair the SOC boards is simple: By choosing to be attentive to political matters, chairmen of this type might achieve personal benefits, including the opportunity to become re-elected and to foster or hold on to a political career. Additionally, these chairmen might consider their chances of being recruited to other directorships in the private sector as being fairly small. For these reasons, we might assume that politically experienced people are more concerned about their chances of staying in the SOC chairman position than about their professional reputation. Accordingly, they will loyally pursue the interests of the government-owner.

While political experience is perhaps the main indicator of whether the chairman would be loyal to the government-owner, it seems reasonable to also account for the chairman's sector affiliation. Irrespective of any political experience, we might expect public sector employees to have a better understanding of the political game and to be more sensitive to political signals than is the case for private sector employees. Clearly, civil servants in the state bureaucracy represent a special case, since they are in principle the loyal representatives of their ministers. Yet, it seems generally reasonable to assume that most public sector employees will be loyal to the government-owner out of concern for their own employment opportunities, which include both re-appointments to the chairman position as well as other vacancies in the state sector. By contrast, those chairmen employed in the private sector with no political experience are likely more concerned about their professional reputation in the private job market. While they certainly might want to stay in the SOC board position, the most important is for them to signal their competence to business peers, even if this means they might act against the government-owner's interests.

There are several reasons, however, why we should not expect every SOC board to be chaired by political representatives and/or public sector employees. Most importantly, the state ownership structure might prohibit political influences on board appointments insofar as potential co-investors have the legal right to protect their interests. From this it follows that co-investors will refuse to accept any political appointments if they believe their interests might be exploited. In this respect, we should also take into account that higher state ownership stakes might bring successively stronger political influences on board appointments. For reason of simplicity, hypothesis 3 only states the effect of full versus partial state control:

> *Hypothesis 3: Political representatives and/or public sector employees are more likely to chair the boards in fully state-owned companies than in firms under partial state control.*

In the same vein as we expect political influences to increase with higher state ownership stakes, we would also expect that co-investors' influences are likely to increase with their ownership share. Thus, the mere presence of co-investors might not sufficiently secure control over who gets appointed to chair the SOC boards. In fact, we might expect that only large co-investors can exert some influence over board appointments, and thereby act as a corrective to government control. More generally, the argument is that higher co-investment concentrations bring successively stronger influence on who gets appointed as board chairmen. Hypothesis 4 therefore suggests that for firms under partial state control:

> *Hypothesis 4: Political representatives and/or public sector employees are less likely to chair the boards in SOCs with a high non-governmental ownership concentration than in SOCs with a dispersed non-governmental ownership structure.*

However, co-investors are not all alike. If we accept the notion that different types of shareholders pursue different goals, this leads us to expect that private co-investors are more likely than public co-investors to oppose political appointments. The expectation is therefore that in those SOCs where private co-investors represent the major non-governmental owner, they would likely employ their influence to encourage the appointment of more non-politicians and private sector employees to the SOC boards. Given the prospect of a weak relationship between private co-investment and political and/or public sector representation on the board, hypothesis 5 suggests that for firms under partial state control:

> *Hypothesis 5: Political representatives and/or public sector employees are less likely to chair the boards in those SOCs which private investors represent the major non-governmental owner than in SOCs which public co-investors dominate.*

But the state ownership structure is not the only factor which may delimit political control of board appointments. Additionally, we should account for the fact that politically experienced people (and perhaps also public sector employees) who also posit some board competence represent a scarce resource. Thus, there are simply too few people in the pool of candidates for political appointments. Given this restriction, we are led to ask whether it is more important to secure political control of some SOCs than others. For instance, there is reason to believe that political influences is more pronounced in large firms, since larger firms tend to be more visible and closely scrutinized than smaller firms (Jensen and Murphy, 1990a). Also, it seems likely that politicians will pay particular attention to SOCs that

employ a regional workforce, because their presence might have substantial effects on the wellbeing of local communities and thereby attract a great deal of public interest. Consequently, I suggest that politicians would be more concerned about board appointments in those SOCs that are most visible to the voters (in terms of firm size and regional presence) than in fairly small SOCs. The argument is set forth in hypothesis 6:

> *Hypothesis 6: Political representatives and/or public sector employees are more likely to chair the boards in SOCs which are considered highly visible to the voters than in less visible SOCs.*

Yet another limitation on the possibility for exercising political influences has to do with the fact that political appointments are usually not considered as 'good corporate governance'. As an illustration, leading proponents of corporate governance reforms, like the OECD, has strongly recommended that board members should not be guided by any political concerns. The question is then whether we might reasonably believe that politicians are likely to accept any self-binding commitments to such corporate governance principles. Interpreting the transfer of state ownership rights from sectoral ministries to ownership ministries as one major attempt to increase professionalism in corporate governance, we might generally expect the ownership ministry to be more attentive towards principles of good corporate governance than other sponsor ministries. In other words, we might suggest that the ownership ministry would be more inclined than other ministries to appoint non-politicians and private sector employees to SOC boards. In formal terms, hypothesis 7 thus states that:

> *Hypothesis 7: Political representatives and/or public sector employees are less likely to chair the boards in SOCs which are administered by the ownership ministry than in those SOCs administered by other sponsor ministries.*

Finally, it might also be the case that debtholders might restrain politicians from taking actions that do not support the debt-paying ability of SOCs. Using the debt ratio as a proxy for debtholders' influences on board appointments, it seems reasonable to expect that lenders might insist on the boards being headed by business people in highly leveraged SOCs. Bearing a resemblance to prior arguments, the idea is simply that business persons (private sector employees) are more capable to deal with financial policy issues than are political representatives and public sector employees. Thus, hypothesis 8 proposes that:

Hypothesis 8: Political representatives and/or public sector employees are less likely to chair the boards in SOCs with a high debt ratio than in SOCs with a low debt ratio.

4.1.3 Politicians pursue ideological goals

Consider then politicians who care about implementing their preferred party-policy. Certainly, this means that politicians would seek to ensure that board recruitment patterns support partisan profiles. As to left-wing governments, we expect them to prefer political or public control with SOCs. By contrast, right-wing governments are likely to prefer less political control and more business competence to SOCs. Hypothesis 9 therefore says that:

Hypothesis 9: Left-wing governments are more likely than right-wing governments to appoint chairmen who are politically experienced and/or employed in the public sector.

From this it follows that ideology-oriented politicians in leftist government parties basically pursue the same selection strategy as politicians who are primarily concerned with their re-election prospects – but for quite different reasons. More specifically, the aim of ideology-oriented leftist politicians is not to instruct political representatives and/or public sector employees to think about voter reactions when making board decisions. Instead, they would be concerned about securing that the SOC boards pay more attention to social and distributional effects than to economic aspects alone.

4.1.4 Interaction effects

The three governance models are portrayed as three alternative approaches to understanding board appointments. Noticeably, this means that for any single governance model to gain empirical support, its corresponding hypotheses need to be corroborated. Yet, there might also be some more complex relationships between the independent variables that are attached to different governance models. In particular, it seems reasonable to expect that the importance of both reputation criteria and some of the constraining forces of the re-election model could differ as a function of state control. As to the impact of corporate objectives on political appointments, we should expect that the negative commercialisation effect is presumably stronger within the group of partly state-owned firms than within the group of firms under full state control. Due to the auxiliary pressure of co-investors, we might also think that the constraining effect of debt would be even stronger for firms under partial state control than among fully state-owned firms. To

explore these issues, I therefore perform subsample analysis to test whether the impact of independent variables differ according to state control.

Additionally, there might be some intricate relationships due to the ideology model. To explain why, we recall that leftist politicians would likely prefer the same kinds of board chairmen as politicians who care about their re-election prospects. But also, we should expect that ideology-oriented politicians are subject to the same constraints as politicians who seek to stay in office for its own sake. As a result, the independent variables described in hypotheses 3–8 might behave differently as a function of government-party, and actually show up as significant predictors within the sub-sample of left-wing governments. At the same time, a stronger test of hypothesis 9 would imply that the very same independent variables should have no effects within the sub-sample of right-wing governments. The reason is that not only should we expect right-wing government-owners to appoint non-politicians and/or private sector employees to the chairman position, but they do so out of self-interest, not due to the constraining forces of the re-election model.

4.1.5 How do nation-specific characteristics affect board appointments?

The fact that our analysis includes SOCs from two countries suggests that we consider the effect of nation-specific institutional aspects. In particular, I focus on the issue of whether state representatives are allowed to sit on the SOC boards. While current politicians and state bureaucrats are prohibited from taking board positions in Norwegian SOCs, the Swedish state might be represented on the SOC boards by politicians themselves or by civil servants. Interestingly, the presence of Swedish state representatives on the SOC boards leads us to ask whether the Swedish government-owner (irrespective of political motivation) would be less eager than the Norwegian government-owner to appoint politically experienced persons and/or public sector employees as chairmen. After all, the Swedish state is entitled to be represented on every SOC board, while no such requirement applies to the Norwegian state. On the other hand, when also taking into account that the Norwegian state is given some special privileges in SOCs that are fully owned by the state, this leads to the expectation that Norwegian politicians (if concerned with re-election or ideology) might be less concerned about the chairman position than their Swedish counterparts. All in all, therefore, this suggests we leave the question of nationality effects open for empirical inquiry.

4.1.6 Final remarks

In the board literature, a common claim is that corporate directors are not selected by shareholders but rather by the very managers they are supposed to oversee (Shivdasani and Yermack, 1999; see also Mace, 1971). The scope

for managerial influences on board selection processes are particularly stressed in American research, since top managers themselves often hold board seats in US firms. By contrast, CEOs in Norwegian firms are not allowed to sit on the board in the firms they hold managerial positions, which suggests there is less scope for managerial influences on board appointments in the present context. However, at the end of the day, the question of CEOs' impact on board appointments can only be answered by empirical evidence. The lack of data available for this purpose means that managerial influences on board appointments cannot be further investigated in this study.

4.2 CEO Compensation Contracts

Compared to board monitoring, the design of CEO compensation contracts represents a more direct mechanism to align the interests of shareholders and corporate managers. If politicians were to follow the ideas of standard economic theory, their compensation strategy would basically be to make sure that the SOC boards are offering top managers a market-clearing pay (which makes it possible to attract managerial talents) and explicit incentives (which induces self-interested CEOs to act in accordance with shareholder interests). Additionally, they would put pressure on the boards to avoid the use of management perquisites, like golden parachute agreements, if such measures are not explicitly invoked on business ground (otherwise, they would only represent an inefficient control cost).

But why, then, do we tend to observe that compensation packages substantially differ from such ideas? As to the argument that firms which are willing to pay more will, in general, attract more highly talented managers, the problem is that managerial compensation contracts are not a private matter between the board and the CEO (Jensen and Murphy, 1990b). Instead, the public disclosure of executive pay virtually guarantees that third parties, such as rank-and-file employees, labour unions, the Parliament, and the media affect the type of contracts written between management and the board of directors, which eventually makes the level of CEO compensation a populist issue (Jensen and Murphy, 1990b; Murphy, 1999). Thus, to the worse or better of shareholder interests, managerial pay levels are likely dampened by public attention.

As regards the use of incentive schemes, their primary advantage is that top managers are rewarded based on their performance. In addition, the use of incentives would perhaps make it easier to attract the most competent CEOs, since we might assume that talented, self-confident people prefer to be rewarded based on performance rather than independently of it (Jensen and Murphy, 1990b). Yet, the use of incentive schemes is not without caveats. First, there is the case in which the incentive plans reward (or

actually punish) managers for factors they cannot control, like when stock options are not indexed to the overall market (Oyer, 2004). Second, it is possible that top managers attempt to manipulate the measures used as incentive criteria so as to increase the value of bonuses, stock options and the like (Healy, 1985; Zhang et al., 2008).[44] Third, there is the problem that, when introduced, incentive pay is simply added to the CEO's fixed salary. The CEO might therefore avoid that incentive pay is substituted for fixed salary, which implies that there are only upsides related to the introduction of incentives. In sum, therefore, some types of incentive schemes might actually lead to misalignment between the interests of shareholder and corporate managers.[45]

Finally, as to the adoption of golden parachutes, it is not necessarily so that such kind of contractual agreement cannot possibly align the interests of shareholders and corporate managers. By contrast, golden parachutes might serve both specific and broader purposes (Greve, 1997). The narrowly specified contract reflects the corporate governance rationale for the adoption of golden parachutes: To ensure that the CEO will not resist a takeover bid, the contract is adopted expressly to cover management's interests in the hypothetical event of a takeover (Singh and Harianto, 1989). Golden parachutes are thus seen as insurances against takeovers, because they involve a negotiation by top managers with the board for the inclusion of sizeable payments should a change in ownership control occur which increases the risk of management replacement (Singh and Harianto, 1989). In contrast, the broadly specified golden parachute contract is included in the compensation package to compensate the CEO not only in case of hostile takeovers, but also in the more general case of dismissal. In particular, the latter might prove relevant if shareholders need to ease the process of CEO dismissal. Broadly speaking, therefore, we might expect there to be valid reasons for including golden parachutes in the CEO compensation contract.

Now, the key question is how these ideas about CEO compensation contracts apply in the case of state ownership. Consistent with many of the above arguments, anecdotal evidence indicates that certain elements of executive compensation design are controversial when applied to SOCs. For instance, the Norwegian government-owner has recently claimed that many top managers in SOCs are being paid too much, which, in turn, prompted

[44] In practice, the Enron case represents a well-known example that incentive schemes might provide perverse managerial incentives; for instance, to engage in irregular accounting procedures.

[45] While we cannot conclude from these arguments that all incentive schemes are potentially dysfunctional, they certainly makes the case for the board being attentive to possible pitfalls in the design of incentive contracts. For instance, the board should attempt to eliminate any external effects on the incentive criteria employed in the contract, and the incentive plans should be capped so as to establish an upper limit on the possible pay.

government prohibition on the use of stock-option contracts. Likewise, in Sweden, the government-owner has strongly recommended that incentive schemes directed at the CEO should be avoided, thus reflecting a view upon performance-based pay as being a curse rather than a blessing. Importantly, empirical research suggests that political attacks on CEO pay take the form not only of rhetoric, but is actually translated into practice whenever politicians have the necessary power to enforce their preferred compensation design. In fact, top managers in firms under full state control are found to be lower-paid and less incentivised than CEOs in firms under partial state control and privately owned firms (Greve, 1997; Wolfram, 1998; Cragg and Dyck, 2003). On the other hand, prior research also shows that golden parachutes are more commonly applied among fully state-owned firms than among partly privatised ones (Greve, 1997), which indicates that politicians are not equally concerned with limiting every aspect of the compensation package.

Although the empirical findings on top managerial pay in SOCs are intriguing, it is important to note that research on this issue is extremely limited (D'Souza et al., 2000).[46] Thus, we need more systematic empirical examination of the design of executive compensation contracts under state ownership. Attempting here to provide some theoretical guidance to this issue, I start by asking what kind of compensation design that would satisfy the government-owner, which answer to this question naturally hinges on the motivational concerns of politicians. Then, I describe the channels through which politicians might affect CEO compensation contracts and suggest that the government-owner might have some bearing on this issue via board appointments or by way of exercising direct shareholder pressures. However, as this discussion suggest that politicians' preferences about the design of CEO compensation contracts might not support the firms' interest, I also explore what these contracts would look like if corporate directors were to act independently of political pressures, caring only about their reputation for being competent. Additionally, I consider some possible moderating effects due to interactions between different governance models. Following prior research on executive compensation, I then consider the possibility that self-dealing managers can exert some influence on the pay-setting process.

[46] While this thesis focuses exclusively on SOCs, the 'politics of pay' has been more widely explored among firms subject to other ownership arrangements. For a large part, empirical research has concentrated on how political influences are channelled through firms' regulatory environment. One important finding is that firms subject to economic regulation pay their CEOs significantly less than unregulated firms. These studies, which are reviewed in Murphy (1999), include DeAngelo and DeAngelo (1991); Joskow et al. (1993, 1996); Dial and Murphy (1995); Murphy (1996); Rose and Wolfram (2002) (see also Jensen and Murphy, 1990a, 1990b).

Finally, I look at some possible effects of nation-specific characteristics on the design of CEO compensation packages.

As concerns the different components of executive compensation contracts, the broader literature has mostly dealt with one or, more seldom, two parameters of CEO compensation. By contrast, this thesis examines all of the above-mentioned components of the CEO compensation package, including the total compensation level, the use of incentive schemes, and the adoption of golden parachutes. The inclusion of different aspects of the CEO compensation contracts is important not only because their determinants may differ (Finkelstein and Hambrick, 1989; David et. al., 1998; Finkelstein and Boyd, 1998), but also because it is important to explore if and how they relate to each other.

4.2.1 What kinds of CEO compensation contracts do politicians prefer?

As noted above, the answer to this question naturally depends on political motivation. Therefore, I start by providing some theoretical ideas about the kinds of compensation contracts that are likely preferred by politicians who care about their reputation, re-election prospects, or ideology, respectively. As will be clear from this discussion, there are sound reasons why politicians of all types seek to keep compensation levels, incentive schemes and (possibly) golden parachutes in check.

Probing the literature on political influences on CEO pay, most attention has been drawn to the reasons why politicians who are concerned with their re-election prospects might seek to put constraints on the level and structure of CEO compensation packages. Most obviously, executive pay levels might be suppressed due to the strong negative reactions of the wider public to 'excessive wages' (Joskow et al., 1996). Politicians' sensitivity to voter reactions thus implies that high-level salaries, large bonuses, golden parachutes, and the like, are most likely turned down by the government-owner. Moreover, politicians might be unwilling to apply incentive schemes, since this means they have to reveal their underlying political objectives (Vickers and Yarrow, 1991; see also Cragg and Dyck, 2003). For instance, the government-owner might seek to keep employment above efficient levels in order to retain support from public sector employees (see, for example, Boycko et al., 1996). But, since the visibility of such political objectives will draw taxpayers' attention to the benefits from efficiency improvements that they would have to sacrifice, this leads us to expect that politicians seek to avoid the use of incentive schemes.

Interestingly, however, we might argue that politicians would opt for the same compensation strategy if caring about their reputation as being competent. Yet, in this case, the reason for politicians being restrictive on the compensation issue is more subtle. The crucial point is that politicians need to consider the possibility that doing the right thing from the point of view of

the firm may not coincide with doing the right thing from the perspective of society at large. Also, we make the assumption that future employers in the public or private sector are well aware of the fact that politicians cannot be held responsible for board decisions about top managerial pay. Politicians are, however, held responsible for the aggregated effects of CEO pay levels on society at large – an issue which is deemed very important for most employers. More precisely, the state's role in the wage settlement process suggests that politicians should pay more attention to the broader societal effects that follow from compensation practices in SOCs than to firm-specific compensation issues (Cragg and Dyck, 2003). In fact, politicians should consider the possibility that excessive salaries, incentive pay, and golden parachutes on the top management level in SOCs might spur wage increases in other parts of the economy, with subsequent detrimental effects on prices, inflation, and interest rates.[47] As regards incentive schemes, there is also the problem that high-powered incentives may induce CEOs to pursue more risky strategies than responsible politicians would find acceptable. After all, politicians do not invest their own money, but those of the taxpayers and, unlike professional investors, politicians cannot diversify their ownership portfolios as they like (which would have offered the possibility of reducing total risk). Thus, while recognising the benefits of incentive schemes, it is likely that politicians who are concerned about their reputation would prefer low-powered incentives to high-powered ones. In sum, therefore, these arguments suggest that politicians may in fact behave quite rationally when putting restrictions on the level and structure of executive compensation contracts.

Finally, the above outcome would not be altered if we assume that politicians are motivated by ideological concerns, although we might expect left-wing and right-wing government-owners to argue differently about why there should be some constraints on the CEO compensation packages. As regards leftist politicians, they are primarily expected to be concerned about the distributional effects and moral aspects related to high salaries and the possibility for managers to earn large bonuses and/or favourable stock options. By contrast, politicians at the right are more likely concerned about the macro-economic effects of excessive salaries in terms of their inflationary effects. Regardless of ideological orientation, politicians would thus like to see some restrictions on managerial pay arrangements.

[47] Such effects on the economy would also be the concern of politicians who are primarily motivated by their re-election prospects. However, politicians who are concerned about their chances of staying in office do not worry about the effects of excessive salaries on the economy *per se*, but only about the anticipated voter reactions to such compensation practices. The inflation argument is therefore discussed in relation to the reputation motive.

4.2.2 Political influences on CEO compensation contracts

The above discussion leads to the simple suggestion that politics matters to executive compensation design, albeit it seems that politicians would like to constrain the level and structure of CEO compensation contracts for very different reasons. While this makes it difficult to identify politicians' ultimate motivation, it should also be easier to recognise what seem to be 'political-friendly' compensation packages. The question is now what the chances are that politicians can have their interests fulfilled when, after all, the compensation issue lies under the authority of corporate directors? Clearly, two channels for political influences seem to be of particular importance; that is, the board of directors and the state ownership structure. Thus, I expect that politicians may affect decisions about CEO compensation design by appointing corporate directors who will be attentive to political interests or by way of their sheer ownership stake. Noticeably, the two channels may be related, as we have already discussed how board appointments are likely influenced by state control (cf. Section 4.1). For reasons of simplicity, however, I will treat the two as separate channels for political influences, thereby providing distinct arguments as to why they matter to the setting of CEO compensation contracts.

In terms of their decision-making authority, it is evidently so that the SOC boards represent the primary mechanisms by which political influences are translated into compensation practices (Wolfram, 1998).[48] To evaluate the role of the SOC boards in the pay setting process, we therefore focus on the inclination of corporate directors to please the government-owner. Thus, I ask whether we might plausibly assume that some corporate directors are more concerned than others about keeping their SOC board positions. In line with our prior discussion about board appointments, I posit that politically experienced directors would be more receptive to political signals about CEO compensation than non-political directors, since we might expect the former are mostly concerned about their re-election prospects (e.g., due to fewer outside career offerings). By contrast, I suggest that non-political directors are likely more concerned about their reputation, because such behaviour may signal their competence and so increase their chances of gaining other directorships in the private sector. Accordingly, they would choose those compensation packages that are perceived right for the firm. In a similar manner, we might expect that corporate directors who are employed in the public sector would be more inclined to please the government-owner than those directors employed in the private sector, which is due to the assumption that public employees are more concerned

[48] Recall that, in the sample period, shareholders have no advisory or binding vote on executive compensation in Norway and Sweden – a right which is today implemented in company law.

about keeping their current board positions than about their chances of being recruited to board positions in the private sector, and vice versa. Sticking to our perception that politicians seek to keep both pay levels and the use of other compensation elements (i.e., incentive schemes and golden parachutes) in check, our first set of hypotheses simply state that:

> *Hypothesis 1a: The level of CEO compensation is higher among SOCs chaired by non-politicians (private sector employees) than among SOCs chaired by political representatives (public sector employees).*
>
> *Hypothesis 1b: Incentive schemes are more likely used among SOCs chaired by non-politicians (private sector employees) than among SOCs chaired by political representatives (public sector employees).*
>
> *Hypothesis 1c: Golden parachutes are more likely adopted among SOCs chaired by non-politicians (private sector employees) than among SOCs chaired by political representatives (public sector employees).*

Yet, while the board of directors represents the key important channel for influencing executive compensation, the state ownership structure provides the fundamental context in which CEO pay decisions are made. As to the issue of state control, I have previously argued that in cases where the state co-invests with others, the shareholder electorate might in fact pursue different interests. For instance, the government-owner might be concerned about public reactions or inflationary effects related to excessive compensation levels whereas co-investors are disposed to spend some more money to attract high-quality managers. Moreover, we would expect that co-investors are more likely than the government-owner to accept some more risk related to the use of incentives schemes. Also, co-investors might be more willing than the government-owner to adopt golden parachutes, since this can reduce the risk that CEOs oppose the potential sale of co-investor shareholdings. As to the question of which of these interests will be pursued, it seems clear that corporate directors who seek to retain their positions would be more attentive to the interests of co-investors in firms under weak state control. By contrast, in cases where the state is the single or dominant shareholder, corporate directors will pay more attention to political interests than to the interests of co-investors. Thus, while politicians have no direct say on the design of CEO compensation contracts, they may surely affect the board's pay decisions through their sheer ownership share. In support of this view, I suggest that political influences on the pay setting process are likely stronger when state ownership stakes are higher. Briefly, the second set of

hypotheses thus suggests that if corporate directors care about keeping their positions:

> *Hypothesis 2a: The level of CEO compensation is higher among firms under partial state control than in fully state-owned firms.*
>
> *Hypothesis 2b: Incentive schemes are more likely used among firms under partial state control than among fully state-owned firms.*
>
> *Hypothesis 2c: Golden parachutes are more likely adopted among firms under partial state control than among fully state-owned firms.*

4.2.3 Corporate directors care about their reputation

Now, let us assume instead that corporate directors are concerned about their reputation – due to future employment opportunities or for its own sake. In principle, this would lead us to expect that chairmen seek to design 'optimal' compensation contracts, when also taking into account that the very nature of state ownership might induce a different compensation design than is prescribed by economic theory (with the accompanying qualifications of the latter).[49] While the optimal compensation strategy depends on a wide range of factors, some of which are industry-specific, the aim of this thesis is less ambitious as I make no attempts to discuss what might be appropriate levels of CEO compensation and golden parachutes, or whether the chosen incentive schemes might actually induce performance improvements. Instead, the aim is simply to make some convincing arguments about the factors that may explain variation in CEO compensation contracts across the state ownership portfolio. Thus, I ask: Are there any legitimate reasons why some SOC managers would be paid more than others? Is it likely that incentive schemes and golden parachutes are more appropriate in some SOCs than in others?

As to the firm characteristics that may affect executive compensation contracts, the corporate objective of SOCs stands out as one obvious candidate if not only for the reason that commercial SOCs are exposed to market forces, which may put upward pressure on CEO pay. The argument is then simply that the price for attracting managerial talents is higher among commercially oriented SOCs than among SOCs with entirely different

[49] Naturally, the competence of corporate directors is assessed on the basis of several other dimensions than their ability to decide on an optimal compensation strategy. That being said, the compensation issue is one of the most visible tasks which lies under board authority. Therefore, we might safely assume that corporate directors who are motivated by reputational concerns would seek to design compensation packages that are in line with predominant economic ideas.

conceptions. Moreover, the literature suggests that the corporate objective of SOCs is likely to have a significant effect on the use of incentive schemes. As regards societal-oriented SOCs, they are generally instructed to balance the welfare of many different stakeholders. Obviously, such multi-tasking implies that it will be difficult to incorporate incentive schemes in the compensation contract, since performance measures are difficult to establish and evaluate ex post (Holmström and Milgrom, 1991; Tirole, 2001; Dixit, 2002; Burgess and Ratto, 2003). In fact, the blurring of political and business objectives suggests that the goals of these firms are best promoted through flat managerial compensation contracts (Tirole, 2001, pp. 25-26). By contrast, the focus of commercially oriented SOCs on a specific task (i.e., profit-maximisation) implies that incentive contracts could more easily be designed ex ante to align CEOs' and shareholders' interests (Shleifer and Vishny, 1997).

As regard the effect of corporate objective on the adoption of golden parachutes, the argument is more complicated. At first glance, we might accept the notion that top managers in commercial SOCs incur a higher risk related to job security than CEOs in non-commercial SOCs, since corporate or managerial failures are more easily verified in the former type of firms (in terms of significant reductions in earnings and/or drops in stock value). If attempting to compensate the CEO for the risk of dismissal, the idea is therefore that market exposure positively affects the adoption of golden parachutes. However, if we recognise that the bare risk of dismissal is not a very weighty argument, there might actually be more legitimate reasons for adopting golden parachutes among non-commercial SOCs. The argument is that the case for CEO dismissal is more difficult to prove for SOCs with multiple objectives to fulfil, since managerial performance becomes noisier to evaluate when the manager pursues multiple tasks. To avoid spending time and money on court trials in the case of CEO dismissal, the board might therefore decide to solve this potential problem by adopting golden parachutes. In line with this reasoning, I thus expect that SOCs with societal interests to be fulfilled are actually more likely to adopt golden parachute contracts than SOCs operating under market conditions, which also suggests that the absence of 'focus' on a specific task is costly (Tirole, 2001). Based on the preceding arguments, we have the following set of hypotheses:

> *Hypothesis 3a: The level of CEO compensation is higher among commercial SOCs than among non-commercial SOCs.*
>
> *Hypothesis 3b: Incentive schemes are more likely used among commercial SOCs than among non-commercial SOCs.*
>
> *Hypothesis 3c: Golden parachutes are less likely adopted among commercial SOCs than among non-commercial SOCs.*

Importantly, some of the above arguments are considered to be even stronger among those commercially oriented SOCs which are publicly traded. In general, stock market listing leads to increased attention from the capital market, which may trigger a homogenisation of CEO pay in line with industry tendencies as information on executive compensation becomes more transparent. More precisely, increased transparency may put upward pressure on the level of CEO compensation, which leads to the expectation that, in order for SOCs to attract high-quality CEOs, they need to pay top managers in listed SOCs higher levels of compensation than CEOs in non-listed SOCs. Also, the stock market promotes reliance on share prices and shareholder return as bases for performance-based pay systems, which suggests that incentive schemes are more likely to be used among listed SOCs than among non-listed ones. Finally, as regards the adoption of golden parachutes, stock market listing certainly strengthens the possibility for such adoption in that publicly traded firms are exposed to the threat of takeovers. However, this argument hinges on whether we are willing to perceive the takeover threat as realistic in the case of state ownership – which in many cases is most unlikely, since politicians have agreed to the notion that state shareholdings should be rather persistent. Nevertheless, as stock liquidity rises with stock market listing, the implication is (at least in principle) that publicly traded SOCs run the risk of being divested to hostile bidders, which suggests that golden parachutes are more likely adopted among listed SOCs than among non-listed SOCs. Our next set of hypotheses therefore state that:

> *Hypothesis 4a: The level of CEO compensation is higher among listed SOCs than among non-listed SOCs.*
>
> *Hypothesis 4b: Incentive schemes are more likely used among listed SOCs than among non-listed SOCs.*
>
> *Hypothesis 4c: Golden parachutes are more likely adopted among listed SOCs than among non-listed SOCs.*

In the literature, firm size is cited as another key economic determinant of CEO compensation contracts. The presumption of a positive correlation between firm size and executive pay may be explained by the observation that, in large firms, CEOs tend to have a larger span-of-control (Blau, 1970) and more resources to oversee (Finkelstein and Hambrick, 1989) than in small firms.[50] However, while firm size is likely to have a positive impact on the level of CEO pay, size might actually suppress the use of incentive

[50] Additionally, large firms are normally financially capable of paying their CEOs more than small firms.

schemes. The reason is that large firms normally perform several tasks, among which outputs are observable with different degrees of precision (Williamson, 1985). When considering these tasks together, giving a more powerful incentive to one task might draw effort away from other tasks; therefore the existence of several tasks pulls down the power of incentives for all tasks (Holmström and Milgrom, 1991; Dixit, 1997). Moreover, firm size is also likely to repress the adoption of golden parachutes. The argument is that large firms are considered to be less likely takeover targets than small ones, since their size make them more expensive to acquire (Cochran et al., 1985; Knoeber, 1986; Wade et al., 1990). Our fifth set of hypotheses thus suggests that:

> *Hypothesis 5a: There is a positive relationship between firm size and the level of CEO compensation.*
>
> *Hypothesis 5b: There is a negative relationship between firm size and the use of incentive schemes.*
>
> *Hypothesis 5b: There is a negative relationship between firm size and the adoption of golden parachutes.*

Finally, while I have already discussed how the prices to attract managerial talents differ mainly as a function of corporate objective and stock market listing, it seems plausible that the demand for competent CEOs might also enforce SOC boards to reward top managers based on their previous occupations.[51] More precisely, I expect this will the case for CEOs who are recruited from the private sector, because of the historically large wage differentials between the private and public sector. Thus, all else equal, the entry price of private sector executives is presumably higher than that of their public sector counterparts and of those executives who are internally recruited. Hypothesis 6 therefore suggests that:

> *Hypothesis 6: The level of CEO compensation is higher among SOCs which have recruited their CEOs from the private sector than among SOCs which have recruited their CEOs from the public sector or from within the firm.*

[51] Prior research has demonstrated that other human capital investments, like education level and job tenure, have little explanatory power for CEO compensation (Core et al., 1999).

4.2.4 Moderating effects

The above arguments suggest that political influences are channelled through the state ownership structure and via board appointments.[52] Yet, it might also be the case that these factors work in more subtle ways than to have a direct impact on CEO compensation contracts. To elaborate on this issue, we have already established that non-political (private sector employees) directors are more likely than political representatives (public sector employees) to care about their reputation, which means they would pay attention to economic criteria when designing CEO compensation contracts. Also, we note from the above discussion that, even those corporate directors who care about their re-election prospects might be inclined to defy political interests, if they serve on boards in firms under partial state control. In fact, they might attempt to decide on compensation packages that are closely in line with economic criteria, since that is likely what (private) co-investors prefer. Therefore, in those SOCs which the state holds partial control, corporate directors' concern for their current positions might lead to almost the same governance decisions than if corporate directors were concerned about their reputation.

The upshot of this is that the importance of economic criteria would differ as a function of both the chairmen's professional background and state control. To reveal such patterns, I conduct sub-sample analysis to test first, whether non-political corporate directors (private sector employees) stress the importance of economic criteria and, conversely, whether political (public sector) representation on SOC boards strengthens political influences on CEO compensation design in terms of repressing the role of economic factors. Second, and related, I will test whether partial state control indicates a strong focus on economic criteria and, contrary, whether full state control provides little role for economic reasoning. More precisely, the latter case suggests that corporate directors seek to suppress contractual differences between SOCs in an attempt not to provoke the government-owner.

[52] Apparently, though, this leaves us with the following puzzle: Why would politicians who are concerned about their reputation appoint non-politicians (private sector employees) to the SOC boards, if they risk that such corporate directors would not pay sufficient attention to the interest of the government-owner? To answer this question, we recall the assumption that politicians who are concerned with their reputation would strictly emphasise the competence requirements of particular SOCs. This also implies that politicians need to consider the simple fact that the board performs several important functions other than making decisions about the CEO compensation package, including major investment and strategy decisions. Since politicians presumably think that non-politicians (private sector employees) are better qualified than political representatives to perform these functions (at least) in some types of SOCs (including commercially oriented and listed SOCs), they opt for the former – while at the same time urging corporate directors to keep an eye on government-owner's concern for the economy as a whole. In a similar vein, right-wing politicians who prefer less political control with SOC boards will urge the boards to consider a cautious approach in the design of CEO compensation contracts.

Importantly, such analysis also makes it possible to discriminate among motivational concerns, since state control should not be considered a moderating factor in the case where corporate directors solely care about their reputation, but only if they were concerned about their chances of being re-elected.

4.2.5 Managerial influences on executive compensation contracts

So far, I have traced the level and structure of CEO compensation contracts to economic determinants and to the strength of political influences. However, the literature on CEO compensation also stresses the scope for managerial influences on the pay setting process (see, for example, Bebchuk and Fried, 2003). If we stick to the notion of top managers as being selfish, this leads us to expect that CEOs attempt to put upward pressures on pay levels and management perquisites. In particular, the literature on executive compensation suggests that CEOs will normally prefer to receive high levels of fixed salary and to face weak links between pay and performance, since such compensation packages reduce executives' risk exposure (Barkema and Gomez-Mejia, 1998). This notion rests, however, on the assumption that the incentive pay component fully substitutes for non-contingent compensation (fixed salary). But, to the extent that incentive pay is only marginally substituted for fixed salary, there are mostly beneficial effects related to the use of incentive schemes. In view of this possibility, I abstain from making predictions about CEOs' preferences about incentive schemes, focusing instead on the total compensation level and the adoption of golden parachutes.

One of the factors most frequently included in prior research is board size. The argument is that the complexity in decision-making processes increases with board size, which suggests that large boards are less likely than small boards to function effectively (Pfeffer, 1973; Jensen, 1993; Yermack, 1996). In support of this view, CEOs have been found to be more successful in influencing executive pay in firms with large boards than in firms with small boards (see, for example, Greve, 1997; Randøy and Nielsen, 2002).[53] Therefore, hypotheses 7a and 7b state that:

> *Hypothesis 7a: There is a positive relationship between board size and the level of CEO compensation.*

[53] On the other hand, we note that prior research also carries a different interpretation of the impact of board size. The argument is that in firms with large boards, CEOs would have greater difficulty in influencing all board members to agree on critical decisions than they would in firms with small boards (Singh and Harianto, 1989).

Hypothesis 7b: There is a positive relationship between board size and the adoption of golden parachutes.

To facilitate the decision-making process of the board, firms frequently tend to establish compensation committees (Singh and Harianto 1989) – a trend which is also observed for SOCs. The task of such board committees, which normally consist largely of outside members of the board, is to develop proposals for the design of CEO compensation packages (Barkema and Gomez-Mejia, 1998). Although the proposals have to be approved by the full board, the presence of compensation committees is thus predicted to increase board control at the expense of manager influence. Accordingly, hypotheses 8a and 8b suggest that:

Hypothesis 8a: There is a negative relationship between the presence of compensation committees and the level of CEO compensation.

Hypothesis 8b: There is a negative relationship between the presence of compensation committees and the adoption of golden parachutes.

Besides the importance of board characteristics, the balance of power between the board and the CEO is often described in terms of managerial tenure. The argument is that the top manager's time in office increases his or her bargaining position vis-à-vis the board as the CEO has an opportunity to accumulate a track record and to establish initiatives which may be seen to require the executive's continued service (Hambrick and Finkelstein 1995). Thus, with the passage of time, CEOs are hypothesised to influence boards' decisions in line with their preferences. The arguments are summarised in hypotheses 9a and 9b:

Hypothesis 9a: There is a positive relationship between CEO tenure and the level of CEO compensation.

Hypothesis 9b: There is a positive relationship between CEO tenure and the adoption of golden parachutes.

Finally, we should consider the option that corporate directors themselves might indirectly obtain pecuniary benefits from granting 'CEO-friendly' compensation packages. This is particularly the case when chairmen hold a CEO position. The general argument is that other firms' CEOs are expected to be bad monitors because they have the same role in the principal-agent

setting as the CEO they are supposed to monitor (Gilson and Kraakman, 1991). More specifically, it may be that a social comparison process is operating, with the focal CEO's compensation being determined, in part, through a comparison process by the chairman (O'Reilly et al., 1988). For instance, the top manager in a firm who is the chairman on another firm's board might put upward pressure on the level of executive pay as he or she expects there to be a mimetic effect of these pay rises across firms (Hallock, 1997). Thus, hypotheses 10a and 10b suggest that:

> *Hypothesis 10a: The level of CEO compensation is higher among SOCs chaired by a CEO than among SOCs chaired by a non-CEO.*
>
> *Hypothesis 10b: Golden parachutes are more likely adopted among SOCs chaired by a CEO than among SOCs chaired by a non-CEO.*

4.2.6 How do nation-specific characteristics affect CEO compensation?

Generally, it seems reasonable to expect that national differences in board composition may influence on the level and structure of CEO compensation contracts. Particularly, the fact that Swedish politicians and state bureaucrats are allowed to serve on the SOC boards indicate they have hands-on influence on the design of executive pay. To investigate this issue, I will run a nationality sub-sample analysis to explore if political representation (public sector employees) on the board has a stronger impact among Swedish SOCs than among Norwegian SOCs. Additionally, I expect that incentive schemes will be less frequently employed among Swedish SOCs than among their Norwegian counterparts from 2003 onwards, due to the Swedish government-owner's proposal to avoid performance-based pay components directed at the CEO.

4.3 Dividend Payments

Yet another means for shareholders to discipline corporate managers is to extract money (dividends) from the firm. The argument is that unless profits are extracted from the firm, they might be diverted by corporate managers for personal use or committed to unprofitable projects that provide private benefits (see, for example, Rozeff, 1982; Easterbrook, 1984; Jensen, 1986; La Porta et al., 2000). Additionally, high dividend payments force firms to go to the capital markets, which mean they incur the monitoring of external capital providers (Jensen, 1986). For these reasons, dividend payments are seen as a viable governance mechanism to reduce any conflicts of interests between shareholders and self-seeking managers.

Clearly, the dividend argument is equally valid in the case of state ownership. Although SOCs often pursue a variety of objectives other than profit maximisation alone, they might potentially generate large profits. Like private shareholders, government-owners therefore need to decide upon whether or not they should force SOCs to disgorge their earnings. Since there might be significant values at stake, the dividend decision is a non-trivial issue.[54] Therefore, it seems surprising that SOC dividends have been left almost unexplored in previous research insofar as "no strong theoretical or political arguments concerning expected dividend payments [from SOCs] have been put forward" (Megginson et al., 1994, p. 421).

One possible reason why the dividend issue has received little attention is that it has been viewed as only of secondary interest to most government-owners. For instance, this might be the case if viewing SOCs as being tools for the distribution of existing wealth. Accordingly, SOCs are seen as investment vehicles through which to channel cash rather than as financial assets expected to generate a monetary return (Megginson et al., 1994). From this view, we might expect that politicians are inclined to let SOCs keep their earnings. Such reasoning is reinforced by the fact that fully state-owned firms cannot turn to the capital market to float new securities, which means that politicians might have to compensate for any high dividend payments today by making additional grants to the same firms in the nearby future (if holding the debt-level fixed). In support of these claims, empirical research has documented significant increases in dividend payments after privatisation (Megginson et al., 1994; Boubakri and Cosset, 1998; D'Souza et al., 2000). However, we might also interpret these findings quite differently. In fact, rather than explaining dividend increases following government sell-outs in terms that politicians having a weaker preference for dividends than do private shareholders, such increases can be seen as an attempt to send signals about the earning prospects of privatised SOCs.[55]

Yet, public sector developments in the area of corporate governance challenge the notion that politicians are inattentive to dividend payments. Instead, some government-owners have embarked on extremely deliberate dividend policies. For instance, in Sweden, the government-owner publicly announces its dividend policies for all SOCs and reports the actual dividend payments. Moreover, government-owners often derive dividend policies as

[54] In Norway, listed companies in which the state holds a dominant ownership stake generated a total annual profit of 69 000 NOK millions for the year 2005, whereas the largest company under full state control made an annual profit of nearly 6 000 million NOK (1 NOK = 7.97 EUR and 6.73 US$). *Source*: The State's Ownership Report 2005.

[55] This argument is derived from the dividend-as-signal theory due to Bhattacharya (1979). See also, amongst others, Kose and Williams (1985); Miller and Rock (1985); Ambarish et al. (1987).

part of a broader discussion on the financing instruments of SOCs. There are thus clear indications that politicians take an active stance on the dividend issue – although we know little about the factual political motivation for extracting SOC dividends.

In a similar manner to that of CEO compensation, there is need for improved knowledge about the channels through which politicians might affect dividend payments. While the dividend decision is normally the responsibility of the board of directors, shareholders can exert some influence on this issue by virtue of their right to decide on a lower dividend than the board proposes. But there is also the interesting case that, in Norway, the government-owner is not legally bound by the board's dividend proposal. In any case, we need to discuss how politicians' preferences about dividend payments hinge on their motivational concerns and how political influences interact with the motivation of corporate directors. Also, we need to consider the effects of nation-specific characteristics on dividends.

4.3.1 Do politicians prefer dividends over retained earnings?

Should we expect politicians to have a preference for dividends over retained earnings? To answer this question, we first look at the dividend preferences of politicians who are concerned about reputation-building. In general, it is expected that such politicians consider the disciplinary effects of dividend payments. In the attempt to control self-serving managers, politicians would thus prefer that earnings are paid out as dividends, which also oblige SOCs to go the capital markets for financial support. But, in their efforts to do what is right for the firm, politicians would also emphasise other criteria (recalling from Chapter 3, such criteria might include SOCs' growth opportunities and developments in rate of return), which might perhaps modify the request for dividend payments. In the literature attention has been directed particularly to firms' growth opportunities and capital structure. With regard to growth opportunities, the argument is that dividend payment ratios would be lower in firms with good growth prospects, since shareholders are normally willing to wait for a firm's investments to pay off (Ambarish et al., 1987; La Porta et al., 2000). Such behaviour would also benefit the long-term public interest, since firms with good growth prospects might be capable of paying higher dividends in the future than today. As to the capital structure, the idea is that shareholders might use a high debt ratio as a substitute control mechanism to dividend payments, since highly-leveraged firms are normally more closely monitored than all-equity firms (Short, 1994).

That being said, there are weighty reasons why reputation-building politicians might actually prefer SOCs to retain some more of their earnings than is prescribed on standard economic grounds. To understand why, we note that in those cases which the government is the single owner of SOCs, the state is also the single provider of capital to the firm (if holding the debt-

level fixed). Unfortunately, though, the reliance on state funding carries the implication that capital infusions are likely to become highly unpredictable (Johnsen, 2004). This might be due to the long-term process of raising state capital through budgetary procedures and/or the fact that SOCs' request for additional capital have to compete with other spending areas.[56] In any case, SOCs run the risk that profitable investment opportunities are lost. Thus, we might expect that even politicians who seek to appear competent will prefer lower dividend payment ratios than would have been claimed by the average investor.

Assuming instead that politicians care about keeping their positions, we need to ask whether the government-owner can use dividends to attract or hold on to voters' loyalty. One answer to this question would be as follows: Since the voters have no cash flow rights, we cannot expect the average citizen to have any special preference for dividends. Still, it might be the case that some interest groups (SOC employees and their trade unions) prefer less dividends if they can benefit from the retained earnings; for instance, in terms of the firm being financially capable of avoiding dismissals or salary cuts. To please these interest groups, the government-owner may thus agree on low dividend payment ratios from SOCs. More generally, politicians might seek to refrain from dividend payments so as to make SOCs financially capable of implementing whichever government policy that might benefit the electorate (e.g., to cut prices, improve upon service quality, and keep employment up). The problem is, however, that politicians might not believe that SOC managers will pay sufficient attention to such political interests. Instead, politicians worry that corporate managers might spend the retained earnings to pursue their own interests at government-owner's expense (e.g., expansion of businesses abroad rather than in the domestic market). In fact, this leads back to the very reason why corporate managers need to be financially disciplined in the first place.

The above arguments thus suggest that politicians who seek to stay in office might in fact have little to gain from low dividend payment ratios. But, can they possibly benefit more – in terms of voter support – by extracting high dividends from SOCs? Obviously, this might be the case if politicians think that dividend payments suffice to convince citizens that the SOCs are performing well (Gugler, 2003). Though, it seems even more important that politicians might use dividend payments to invest in voter welfare. This argument makes even more sense when recognising that politicians act under short-run political pressure, which suggests that they

[56] We should also note that the reliance on state funding might carry the equally severe implication that a financially healthy state might provide SOCs with capital on terms that barely would have been acceptable to a private investor (provided that the Parliament keeps in line with the market investor principle).

need liquidity to spend on 'voter-friendly' purposes which yield immediate benefits. Accordingly, politicians will not be willing to wait for retained earnings to materialise as future dividends. In addition, we should note that politicians' preference for liquidity can actually only be met by high dividend payments, which is due to the fact that the state is constrained in its exit options. The only short-term opportunity of getting a return on investments is thus for politicians to extract high dividends from SOCs (Gjesdal and Johnsen, 1995). While such dividend practices might not be efficient from a finance-based point of view (because it implies that politicians are willing to forego future capital gains), it is a valid argument for politicians who otherwise cannot meet their need for money by selling a proportion of their ownership portfolios. Given this, it seems reasonable to suggest that politicians who care about voter popularity will not be indifferent between liquid funds and retained earnings.[57]

Finally, we ask what happens to the dividend payment decision if politicians pursue ideological goals. Sticking to the general assumption that left-wing governments prefer more spending than right-wing governments (Persson and Svensson, 1989), this leads to the expectation that left-wing politicians would prefer higher dividends than right-wing politicians. This argument is refined by saying that leftist politicians prefer more government spending because they are more concerned with unemployment and growth and relatively less concerned with inflation, while the opposite holds for politicians at the right (Hibbs, 1977; Alesina et al., 1999). However, there is also an alternative view of the impact of political ideology, which offers the opposite prediction of dividend payments. The argument is that since left-wing governments favour employees over shareholders, and lower dividends might benefit the former, leftist politicians will have a bias against dividends (Bank et al., 2004; see also Roe, 2003). Although we have already raised the objection that retained earnings are not automatically transformed into employee welfare (due to conflicts with the private interests of corporate managers), it seems yet reasonable that the partisan profile of left-wing governments may equally well support the idea of low dividend payments. Thus, we leave as an open question whether left-wing or right-wing governments should be associated with the largest dividend payments.

Taken together, the above discussion suggests that politicians are likely to have strong opinions on the issue of dividend payments, although some implications are open-ended. Certainly, in Norway, politics directly affects dividend payments as the government-owner has the right to set the dividends for fully state-owned firms. More generally, we expect that

[57] Anecdotal evidence supports the notion that politicians may use the dividend to balance the state budget, paying no heed to the written dividend policy. In Norway, the Parliament has on a number of occasions raised dividend payments contrary to the recommendations of the corporate boards.

politicians might affect the dividend decision by way of their sheer ownership stake and via the board of directors. To explore these issues, I start by looking at the case in which both politicians and corporate directors care about their reputation for being competent, and therefore seek to decide on dividend payments in line with economic criteria. Thereafter, I discuss what happens to dividend payments in the case which both politicians and corporate directors care about their re-election prospects. Since there is theoretical ambiguity on the issue of political ideology, I abstain from making any *à priori* hypotheses about the effect of government party on dividends. Additionally, I look at some moderating effects which relate to interactions between different governance models.

4.3.2 Politicians and corporate directors care about their reputation

What if both politicians and corporate directors seek to act as competent representatives of shareholder welfare? As already noted, this concern would basically lead them to extract enough dividends so as to discipline corporate managers. However, we cannot simply interpret this control argument in terms that politicians and corporate directors want the SOCs to give up their entire profit. Instead, they are likely to stress both the growth opportunities and capital structure of SOCs (amongst other factors) when deciding on the appropriate level of dividend payments. Since the government-owner should be particularly prone to consider its investments in a long-term perspective, the implication is that politicians and corporate directors who care about the firm's best interest would be willing to wait for shareholder investments to materialise in terms of future dividends. Accordingly, we might expect that firms with good growth opportunities, and thereby high profit and dividend prospects, will experience lower dividend payment ratios than low-growth firms. Our first hypothesis thus suggests that:

> *Hypothesis 1: The dividend payment ratios are higher among SOCs with poor growth opportunities than among SOCs with good growth opportunities.*

The capital structure of SOCs represents another factor which is likely to modify the request for dividend payments, since debt is a potential substitute control mechanism to dividends. More precisely, higher leverage increases monitoring by the capital markets as debtholders seek to ensure themselves of getting a return on their investments, which, in turn, makes dividend payments less needed. In practice, therefore, debt and dividends are seen as

two related aspects of financial policy decisions.[58] Our next hypothesis makes this notion explicit as it states the effect on dividend payments for any given level of debt:

> *Hypothesis 2: The dividend payment ratios are higher among SOCs with a low debt ratio than among SOCs with a high debt ratio.*

Finally, we should expect that the corporate objective of SOCs indicate their main financial concern. More precisely, it seems reasonable to suggest that the nature of activity of non-commercial SOCs implies that politicians' interests in such firms are not primarily tied to financial issues. Another reason relates to the fact that firms which are set up to fulfil societal goals often have close financial ties to the government-owner – in terms of receiving grants over the state budget or being instructed to offer their services at some politically determined price levels. Since this might reflect concerns for distributional fairness and service quality rather than profit-maximisation, we should expect the dividend payment ratios would be lower among non-commercial SOCs than among profit-oriented SOCs. Thus, all else equal, hypothesis 3 states that:

> *Hypothesis 3: The dividend payment ratios are higher among commercial SOCs than among non-commercial SOCs.*

4.3.3 Political influences on dividend payments

Now, assume instead that both politicians and corporate directors care about their re-election prospects. In general, this means that the government-owner would use dividends to attract voter support – and corporate directors would loyally pursue the shareholder interests. More specifically, it is expected that politicians will use SOCs as financial drains, because they want to reallocate profits from SOCs to other policy areas. Thus, dividend payments are seen as an instrumental tool for politicians to fulfil their electoral promises and, thereby, balance the state budget. However, the government-owner might not find it wanted to extract high dividends from all SOCs. Instead, we might expect that politicians would like to see higher dividend ratios among SOCs that generate large amounts of cash (e.g., in terms of absolute income value) than among low-income SOCs, since this implies that politicians can spend

[58] In fact, debt and dividends can also be seen as simultaneously determined (Jensen et al., 1992). Thus, just as we expect that firms' debt ratio contributes to explaining how much dividends are extracted, high dividend payments might enforce capital market lending by SOCs. Also, there is the problem that, if access to external finance is very costly, firms might choose a lower debt ratio and use high dividend payments to substitute for capital market control.

more money on highly visible welfare purposes. Hypothesis 4 therefore states the effect of income level on dividend payments:

> *Hypothesis 4: The dividend payment ratios are higher among high-income SOCs than among low-income SOCs.*

To evaluate the scope for political influence, we assume once again that the state ownership structure and the board of directors represent the major channels through which politicians are likely to have their interests fulfilled. Moreover, we continue to explore their effects separately, even though the two aspects might be related. As regards the effect of state control on dividend payments, the expectation is that the government-owner and co-investors have different views upon the dividend decision. While we believe that politicians generally prefer higher dividend payments ratios to lower ones, co-investors are likely to prefer a dividend profile in line with the reputation model described above. As the latter criteria presumably bring about more flexible dividend payments than is sought by liquidity-preferring politicians, this suggests that state control is an important determinant of dividend payments. Clearly, this argument holds irrespective of whether the dividend payments are set by politicians themselves or by corporate directors – provided that both are motivated by their re-election prospects. Following the notion that political influences are probably weaker in firms under partial state control, hypothesis 5 thus proposes that:

> *Hypothesis 5: The dividend payment ratios are higher among fully state-owned firms than among firms under partial state control.*

Apart from exercising influences on dividend decisions by way of their ownership stakes, shareholders might also force SOCs to disgorge cash by voting for corporate directors who offer beneficial dividend payments (La Porta et al., 2000). Accordingly, the government-owner might use its power to appoint chairmen who are likely to offer high dividends. In brief, I suggest that politically experienced directors would be more attentive to political signals about dividend payments than non-political directors, since political representatives are presumably most concerned about their re-election prospects. By contrast, non-political directors are more likely to care about their reputation, which means they would decide on a level of dividend payment which is perceived right for the firm. Additionally, we might expect that corporate directors who are employed in the public sector would be more inclined to please the government-owner than is the case for private sector employees. Therefore, hypothesis 6 states that:

Hypothesis 6: The dividend payment ratios are higher among SOCs chaired by political representatives (public sector employees) than among SOCs chaired by non-politicians (private sector employees).

Finally, it seems reasonable to expect that the scope for political influences on dividend payments vary according to which is the sponsor ministry of the SOCs. Following the notion that the ownership ministry is probably a more professional administrator of SOCs than are sectoral ministries, we might expect that the former puts pressure on the minister to abide with economic criteria in the dividend setting process. By contrast, sectoral ministries are less likely to defy political pressure to raise dividend payments, since they are probably less experienced with financial policy issues. Everything else equal, Hypothesis 7 thus proposes that:

Hypothesis 7: The dividend payment ratios are lower among SOCs which are administered by the ownership ministry than in those SOCs administered by other sponsor ministries.

4.3.4 Moderating effects

Yet, like in our prior discussions, we should recognise that there might be more complex relationships between the independent variables under different governance models. To explain why, we first look at the case in which both politicians and corporate directors care about their reputation, and thereby consider firms' growth opportunities (amongst other factors) when deciding on dividend payments. Because we might assume that non-governmental shareholders would agree to such decision-making, there are presumably no conflicts of interests between the government-owner and potential co-investors on the dividend issue. However, we have also noted that the effect of firms' growth opportunities (when controlling for the debt-level) might differ as a function of state control. That is, the need to account for the growth opportunities of fully state-owned firms is exacerbated by the fact that Parliamentary decisions about capital contributions are long-term processes, which might have severe implications for the investment decision. To ease SOCs' demand for additional capital, politicians might therefore prefer fully state-owned firms to retain some more of their earnings than is rational from a finance-based position. To evaluate this proposition, I will run sub-sample analysis to test whether the relationship between growth opportunities and dividend payment ratios are even more strongly negative among firms under full state control than among partly state-owned firms.

In addition, I would like to test the notion that, under the re-election model, the importance of economic criteria might differ as a function of both state control and the professional background of chairmen corporate

directors. The state control argument is that corporate directors who seek to become re-elected would also be attentive to the dividend preferences of co-investors in firms with less than full state control. For this purpose, I conduct sub-sample analysis to test whether partial state control indicates a strong focus on economic criteria. By contrast, full state control should not provide any role for these criteria, only that of the SOC income level. Again, such analysis also makes it possible to discriminate among motivational concerns, since state control should not be considered a moderating factor in the case which corporate directors solely care about their reputation, but only if they were concerned about their chances of being re-elected. Moreover, I will test whether non-political corporate directors (private sector employees) stress the importance of economic determinants, whereas political (public sector) representatives are likely to pay more attention to the SOC income level.

4.3.5 How do nation-specific characteristics affect dividends?

To further explore the moderating effect of state control on dividend payments under the reputation model, we should also take into consideration that company legislation differs between Norway and Sweden on the issue of political intervention. In Norway, politicians might directly affects dividend payments as the government-owner (or, in fact, the Parliament majority) has the right to set the dividends for fully state-owned firms. By contrast, in Sweden, the board of directors set the dividends for all SOCs. In seeking to understand the effects of these institutional differences on dividend payments, we draw on the argument that legally protected shareholders are willing to accept low dividend payments today in exchange for high reinvestment rates in future periods (La Porta et al., 2000). Following this notion, it seems reasonable to expect that the scope for political interference might actually have a positive effect on government-owners' willingness to wait for their dividends when growth prospects are good. In other words, Norwegian politicians should be more willing to wait for future dividends than Swedish politicians, because the former can be sure of extracting future dividends as soon as the earnings materialise in fully state-owned companies. By contrast, Swedish politicians need to rely on the SOC board of directors to get their dividends. As a result, with good shareholder protection, we might test the proposition that high-growth Norwegian firms under full state control should have lower dividend payment ratios than their Swedish counterparts.

Interestingly, the situation is reversed if we assume that politicians care about re-election or ideology instead of their reputation. In these cases, politicians might seek to exploit their legal protection by getting what they want immediately, regardless of any economic criteria. Thus, the proposition is now that Norwegian politicians would use their intervention rights to pursue a more aggressive dividend profile for fully state-owned firms than

what is possible to do for Swedish politicians. Overall, therefore, nation-specific arrangements might result in very different dividend profiles depending on the motivation of politicians.

4.3.6 Final remarks

In a similar manner to that of other governance decisions, we should note the possibility that corporate managers may succeed in influencing dividend payments. In particular, this might be the case if SOC managers, when experiencing that most of the firm's earnings are extracted by shareholders, take actions to avoid this from happening in the future. To this end, they may engage in activities that decrease profits; for instance, by committing the firm to less profitable projects than would otherwise be seen as economically rational. But also, corporate managers may engage in income and dividend smoothing, which means they seek to manipulate the time profile of earnings to make the reported income stream (and thereby also the dividend stream) less variable (Fudenberg and Tirole, 1995; Gugler, 2003). In any case, such strategic behaviour suggests that managerial influence might severely affect the *amount* of dividend paid. However, it might also affect the dividend payment *ratio*, since any attempt to manipulate income might also have an effect on accounting-based figures, such as the firm's growth opportunities. Consequently, some independent variables might suffer from an accounting bias. While recognising this limitation of the study, we also note that this issue is not easily resolved as it is highly unlikely that firms would be willing to divulge information about this kind of strategic behaviour by corporate managers.

Finally, we should note that tax issues are normally an integrated part of dividend discussions, since shareholders' preferences for dividends over retained earnings might certainly depend on whether dividend payments are taxed more heavily than capital gains (see, for example, La Porta et al., 2000). The reasons why tax issues are not included here relate primarily to the facts that both taxes and SOC dividends are at the hands of the state, and that the very low liquidity of SOC shares makes capital gains less attainable.

4.4. Summary

By combining theoretical and practical insights on the subject matter, the broad aim of this chapter has been to show that governance decisions are likely to be shaped in the intersection between motivational concerns, institutional aspects, and firm characteristics. Moreover, I have sought to transform some more general arguments within the field of state ownership and corporate governance into a set of specific hypotheses about what kinds of governance decisions will be made by politicians and corporate directors

in the areas of board appointments, CEO compensation contracts, and dividend payments. While some might want object that the governance models are overly stylistic, the empirical chapters seeks to cope with this challenge by exploring some possible interactions between the models.

Chapter 5

Data and Methods

Now that we have derived from theory a set of testable predictions about governance decisions, this chapter proceeds to present the data and methods which are used in the empirical analysis. The key questions that will be dealt with are: Why are the two Scandinavian countries of Norway and Sweden considered as appropriate testing grounds to examine the topic of state ownership and corporate governance? Which sampling approach is used to identify the SOCs? How to make operational the three types of governance mechanisms and their determinants? Why using panel data and how to analyse them? How to deal with the endogeneity problems inherent in the governance functions? What models are appropriate in dealing with binary dependent variables? In short, the chapter thus revolves around three major issues: (i) National context; (ii) sample construction, variable definitions, and data collection; (iii) governance functions and econometric methods. While the details on the first two issues are spelled out in Sections 5.1 and 5.2, respectively, the third issue is dealt with in Sections 5.3–5.5. Some final comments on the interpretation of statistical results are provided in Section 5.6.

5.1 National Context

As the empirical analysis includes observations from two different countries, we need to ensure that the analysis is not affected by any serious country-specific 'noise'. In practice, this means that both the state ownership portfolio itself and the administration thereof must be highly comparable. But also, a two-country study provides the opportunity to test other hypotheses than would have been possible if only using single-country data. Therefore, I also look for cross-country variation on some relevant aspects.

From this perspective, there are several reasons why Norway and Sweden represent a rich environment for studying corporate governance. First, both countries have fairly extensive and comparable state ownership portfolios insofar as the Norwegian and Swedish governments are the single or dominant owner in sectors whose performance is of great importance to economic and social welfare, such as energy, telecommunications, transport,

and banking (OECD, 2005).[59] Moreover, co-investments with private shareholders have resulted in significant state shareholdings on the national stock exchanges. As shareholders in some of the largest firms in the country, both the Norwegian and Swedish governments are also major employers of national workforce. In short, therefore, there are considerable values at stake in terms of Norwegian and Swedish SOCs representing a substantial part of gross domestic product, welfare services, market capitalisation, and employment (OECD, 2005).

Second, the alleged failures of corporate governance under both state and private ownership have led both Norwegian and Swedish governments to focus more systematically on how to improve their ownership function. Above, we have seen that such corporate governance reforms include the establishment of national guidelines for 'good corporate governance' and the reassignment of state ownership rights from sectoral ministries to a more professional ownership ministry. While a binding commitment to corporate governance principles may help to increase politicians' credibility on ownership matters, one major purpose of bureaucratic specialisation in the management of state ownership is to ensure compliance with corporate governance principles. Other corporate governance reforms have encouraged politicians to draw a sharper distinction between commercially and non-commercially oriented SOCs, and to gradually replace political control with private control through a partial privatisation of state ownership rights. A clarification of the corporate objective is clearly helpful to the extent that we assume different governance decisions are optimal for different types of firms. As to the gradual transfer of state ownership rights to private investors, this provides in itself an impetus for changes in corporate governance, since it is of vital importance that co-investors have confidence in governance decisions are being made on efficiency grounds. Which, if any, effects can be associated with such governance reforms is the empirical question that triggers our attention.

Third, on the political level, both Norway and Sweden have been ruled by Social Democratic governments for several decades in the post-war period, which suggests there are strong cultural norms in both countries that value equity and fairness (Randøy and Nielsen, 2002). In Sweden, a Social Democratic government held power also in the sample period.[60] By contrast, there were some changes to the Norwegian government position over the six year-period covered by this study. While a Social Democratic government held position in the period March 2000–September 2001, a bourgeois

[59] Recalling from Chapter 3, the major difference between the two countries as regards which sectors are represented at the state level concerns the health sector.

[60] The Persson-government held power in the period 1996-2006.

Coalition government held power in the period October 2001–October 2005.[61] Generally speaking, this suggests that we might test hypotheses about the effect of political ideology on corporate governance – by means of intra-country comparison as well as cross-country comparison.

Finally, I have already confirmed there to be some important within- and between-country differences as regards the legal regimes and policy practices defining government-owners' right to intervene in governance decision-making. Clearly, such institutional variety makes it possible to test, and even discriminate among, some of our hypotheses. In sum, therefore, it seems that a two-country study including Norwegian and Swedish SOCs will enrich our possibility for detecting interesting empirical patterns.

5.2 Sample, Variables and Data Sources

Previously, the availability of information about corporate governance in the context of state ownership has been scarce. One major problem, as Cragg and Dyck (2003, p. 177) note, has thus been "...assembling information from various sources, with no single repository of such information and no commercial vendors seeing value in collecting such information". During the past decade, however, the general public in Norway and Sweden has experienced higher transparency on state ownership and governance issues. Partly, this is due to improved reporting from the governments in terms of issuing annual ownership reports. But it is also due to more intensive media coverage on corporate governance matters (e.g., CEO compensation levels) as well as a more inclusive and consistent reporting of corporate governance in the company annual reports. Yet, there are still large differences among SOCs as regards what kind of information is disclosed, which means that for some SOCs I simply lack the information needed to include them in the analysis of particular governance decisions. Additionally, I had to renounce on some more fine-grained data about governance decisions, including some aspects of board appointments. With this caveat in mind, the thesis gives but a fairly comprehensive and rich descriptive account of state ownership and corporate governance in Norway and Sweden.

5.2.1 Sampling approach

The sample consists of every Norwegian and Swedish firm (for which data were available) in which the state holds a direct equity fraction over the period 2000-2005. The sample period was chosen because prior to year 2000

[61] The Stoltenberg I-government replaced the Bondevik I-government in March 2000. Following the Parliamentary election in autumn 2001, the Bondevik-II government was established in October 2001 (replaced by the Stoltenberg II-government in October 2005).

there were too many missing key variables. To construct the database the first step was to identify all SOCs which had been in existence during the six-year period. To identify Norwegian SOCs government sources were used: Ownership reports, White Papers, and annual reports from the Office of the Auditor General of Norway (*Riksrevisjonen*). Swedish SOCs were identified from the government offices' annual ownership reports.[62] A number of companies were then excluded from this target group: Companies in which the state holds only indirect ownership stakes (e.g., SOC subsidiaries and companies owned by subordinate ministerial agencies); companies for which annual reports not longer were available due to mergers, acquisitions or winding up of businesses; companies which share administrative resources with another SOC; foreign registered companies; companies which have been under state ownership for less than one year; companies with irregular reporting routines; companies subject to special governance rules (e.g., particular groups are represented on the board or the CEO compensation issue is under Parliament authority); companies which do not reply upon request or whose annual reports are not longer available; and finally, companies for which no public information were available (only possible to identify by name). Table 5.1, Panel A summarises the construction of the Norwegian and Swedish samples, while Panel B lists the sample SOCs by name and corporate objective (commercial versus non-commercial).[63]

[62] First published by the Swedish government in 1999, the annual reports on state ownership include a thorough description of every SOC in Sweden. By contrast, the Norwegian government issued its first ownership report in 2003 and includes only a sub-sample of SOCs. Therefore, a complete overview of the Norwegian SOC population could only be achieved by consulting other official sources.

[63] The selection of corporate objective as identification criterion corresponds to the type of classification of SOCs that is reported in the governments' annual ownership reports.

Table 5.1. List of state-owned companies in the sample.

NORWAY		SWEDEN	
Panel A: Construction of the sample		**Panel A: Construction of the sample**	
121	Number of companies identified from government sources	61	Number of companies identified from government sources
- 27	Indirect state ownership	- 4	Indirect state ownership
- 10	Annual reports not longer available due to mergers, acquisitions or winding up of businesses	- 5	Annual reports not longer available due to mergers, acquisitions or winding up of businesses
- 3	Shared administrative resources with another SOC	- 1	Shared administrative resources with another SOC
- 1	Foreign registered company	- 1	Irregular reporting routines
- 1	The company has been state-owned for less than one year	- 2	Foreign registered companies
- 4	Companies subject to special governance rules	- 5	Do not reply upon request/annual reports not available
- 13	Do not reply upon request/annual reports not available	- 3	No information available about the company
- 6	No information available about the company		
56	Basic sample	40	Basic sample
Panel B: SOCs in the sample		**Panel B: SOCs in the sample**	
Commercial SOCs	*Non-commercial SOCs*	*Commercial SOCs*	*Non-commercial SOCs*
Arcus AS	Akvaforsk AS	Akademiska Hus AB	ALMI Företagspartner AB
Argentum Fondsinvesteringer AS	Avinor AS	Green Cargo AB	Apoteket AB
Bane Tele AS	Carte Blanche AS	Imego AB	Göta kanalbolag AB
Cermaq ASA	Den Norske Opera AS	Lernia AB	IRECO Holding AB
DNB NOR ASA	Enova SF	Luossavaara Kirunavaara AB (LKAB)	Kungliga Dramatiska Teatern AB
Eksportfinans AS	Gassco AS	Nordea Bank AB	(Dramaten)
Electronic Chart Centre AS	Industritjeneste AS	OMX AB	Kungliga Operan AB
Entra Eiendom AS	Innovasjon Norge	Posten AB	Samhall AB
Flytoget AS	Kings Bay AS	Rymdbolaget	SIS Miljömärkning AB
Grødegaard AS	KITH AS	SAS AB	SOS Alarm Sverige AB
Kommunalbanken AS	Nationaltheatret AS	SJ AB	Statens Väg- och Baninvest AB
Kongsberg Gruppen ASA	NORFUND	Specialfastigheter Sverige AB	Svensk Bilprovning AB
Mesta AS	Norges Statsbaner AS (NSB)	Sveriges	Svenska Spel AB

Nammo AS	Norsk Eiendomsinformasjon AS	Bostadsfinansieringsaktiebolag (SBAB)	Sveriges Provnings- och Forskningsinstitut AB (SP)
NOAH Holding AS	Norsk institutt for fiskeri- og havbruksforskning AS (Fiskeriforskning)	Sveaskog AB	Sveriges Rese- och Turistråd AB
Norsk Hydro ASA	Norsk Rikskringkasting AS (NRK)	Svensk Exportkredit AB (SEK)	Swedfund International AB
Statkraft SF	Norsk Tipping AS	Svenska Skeppshypotekskassan	Systembolaget AB
Statoil ASA	NORUT Gruppen AS	Swedesurvey AB	
Store Norske Spitsbergen Kulkompani AS	Petoro AS	TeliaSonera AB	
Telenor ASA	Posten Norge AS	Teracom AB	
Veterinærmedisinsk oppdragssenter AS (VESO)	Helse Midt-Norge RHF	Vasakronan AB	
Yara International ASA	Helse Nord RHF	Vasallen AB	
	Helse Sør RHF	Vattenfall AB	
	Helse Vest RHF	Venantius AB	
	Helse Øst RHF	Vin & Sprit AB (V&S)	
	Rogaland Teater AS		
	Simula Research Laboratory AS		
	SIVA SF		
	Statnett SF		
	Statskog SF		
	Stor-Oslo Lokaltrafikk AS (SL)		
	UNINETT AS		
	A/S Vinmonopolet		
	Universitetssenteret på Svalbard AS (UNIS)		

5.2.2 Variable definitions and data sources

As regards the empirical measures, it goes without saying that they should be chosen to correspond as closely as possible to theoretical constructs. Moreover, in order to make our findings comparable with those of other studies, the measures used should (if possible) be consistent with the ones employed in previous research. That being said, I also search for opportunities of gaining richer data about state ownership and corporate governance beyond what is already known from prior research. In what follows, I describe empirical proxies for the variables used in the empirical analyses. The dependent variables include different aspects of board appointments, CEO compensation contracts, and dividend payments. The independent variables comprise various institutional features and firm characteristics. Appendix 1 provides an exhaustive summary of the variable construction, which also includes definitions of variables that are used only for descriptive purposes and background variables from which the final variables are constructed.

Dependent variables

Board appointments. Focusing on who gets selected as the chairman of SOC boards, the thesis uses two empirical proxies for the chairman's professional background – broadly corresponding to that of prior research (Grønnegård Christensen and Pallesen, 2001). First, to measure whether the chairman is perceived as being a political representative, a dummy variable is equal to one if the chairman is a current or former Parliamentary and/or government representatives, and zero otherwise.[64] The second proxy concerns the sector affiliation of the chairman at the time of appointment, and a dummy variable is set to one if the chairman was employed in the public sector, and to zero for the private sector.

CEO compensation contracts. The thesis looks at three different aspects of the CEO compensation package, which include the level of total cash compensation, the use of incentive schemes, and the adoption of a golden parachute. As previously noted, the inclusion of several compensation components extends the insights of prior research which has mostly dealt with single aspects of CEO pay. To further specify, the level of CEO cash compensation for a given year is the sum of fixed salary, miscellaneous

[64] Members of the Parliament include Parliamentary deputies, committee and party secretaries. Members of the government include ministers, states secretaries, and political advisers.

benefits, and annual bonuses.[65] As to incentive schemes, they refer to performance-based (contingent) pay systems which are tied to either short-term goals (annual bonuses) or long-term goals (stock options and shareholdings), or both. To account for the presence of incentive schemes, a dummy variable is set to one if the CEO compensation package includes performance-based pay components, and to zero otherwise. A golden parachute is defined as any contractual agreement that will potentially provide the CEO with a payment in the case of dismissal, and which exceeds the required notice of termination.[66] A dummy variable is set equal to one if the CEO is granted a golden parachute, zero otherwise.

Dividend payment ratio. In line with both practice and theory, dividend payment ratios are commonly computed as a percentage of annual earnings (dividend-to-earnings). However, since the thesis deals with accounting data for firms which operate in two different countries and in several different industries, I compute some additional sensitivity measures of the dividend payment ratio. Following prior research, these measures include dividend-to-sales and dividend-to-cash-flows from operational activities (La Porta et al., 2000).

Independent variables

Time trend. To account for time effects I use a continuous variable ranging from 1-6, where the value 1 corresponds to the sample year 2000, and so forth (6 = year 2005).

Nationality. Nationality is a dummy variable equal to one for Swedish SOCs and to zero for Norwegian SOCs.

Government party. Government party is a dummy variable set to one if the governance decision is being made under a right-wing government, and to zero if the government is left-wing.

---

[65] Since CEOs in firms under full state control are excluded from taking part in any long-term incentive programmes based on share value, the value of shareholdings and stock options is not included in the compensation measure. Additionally, the company annual reports in the sample rarely provide the kind of specific information which is needed to calculate stock option values.

[66] Even more precisely, a golden parachute contract is present if the *net notice* period plus the number of months with *severance pay* is larger than zero. Net notice period is defined as the number of months of which the notice period in the event of employer termination exceeds that of employee termination. Severance pay refers to the number of months of which compensation is paid to the CEO who has his or her employment 'severed' and which does not include the required notice of termination on any parts.

Corporate objective. To indicate the corporate objective pursued by different SOCs, they are divided into two groups. One group of firms operate under market conditions and requirements (commercial SOCs), while another group of firms primarily have special societal interests to fulfil (non-commercial SOCs).[67] Corporate objective is a dummy variable set to one if the firm is commercial and to zero if the firm is non-commercial.

Stock market listing. To account for stock market listing I use a dummy variable approach to distinguish between partly state-owned firms which are listed on the national stock exchange (i.e., publicly traded) versus those non-listed, with state ownership stake = 100% as the benchmark category.

State control. Three alternative measures of state control are employed. First, I use a dummy variable equal to one if the firm is partly owned by the state, and to zero if the state is the single owner. Second, I use the equity fraction held by the state to specify a linear relationship between state control and governance decisions. From a theoretical point of view, however, it seems even more interesting to include some measures that identify the relevant voting thresholds being specified in the Companies Act. In view of that, I extend the non-linear relationship of the dummy variable approach to distinguish between those SOCs in which the state holds super-majority ($<$ 100% and $\geq$ 66.66%), simple majority ($<$ 66.6% and $>$ 50%), negative control ($\leq$ 50% and $>$ 33.33%), or minority posts ($\leq$ 33.33%), with state ownership stake = 100% as the benchmark category. The cut-off points thus serve to classify SOCs into mutually exclusive categories of state control.

Co-investment characteristics. One aspect of co-investments relates to non-governmental ownership concentration and two alternative measures are employed. First, I use the equity fraction held by the largest co-investor to specify a linear functional form between ownership concentration and governance decisions.[68] Second, I use a dummy variable approach to investigate whether co-investor control occurs at a threshold, distinguishing

[67] In line with the Swedish government's reporting on state ownership, companies operating under market conditions are characterised by one or both of the following criteria: (1) they operate in a fully competitive market, and (2) the owner, the state, makes market requirements for earnings and return based on the risk profile. By contrast, companies with special societal interests are characterised by one or both of the following criteria: (1) the owner, the state, controls the activity in a tangible, direct way, and (2) they operate on a market with special conditions. *Source:* The Swedish Government Offices' Annual Reports on State-Owned Companies for the years 2000-2005.

[68] As shown by the descriptive statistics in Chapter 3, it is fairly common that the state share its ownership with one investor only. To account for this empirical fact, only the equity fraction of the largest co-investor is included in the analysis.

between those SOCs in which the largest co-investor holds simple majority (< 100% and > 50%) and negative control (≤ 50% and > 33.33%).[69] Along the lines of previous research, I also include a conventional cut-off point of 5% (see, for example, Gomez-Mejia et al., 1987; Tosi and Gomez-Mejia, 1989; Hambrick and Finkelstein, 1995). The last two dummy variables thus refer to 5% co-investor control (≤ 33.33% and ≥ 5%) and less than 5% co-investor control (< 5%). As before, state ownership stake = 100% serves as the benchmark category. Another aspect of co-investments relates to the identity of co-investors. Once again, I use a dummy variable approach to distinguish between those partly state-owned firms in which the largest co-investor is public versus non-public, with state ownership stake = 100% as the benchmark category.

Sponsor ministry. Sponsor ministry is a dummy variable set to one for SOCs under the control of the 'ownership ministry', and to zero otherwise. In the period covered by this study, the Norwegian Ministry of Trade and Industry and the Swedish Ministry of Industry, Employment and Communications are designated the role as ownership ministries.

Debt ratio. Debt ratio is measured by the SOC's debt to assets, defined as the firm's book value of total liabilities and commitments divided by book value of total assets.

Firm size. Because the state ownership portfolio spans several industries and includes both commercial and non-commercial companies, this makes it difficult to identify a uniform proxy for firm size. For instance, sales revenue is considered to be an invalid size-measure for many non-commercial SOCs. Validity is sought to be increased by using three alternative measures of firm size, including book value of equity, total assets, and number of employees.

Regional presence. Regional presence is a dummy variable set to one if the firm employs a regional workforce, and to zero otherwise.

Board size. Board size is measured as the number of corporate directors on the board, including employee representatives.

Compensation committee. Compensation committee is a dummy variable set to one if the board of directors has appointed a compensation committee, and to zero otherwise.

[69] The super-majority category is not included here as it rarely happens that co-investors are so dominant.

Chairman is CEO. To measure whether the chairman is a CEO a dummy variable equals one if the chairman is the top manager in another firm, zero otherwise.

CEO recruitment channel. To identify the recruitment channel a dummy variable equals one if the CEO is recruited from the private sector and zero if the CEO is recruited from the public sector or from within the firm.

CEO tenure. CEO tenure is measured by the top manager's number of years in position. Moreover, to evaluate the CEO's influences on the board, I use two measures of board independence (Westphal and Fredrickson, 2001; Bøhren and Strøm, 2005). One measure uses the tenure of the chairman (years in the chairman position) minus the tenure of the CEO. Another measure uses the tenure of the chairman (years in rank-and-file position included) minus the tenure of the CEO.

Growth opportunities. In line with prior studies, and to increase robustness, several proxies are used to capture firms' growth opportunities, including annual real growth rates of sales, earnings, fixed assets, total assets, and total cash flow (see, for example, La Porta et al., 2000).

Income level. Income level is measured by the firm's operating revenue (accounting income).

5.2.3 Data adjustments

At this point, a few questions concerning the measurement of variables still remain. First, can all continuous measures be held in raw form? Second, at what point in time should the different variables be measured in order to establish meaningful relationships between independent and dependent variables? As to the first question, it seems obvious that the financial data should be adjusted so as to account for year- and country-effects. Thus, all accounting figures are expressed in 2005 million NOK and adjusted for consumer price index (CPI) inflation.[70] Another issue relates to the fact that some continuous measures – like CEO pay levels, firm size, and income level – reveal substantial distributional skewness. But, since non-normal distribution is possibly a source of heteroscedasticity, a log-transformation is used to compress the scale in which the variables are measured (Gujarati, 2003, p. 421).

[70] Exchange rates are drawn from the Central Bank of Norway *(source*: http://www.norges-bank.no), whereas CPI numbers are drawn from Statistics Norway and Statistics Sweden (where the base year is set to 1998 (= 100) for Norway and to 1980 (=100) for Sweden) *(sources:* http://www.ssb.no and http://www.scb.se)

The second question concerns time-matching of variables. That is, we need to make sure that the independent variables are measured at such points in time so that they might actually have an impact on the dependent variables. In general, this suggests that some independent variables need to be lagged. This might be the case for financial data, which are normally revealed at year-end. Thus, in order for such figures to have an actual impact on those governance decisions that are made in the present year, financial data are lagged by one year. For instance, seeking to examine whether firm size measures (like equity) might have an influence on the CEO pay levels being observed in year 2005, we should use financial data from the preceding year (2004). However, since for many SOCs there is a problem of data unavailability prior to year 2000, some analyses are performed using both lagged and non-lagged independent variables. If the results are not altered by using non-lagged data, I thereby avoid missing the 2000-observations on the dependent variables. A more detailed discussion on the issue of time-matching of variables will be provided within the context of specific governance decisions.

5.2.4 Data sources

In collecting data about the aforementioned variables, several sources were consulted, including company annual reports, government ownership reports and White Papers, reports from the Norwegian *Riksrevisjonen*, on-line registers, Internet search engines, and, to a lesser extent, telephone/e-mail-interviews. More specifically, information concerning the board chairman variables was mainly collected from company annual reports and government ownership reports. Besides stating the name of the board chairman, these sources often provide information about the chairman's professional background as well as the time of appointment to the chairman position. In the Norwegian case, board chairman data were also obtained from the publicly available biographies of Parliamentary members and the registers of government deputies (both data sources cover extensive time periods).[71] If not available from secondary sources, board chairman data were identified by telephone/e-mail-interviews or by search on the Internet for the chairman's personal record. Data on CEO compensation packages were primarily collected from company annual reports. In those cases which compensation data were difficult to extract from annual reports, I consulted the Norwegian government's White Papers on the ministries' annual budgetary proposals (St.prp. no. 1), which provide information about CEO compensation in firms under full state control. Data on dividend payments were collected from company annual reports and cross-checked with government ownership reports and *Riksrevisjonen*'s annual reports to reveal

[71] See http://www.stortinget.no and http://www.regjeringen.no, respectively.

any inconsistency in data reporting (which, in some rare cases, might be due to differences in measurement). As regards the independent variables, data were mostly obtained from company annual reports and government ownership reports. However, since the Norwegian government only report data pertaining to a sub-sample of SOCs, secondary sources could not be used to classify every SOC in sample according to their corporate objective. To obtain complete information on this issue, I therefore asked for key informants in the sponsor ministries to complete the corporate classification.

5.3 Governance Equations

To identify the empirical strategy of this study, I first specify the governance functions that follow from the theoretical discussions in Chapter 4. As we recall from this discussion, some variables are posited to have an effect of more than one governance decision. But, surely, there are also some unique predictors to all three governance decisions. For expositional reasons, all equations are here written on general form. Moreover, at this stage, the equations are presented as if all observations were to be pooled, or combined, in ordinary least-square (OLS) regressions. Since the number of observations differs among sample companies, the data set is an unbalanced panel. As a matter of convention, i denotes the ith cross-sectional unit (firm) ($i = 1,\ldots, N$) and t the tth time period (year) ($t = 1,\ldots,T_i$) (note that T_i is used instead of T to allow for unbalanced data). Given this, the *board appointment* equation can be written as:

$$\text{Equation (1) } Y_{1it} = \alpha_{it} + \boldsymbol{\beta}\mathbf{X}_{1it} + \boldsymbol{\gamma}\mathbf{X}_{2it} + \boldsymbol{\delta}\mathbf{X}_{3it} + \boldsymbol{\omega}\mathbf{X}_{4it} + \varepsilon_{it}$$

In this equation, the dependent variable Y_1 describes the board chairman's professional background. In line with the variable definition above, Y_1 is measured both in terms of the chairman's political experience and his/her sector affiliation at the time of appointment. At the right-hand side of the equation, $\mathbf{X}_1$, $\mathbf{X}_2$, $\mathbf{X}_3$, and $\mathbf{X}_4$ are vectors of observed variables influencing the choice of a board chairman. Members of $\mathbf{X}_1$ include variables relevant to the reputation model, such as corporate objective and stock market listing. The vector $\mathbf{X}_2$ contains variables relevant to the re-election model, like state control and firm size. Moreover, the vector $\mathbf{X}_3$ includes the government party variable, which describes the ideology model. Lastly, the vector $\mathbf{X}_4$ includes the nationality variable, while all unobserved (and some even consciously omitted) variables influencing board appointments are summarised by the error term ε. Turning to the *CEO compensation* equation, it takes the form:

$$\text{Equation (2) } Y_{2it} = \alpha_{it} + \boldsymbol{\beta}\mathbf{Z}_{1it} + \boldsymbol{\delta}\mathbf{Z}_{2it} + \boldsymbol{\gamma}Y_{1it} + \boldsymbol{\omega}\mathbf{Z}_{3it} + \boldsymbol{\varpi}\mathbf{Z}_{4it} + \eta_{it}$$

According to this equation, Y_2 denotes the dependent variable, which is described by different aspects of the CEO compensation contract, including total compensation level, the use of incentive schemes, and the adoption of golden parachutes. $\mathbf{Z}_1$, Y_1, $\mathbf{Z}_2$, $\mathbf{Z}_3$, and $\mathbf{Z}_4$ are vectors of observed variables affecting the level and structure of CEO pay arrangements. In line with the hypotheses, members of $\mathbf{Z}_1$ represent those variables fitting the reputation-model of corporate directors, including corporate objective and CEO recruitment channel. The vector $\mathbf{Z}_2$ contains the state control variable, which indicates political influences. In accordance with Equation (1), Y_1 includes variables describing the board chairman's professional background. While, according to theory, Y_1 is a member of $\mathbf{Z}_1$, I refer to Y_1 separately to indicate that this variable is suspected of being correlated with the error term η (in Section 5.5 below, I explain why this might be the case). The variables included in $\mathbf{Z}_3$ describe managerial influences on compensation packages, such as CEO tenure and the presence of a compensation committee. Finally, the vector $\mathbf{Z}_4$ includes the nationality variable, whereas η is an error term capturing the effects of unobserved and omitted variables. The third equation deals with those factors affecting *dividend payments*.

$$\text{Equation (3) } Y_{3it} = \alpha_{it} + \beta\mathbf{\Pi}_{1it} + \gamma\mathbf{\Pi}_{2it} + \delta\mathbf{\Pi}_{3it} + \mu_{it}$$

The dependent variable Y_3, the dividend payment ratio, is measured in terms of dividend-to-earnings, dividends-to-sales, and dividend-to-cash-flow. $\mathbf{\Pi}_1$, $\mathbf{\Pi}_2$, and $\mathbf{\Pi}_3$ are vectors of observed variables influencing dividend payments. Members of $\mathbf{\Pi}_1$ involve variables relevant to the reputation model (which apply to both politicians and corporate directors), such as debt ratio and growth opportunities. To account for political influences, the vector $\mathbf{\Pi}_2$ contains variables relevant to the re-election model, such as income level and state control. As a final point, the vector $\mathbf{\Pi}_3$ contains the nationality variable, while the error term μ captures all unobserved and omitted effects.

5.4 Econometric Specifications[72]

To estimate the above governance equations, the thesis relies on panel data; that is, a combination of cross-section and time series data. Like most panel data sets, the data set used in this thesis is more oriented toward cross-section analyses than time series analyses in the sense that there are a large number of cross-sectional units and only a few time periods. More

[72] The literature on panel data used in this section is drawn from Baltagi (2001); Greene (2003); Gujarati (2003, Chapter 16); Hsiao (2002); Kennedy, (2003, Chapter 17); Petersen (2004); and Wooldridge (2006, Chapters 13 and 14).

specifically, the data set follows a sample of SOCs over a six-year period (2000-2005), and thus provides multiple observations on each variable for each firm in the sample. In this section, I look at the benefits of using panel data in the present context. Moreover, I describe the statistical techniques available for analysing panel data and their corresponding modeling assumptions. I also discuss whether there are some special characteristics of the present data set which make some of these approaches more appropriate than others.

5.4.1 Why use panel data?

In general, there are mainly two reasons for using panel data. First, repeated observations on each unit (e.g., firm) make it possible to control for unobserved explanatory variables. Second, panel data allows us to analyse change over time. This latter reason is yet of less importance in the present context, since some of the key variables are largely time-invariant.[73] At a more intuitive level, panel data are also used for the purposes of obtaining more information on the issues concerned and thereby also limiting the influence of any short-term irregularity inherent in annual data.

To understand why we should care about controlling for omitted variables, it seems constructive to address the homoskedasticity assumption underlying the classical model for ordinary least square regression (OLS). According to this assumption, the error term should have the same variance given any value of the independent variables. Specifically, this means that the relationship between independent variables and the dependent variable is constant across different cross-sectional units and through time. Similarly, the intercept is constant across different cross-sectional units and through time. Subsequently, the process affecting the error term would be the same for all units and for all years. Clearly, this assumption might be violated if we take into account the individuality of each unit. For instance, if our interest is in the effect of growth opportunities on dividend payments, we might raise the question of whether the growth opportunities variable has the same effect in the cross-section as in the time-series; that is, whether the expected difference in dividend payment ratios between low growth and high growth firms is the same as the expected dividend change when SOCs change their status from low growth to high growth firms. In particular, this suggests that there are two kinds of variation, one between cross-sectional

[73] The year-by-year descriptive statistics presented in Chapter 3 strongly suggests that some of the independent variables display little *within* variation. For instance, a manual inspection of the data shows that among the 96 SOCs in the full sample, only five firms were partly divested (from an original state ownership stake of 100%) in the sample period. Moreover, among the 10 firms that are publicly traded, only two were being listed on the national stock exchange during the sample period.

units and one within cross-sectional units (firm-specific effects). Moreover, the reason why firm-specific effects are possibly observed relates to the operation of excluded variables. For instance, all else equal, it might be that some firms have an historical record for being treated like political instruments, which affects their propensity to pay high dividends even when their growth opportunities improve. As will be further discussed below, one major advantage of panel data is that they help to control for such unobserved firm-specific effects.

5.4.2 How to analyse panel data?

In principle, panel data can be analysed by way of three models: Pooled OLS, the fixed-effects model, and the random-effects model. The pooling approach corresponds to what would be specified and estimated with cross-sectional data, only with more observations. In fact, pooling of data implies that each observation is treated as a separate observation without reflecting that it may come from the same firm. Using our above example, this means that if we are interested in analysing the impact of growth opportunities on dividend payments, we must be willing to assume that the growth–dividend relation is the same for all firms. Thus, we do not care about the identity of SOCs, only their assigned value on the growth opportunities variable. While I have already questioned this assumption, in terms of drawing attention to firm-specific effects, the pooling approach also suffers from other deficiencies. Most importantly, pooled OLS rests on the assumption that the error terms are not correlated across time (assumption of no serial correlation). However, as the panel data structure implies that each firm is surveyed repeatedly over several years, we might easily see how the error term might be carried over from one year to the next. Because the pooled OLS standard errors ignore this correlation, they will be incorrect, as will the test statistics. In addition, with pooled OLS there is a possibility that the t-values might be inflated, which eventually would lead to invalid inferences for marginal effects. This is particularly likely to occur in the case when there is little within variation in one or more of the independent variables *and* when the dependent variable remains fairly stable over time (like when only non-political chairmen are recruited to the board). In this case, the use of pooled data would imply that the 'same' observations are counted several times. But, since the standard errors will drop with an increasing number of observations, this means that pooled regression might incur inflated t-values.

Fortunately, there are other techniques that might help to reduce the problems of pooling data. In particular, both the fixed-effects and the random-effects models account for the presence of firm-specific effects in that they separate the error term into one time-invariant and firm-specific component, and one idiosyncratic component which varies within and between firms. The fixed-effects model is particularly appealing as it allows

unobserved variables to be correlated with the error term, thus resolving the endogeneity problem which is often associated with omitted variables. However, as the interest of the fixed-effects model is in making intra-firm comparisons (i.e., the impact of moving from one state to another), it is perceived as less relevant to the present data set. The reason is, as already noted, that some of our key independent variables are characterised by a high degree of time-invariance.[74]

Being interested in estimating the effects of largely time-invariant variables, the random-effects model becomes a more attractive alternative. Like the pooled OLS model, the random-effects model assumes that the independent variables are strictly uncorrelated with the error term. In addition, like pooled OLS, the random-effects model takes advantage of both cross-sectional and within-unit variation and it assumes that these effects are the same. Unlike the pooled OLS estimator, however, the random-effects estimator explicitly accounts for the fact that some observations pertain to the same firm. Specifically, this is achieved by computing a matrix-weighted average of the between and within estimators. While the *between* estimator makes comparisons between firms in their average outcomes (by taking the mean value of each variable for each firm across time), the *within* estimator uses the intra-firm variation (by subtracting from each variable its mean value over time for the firm). As to the question of how these computations are reflected in the random-effects equation, they affect both the intercept and the error term. More precisely, the intercept represents the mean value of all time-invariant and firm-specific intercepts, while the time-invariant and firm-specific component of the error term represents the random deviation of individual intercepts from this mean value (in addition, the error term comprises an idiosyncratic component).[75] The random-effects model thus views the intercepts as being randomly drawn from a larger population – so they may be interpreted as random and treated as though they were part of the error term. Due to this decomposition of the error term, the random-effects model is also capable of handling the problem of serial correlation. Specifically, it is now possible to use the generalized least squares estimator (GLS) as we have sufficient information about the form of the serial

[74] Not only is the interest of the fixed-effects model in making within-estimates, but it carries the drawback of actually *preventing* estimation of time-invariant variables.

[75] Simply stated, this means that although proposing different firm-specific intercepts, the intercept for each cross-sectional unit is assumed to arise from a common intercept (which is the same for all firms and over time). Subsequently, this means that the sample is treated as a random sample from a larger population. This assumption seems reasonable insofar as the present sample is not finite across time and space. Instead of focusing strictly on the sample at hand I therefore lend myself towards inference to a wider underlying population of SOCs.

correlation.[76] Finally, the averaging procedure of the random-effects model might help to reduce the potential problem of inflated t-values that are associated with time-invariant data. The reason is simple: Because the between estimator produces larger standard errors than pooled OLS (due to less efficient use of data, with only one observation per firm), this might in fact produce more reliable t-values.

Does this mean that the random-effects model is always superior to pooled OLS? Clearly, the answer to this question hinges on whether SOC heterogeneity (random effects) is really displayed in the analysis. If the variance of the intercept component of the composite error term is (close to) zero, this implies that the intercepts are not different from one another. Thus, we might rely on the error term to contain only such unobservable variables that vary within and between SOCs (i.e., idiosyncratic errors). In this case, OLS on the pooled data would then be the preferred estimator. To evaluate whether the pooled OLS model or the random-effects model is the most appropriate alternative, I use the Breusch-Pagan Lagrange Multiplier (LM) (for linear regression) and likelihood-ratio test (for logistic regression). In both cases, the random-effects model is run to test if the variance of the intercept component of the composite error term is zero.

5.4.3 How to handle endogeneity problems?

In both the pooled OLS and the random-effects models it is assumed that the independent variables are exogenous; that is, they are not correlated with the error term, because of an omitted variable, simultaneity, or both (assumption of no endogeneity).[77] Yet, in the present context, there are three reasons why this assumption might not hold. First, in all three Equations there is possibly an *omitted variable* bias as the unobserved firm performance variable is likely confounded with the observed state control variable. Second, in Equation (1) there seems to be a problem of *reverse causality* (simultaneity) between state control (independent variable) and the chairman's professional background (dependent variable). Third, there is the problem of *isolating the effects* of endogenous variables in Equation (2). While the first two problems are in fact resolved by the nature of data involved in the data set, the third problem possibly prompts the use of other methods. Below, I take a further look at each problem in turn.

As previously discussed, the heterogeneous nature of the state ownership portfolio (both with respect to corporate objective and sector

[76] Simply speaking, the GLS estimator transforms the original model to account for serial correlation patterns in the error terms.

[77] Also note that the assumption of no endogeneity is key to satisfy the assumptions of zero conditional mean, homodeskedasticity, and normality – all of which concern the error term.

affiliation) confines the type of empirical proxies that prove relevant for the sample as a whole. For this reason no performance measures are included among the independent variables, even though such measures are usually included in research on corporate governance. Yet, the primary concern is not related to the possibility that the explanatory power of the overall model is reduced. Instead, I worry about that firm performance is correlated with the independent variables – in particular, the state control variable.[78] For instance, this happens to be the case when the government wants to make privatisation 'look good' by selling out the healthiest SOCs first (Megginson and Netter, 2001). Accordingly, the choice of state control is not exogenously determined, which means we are likely to experience problems of spurious relationships caused by firm performance. The problem of state control being an endogenous independent variable is exacerbated by the fact that, in Equation (1), there is possibly some reverse causality between the chairman's professional background (in terms of competence) and firm performance (Hermalin and Weisbach, 1991, 1998). In other words, it is expected that SOC performance is both a result of board competence and itself a factor that influences the choice of corporate directors. Moreover, there is also a possibility that the relationship between state control (and perhaps stock market listing) and the chairman's professional background run both ways. For instance, anecdotal evidence would indicate that SOC boards being headed by private business executives could potentially drive the government's decision to (partly) sell out state shareholding and have the firms listed on the stock exchange.

At first glance, it seems that these problems can only be resolved to the extent that we continue looking for sound proxies of firm performance (or, alternatively, instrumental variables for the state control variable) to be included in the panel data models. In the context of the present data set, however, it seems that the problem of both omitted variables and reverse causality is somewhat alleviated by the simple fact that the state control variable is highly persistent over the sample period. More precisely, this means that any considerable changes in SOC performance over the sample period are not reflected in the state ownership structure (still, the question of whether performance changes are reflected in board appointment decisions goes unanswered). This argument is made even stronger as we take into account the fact that firm performance will not have an instant effect on the state divestment decision (which means that any correlation between state control and SOC performance need to involve *lagged* performance variable). As such, we might plausibly assume that the two variables are not correlated *within* the six-year period of study. Likewise, since the state control variable

[78] Note that, even if the fixed-effects model was considered as an appropriate alternative for the present panel data estimation, it would not solve the problem of time-varying omitted variables (like firm performance) that are correlated with the independent variables.

is (largely) time-invariant, this suggests that there is no reverse causality between state control and the chairman's professional background *within* the sample period. To conclude, we note that the time-invariance of the state control variable does not *resolve* the problems of omitted variables or reverse causality – it only helps to alleviate the bias in the random-effects estimator within the sample period. While the downside of this approach is that I also refrain from making statistical inference about causation, it still means that the chosen methods are defensible on econometric grounds. Thus, we are on safe ground for detecting empirical regularity between institutional features and firm characteristics on the one hand and governance decisions on the other.

One final source of endogeneity stems from the problem of isolating the effects of the endogenous variable Y_1, which appear in Equation (2). This type of endogeneity problem arises as (i) the dependent variable in Equation (1) (i.e., the chairman's professional background) is included as an independent variable in Equation (2), and (ii) some, but not all, of the independent variables included in Equation (1) are also hypothesised to have a bearing on CEO compensation contracts. Due to the latter, the key problem is that if we were to regress Y_1 on the observable variables in Equation (2), it means that Y_1 would be correlated with the error term η.[79] Even though this endogeneity problem can be resolved by using two-stage least square (2SLS) estimation, this method is not without caveats. In fact, due to large sample properties, the 2SLS estimates can have very large standard errors. Therefore, we should carefully consider whether 2SLS is even necessary.[80]

5.5 Logit Model for Binary Dependent Variables

Another special case of the present data set is that, in several cases, we would like to explain governance decisions with a binary outcome. For example, in the board appointment function, Y_1 is defined to indicate whether or not the chairman is a political representative, and whether or not the chairman is employed in the public sector at the time of appointment. Moreover, in the CEO compensation contract function, Y_2 indicates whether or not the CEO is offered incentive schemes, and whether or not the CEO is granted a golden parachute in case of dismissal (additionally, Y_2 indicates the continuous measure of total cash compensation). The key point is that,

[79] Note that there is not an identification problem, as the variables entering the different vectors in Equation (1) and (2) are not all the same.

[80] More specifically, we might compare OLS and 2SLS estimates to determine whether the difference is statistically significant. If not, we might simply stick to the former.Wooldridge (2006, pp. 532-533) describes this test procedure in some more detail.

because the dependent variable can take only two values, we cannot simply interpret any coefficient as the change in the dependent variable given a one-unit increase in the independent variable, holding all other variables fixed (Wooldridge, 2006, p. 252). Instead, with a binary dependent variable, we want the coefficients to say something about the *probability* of observing a particular event; for instance, the probability of SOCs adopting incentives schemes or golden parachutes.

From this view, using linear models to estimate the coefficients in models with binary outcomes would lead to systematic errors in the model and might produce unrealistic predicted outcomes that are greater than one (Wooldridge, 2006, pp. 260-261).[81] To handle these problems, I use a logistic regression model (*logit* model), which is a non-linear function with probabilities between one and zero. On general form, the logit function is defined as $L = \log[P/(1-P)] = \sum b_k X_k$, where L is the log odds, P is the probability of the dependent variable taking the value one, X_k's are independent variables, and b_k's are slope coefficients (estimated effects).[82] For instance, P refers to the probability that SOCs will be chaired by a political representative, the X_k's include various institutional and firm characteristics, and the b_k's are the estimated effects of such characteristics. What often complicates the logit model is that the interpretation of estimated effects is not very intuitive. In fact, the magnitude of the effects of the independent variables cannot be established simply by looking at the values of their coefficients. Yet, this problem is today easily resolved as many statistical programs (e.g., STATA) allow the computation of marginal effects on the probabilities of independent variables.

5.6 Final Remarks

The empirical strategy of the thesis is to establish appropriate econometric models that might help to investigate relationships between institutional features and firm characteristics on the one hand and governance decisions on the other. Although these relationships are sought to be derived from theory, we should note that the theory foundation in this field is rather scarce. For that reason, the empirical analysis does not involve any factual *tests* of theory with the aim of explaining as much variation as possible in

[81] More specifically, since the probability depends on the value of the independent variables, there must be heteroskedasticity in a linear modell. As a result, the standard errors are invalid, and so are the test statistics.

[82] One classical reference to the derivation of the logit formula is Hanushek and Jackson (1977). Simply speaking, the log odds represent a way of comparing whether the probability of a certain event is the same for two groups.

the dependent variables. Instead, the aim is more modest in that I look for empirical regularities in the data, which is based on theoretical reasoning about possible determinants of various governance decisions that lie under state authority.

As I discussed in this chapter, the cross-sectional nature of the panel data set suggests that data are estimated by using random-effects models (or, alternatively, pooled OLS). Moreover, while the time-invariance of key independent variables makes it possible to handle some of the endogeneity problems inherent in the model specifications, this also implies there is little possibility for making any statistical inferences about causation. For the present purpose, however, the analysis will likely provide us with a comprehensive understanding of the factors that drive governance decisions in the context of state ownership.

As to the reporting of regression results, I pay emphasis to both the statistical and economic (or practical) importance of variables (Wooldridge, 2002, pp. 142-145). Thus, I seek to reveal whether statistical significance is due to 'large' coefficients or small standard errors. In addition, I carefully discuss why some significant variables appear with an unexpected sign. Because the primary interest of the empirical analysis is in detecting empirical regularities, I run tests of multiple exclusion restrictions to see whether the independent variables are jointly significant. In random-effects models, these tests include the Wald statistic (for linear regression) and likelihood-ratio (for logistic regression) statistic. In pooled OLS models, the joint hypothesis test is conventionally performed by using the *F* statistic. In addition, the overall R-squared (i.e., the weighted average of the within- and between R-squared) is reported for linear random-effects models. Since there are no commonly accepted goodness-of-fit measures which apply to random-effects logistic regression models, I report only the likelihood-ratio statistic. For linear pooled OLS regression, the standard R-squared applies. All results are obtained by using STATA 9.0.

Chapter 6

Board Appointments: Empirical Evidence

Who is appointed to serve as chairmen of SOC boards, and why? Despite of the great controversy that often follows in the wake of political appointments (and sometimes appointments from private business as well) to SOC board positions, prior research has not developed systematic evidence on the board selection issue. This task is important, however, as only thorough analysis can help to substantiate or reject some of the myths and anecdotal evidence surrounding SOC board appointments. For instance, is it really so that a new government, once in office, will replace political chairmen from rival parties with their own political representatives? Moreover, will co-investors constrain political influences on SOC board appointments? Or, is it in fact more likely that each board selection process follows its own distinct logic rather than board recruitment patterns being the results of any concerted strategy? The aim of this chapter is to shed light on these issues by, first, providing a year-by-year description of the professional background of SOC chairmen. Thereafter, I seek to investigate the factors most relevant for understanding the motives of politicians in the board selection process. More precisely, I contrast the reputation, re-election, and ideology model to examine the probability that the SOC chairman is a political representative, and that the chairman is employed in the public or private sector at the time of appointment.

The remainder of this chapter is organised as follows: Section 6.1 picks up on the threads from previous chapters in providing a summary and specification of the theory, data and methods that are used to examine board appointments. Section 6.2 provides descriptive evidence about the political experience and principal occupation of SOC board chairmen. Section 6.3 analyses the factors that are expected to affect board appointments, while Section 6.4 concludes with an interpretation of findings and implications for public policy.

6.1 Theory, Data and Method: Recap and Specifications

As we recall from previous chapters, the following model is used to examine board appointments:

Probability that the chairman is a political representative (public sector affiliate) = f {corporate objective, stock market listing, state control, co-investors' ownership concentration, co-investor identity, visibility, sponsor ministry, debt ratio, government party, nationality, time trend, error term}.

In Chapter 4, I provided the theoretical arguments as to why these variables are considered to be important predictors of board appointments. To briefly recap the main ideas from this discussion, the reputation model starts from the assumption that politicians seek to appoint those types of board chairmen who seem the most qualified to handle the type of activity performed by the SOCs. To decide what type of competence is the most appropriate, it thus seems reasonable to look at the firm's corporate objective and whether the firm is listed on the stock exchange. By contrast, the re-election model suggests that politicians seek to appoint as board chairmen those candidates who are the most attentive to political signals. Accordingly, the competence of chairmen is of less importance than their presumed loyalty to the government-owner. Yet, there are several reasons why political influences on board appointments can be weakened. Perhaps the most important is the legal right and request of (mainly private) co-investors to protect their interests from being exploited. But there is also the fact that there is a limited pool of candidates suitable for political appointments to the chairman position, which may force the government-owner to prioritise those SOCs which are deemed most important to the voters. Moreover, principles of good corporate governance assert that political influence on board appointments should be avoided, and we expect the ownership ministry would be the most eager to signify adherence to such prescriptions. Additionally, debtholders might oppose political actions that do not serve the debt-paying ability of SOCs. As a third competing view, the ideology model posits that politicians will consider board appointments in view of their partisan profiles, which suggests that government party is included as a key predictor in the board appointment model. Finally, due to nation-specific institutional arrangements and potential time trends, I control for nationality and time effects. Table 6.1 provides a summary of variable definitions together with the predicted sign of bivariate relations between independent variables and the two board appointment variables.

Table 6.1. Summary of variable definitions and theoretical predictions.

Variables	Predicted sign
Dependent variables	
Chairman's professional background	
Dummy variable: Political (=1) versus non-political (=0) representative	
Dummy variable: Public (=1) versus private (=0) sector employee	
Independent variables	
Reputation model	
Corporate objective (hypothesis 1)	
Dummy variable: Commercial (=1) versus non-commercial (=0) objective	–
Stock market listing (hypothesis 2)	
Dummy variables: Listed firms under partial state control versus non-listed firms under partial state control, with state ownership stake = 100% as benchmark category*	–
Re-election model	
State control (hypotheses 3)	
Dummy variable: Partial (=1) versus full (=0) state ownership	–
Co-investors' ownership concentration (hypothesis 4)	
Dummy variables: Conventional and voting threshold levels with three cut-off points (5%, 33.34%, and 50.01%), and with state ownership stake = 100% as benchmark category**	–
Co-investor identity (hypothesis 5)	
Dummy variable: Non-public versus public co-investors, with state ownership stake = 100% as benchmark category***	–
Visibility (hypothesis 6)	
Continuous variable: Firm size (log equity)	+
Dummy variable: Regional presence (=1) versus non-regional presence (=0)	+
Sponsor ministry (hypothesis 7)	
Dummy variable: Ownership (=1) versus sectoral (=0) ministry	–
Debt ratio (hypothesis 8)	
Continuous variable: Debt to total assets	–

Ideology model	
Government party (hypothesis 9) Dummy variable: Right-wing (=1) versus left-wing (=0) government	–
Controls	
Nationality Dummy variable: Norway (=0) versus Sweden (=1)	+/–
Time trend Continuous variable ranging from 1-6 (2000,…,2005)	?

Note: A plus (minus) sign in a column indicates that the independent variable is expected to have a positive (negative) effect on political (public sector) board appointments. A combined plus/minus sign indicates that the prospective impact on board appointments is uncertain (theoretical ambiguity). A question mark indicates no strong *à priori* expectation regarding the sign of the independent variable.

* The predicted sign is valid when comparing listed and non-listed firms under partial state control to the benchmark category. In line with theory, however, I expect the major difference between the categories is found between listed SOCs and non-listed SOCs.
** The predicted sign is valid when comparing voting threshold levels to the benchmark category. In line with theory, however, I expect a successively stronger negative relationship between voting threshold levels and political and/or public sector representation on the board.
*** The predicted sign is valid when comparing non-public and public co-investors to the benchmark category. In line with theory, however, I expect the major difference between the categories is found between firms with non-public co-investors on the one hand and firms with public co-investors and fully state-owned firms on the other.

To increase the robustness of analysis, I also test for some alternative measures. The *state control* variable also includes the equity fraction held by the state. Additionally, I use a set of dummy variables indicating voting threshold levels with three cut-off points (33.34%, 50.01% and 66.67%) and state ownership stake = 100% as benchmark category. In line with theory, I expect a successively stronger positive relationship between these voting threshold levels and political (public sector) representation on the board. Similarly, *co-investors' ownership concentration* is also measured by the equity fraction held by the largest co-investor. The *firm size* variable includes the additional measures of total assets (log) and number of employees (log). The firm size variables and the debt ratio variables are used both non-lagged and with a one-year-lag.

To analyse the effects of independent variables on political (public sector) board appointments, it follows from Chapter 5 that data are drawn from the six-year SOC sample (2000-2005). Initially, I constructed this sample so as to cover data about chairmen's political experience and sector affiliation on an annual basis. Naturally, such data reporting makes perfect sense if corporate directors are appointed for one year at a time. Such practice corresponds to the Swedish case, where board members stand for re-election on a yearly basis.[83] If, however, corporate directors were to serve on the board for a period of more than one year, there would actually be no board appointments to register in the between-election years. This is the case in Norway, where company law prescribes that board members are elected for a period of two years.[84] Accordingly, the chairman is eligible for election only every second year. One important implication of the Norwegian practice is that if we include in the data set information about a board chairman in year *t+1* who was elected to the chairman position in year *t,* this would simply mean that we count the same governance decision once more (but, of course, yearly appointments might be observed in cases of voluntary or forced retirements from the chairman position). To avoid double counting of board appointments, which eventually would lead to inflated *z*-values, I therefore include only those years in which the chairman position actually stands for election.[85]

To identify the election years in the Norwegian sample, I examined the company annual reports. In those cases which no such information was provided, I conducted searches on the Internet to look for government documents, press releases or media coverage that could verify the election years. As a result, it was possible to identify most of the election years. In the few remaining cases, I simply added one year to the chairman's first known year in position (or, equivalently, one year was subtracted from the last known year in position). Following this procedure, the result was in a total number of 145 Norwegian board appointments in the sample period, of which 74 were classified as re-appointments and 71 as new appointments. In

[83] According to Swedish company legislation in the sample period, board members can serve on the board for the time period set in the firm's articles of associations, but for no longer than four year at a time (cf. Chapter 8, Article 10 of the Swedish Companies Act). As a rule, however, the Swedish state ownership policy states that board members are appointed for one year at a time, and should not belong to the same board for a longer period than eight years. Also note that, effective from 2006, the Swedish Companies Act makes the one-year appointment mandatory.

[84] Cf. Article 6-6 (Section 1) of the Norwegian Companies Act. Also note that this Article makes allowance for the mandatory period of board members to be set in the firm's articles of associations.

[85] Note that, when using logit models, z-values are used instead of t-values.

Sweden, a total number of 232 appointments were made in the six-year period, including 196 re-appointments and 36 new appointments.[86] Thus, the sample was reduced from an original set of 511 firm-year observations to 377.

Moreover, to obtain a proper test of the hypotheses, it is of crucial importance that data about board appointments are properly time-matched with the independent variables. While I have previously made the case for a one-year lagging of (possibly) time-variant independent variables, I now ask if it is possible to obtain even more precise measurements. For instance, since the chairman is elected at the general assembly (which meeting is normally held in the period April–June), this suggests that ownership variables are recorded at the time when the chairman is actually voted into office. This argument is particularly relevant if we recognise that any partial divestments of state ownership stakes which are formally agreed upon at the general assembly (and, as such, are not recorded at year-end *t-1*) would normally imply that co-investors are given influence in the board nomination process preceding the general assembly. Where possible, I therefore identified ownership stakes and the identity of co-investors at the time of the general assembly meeting. In cases with dispersed co-investments are used lagged ownership variables, since any more exact information about these variables is difficult to achieve without extensive efforts (and, most important, it would probably offer little or no additional explanatory power to the analysis). The same argument holds for the financial measures that include equity, total assets, and number of employees (firm size measures) as well as debt ratio. For all other variables, including localisation, sponsor ministry, government party, corporate objective and stock market listing, it was possible to identify their relevant value at the time of the general assembly meeting.[87]

However, while there are strong arguments for using (some) lagged variables I also want to avoid shrinking the sample size (which is unavoidable, due to the difficulty of achieving lagged financial data). More specifically, to test the ideology model, it is important that the sample includes as many board appointments as possible made by the left-wing Norwegian government in year 2000. For that reason, I perform separate analyses for samples with non-lagged and lagged measures, where caution needs to be made in terms of evaluating the non-lagged measures.

---

[86] Two firm-year observations were excluded from the Swedish sample due to missing data.

[87] Occasionally, it happens that a company is founded in year *t-1*, but is not recorded as fully operative before year *t*. While recording the chairman as being appointed in year *t*, the values of independent variables are set to correspond as far as possible to the time of election. In this way, I avoid to falsely assign any board appointment to, say, the 'wrong' government party.

To analyse the issue of board appointments, I use random-effects models, which allows the estimation of both cross-sectional effects and fixed company effects within the same equation. Also, I use logistic regression to account for the fact that the board appointment variables have binary outcomes, which means we test the probability that the chairman is a political representative (public sector employee).

6.2 Who Chairs the SOC Boards?

Our main interest is to find out whether the government, in its capacity as shareholder, is likely to appoint political representatives as chairmen of SOC boards.[88] Recalling from the above, I define as political representatives those people who are current or former Parliamentary and/or government deputies. Importantly, we should note that this is a very conservative measure of the chairman's political experience, which means that the analysis may in fact understate the political representation on SOC boards. For instance, I have not been able to systematically identify whether the chairman is a current or previous local government representative, or if the chairman perhaps is a key figure in party-politics but with no formal experience from national politics. Despite of this, Table 6.2 shows that the political representation on SOC boards is fairly strong. In Norway, 23% of the chairmen fall into the category of political representatives, while 77% of the chairmen have no political experience. Likewise, 30% of the chairmen in Swedish SOCs are current or former political deputies, while 70% are non-political. Moreover, these recruitment patterns are fairly stable over the six-year period (except for the year 2001 in the Norwegian sample). Thus, it does not seem that the nation-specific board practices (i.e., whether currently serving politicians are allowed to sit on SOC boards) have any significant impact on the tendency for political appointments.

[88] Appendix B provides an overview of the political affiliation of all board chairmen in Norwegian and Swedish SOCs over the sample period.

Table 6.2. Political representation on SOC boards.

	Norway			Sweden		
Year	Political	Non-political	*n*	Political	Non-political	*n*
2000	24	76	17	31	69	35
2001	14	86	21	29	71	38
2002	27	73	22	35	65	40
2003	27	73	33	28	72	40
2004	24	76	25	30	70	40
2005	19	81	27	28	72	39
Total	23	77	145	30	70	232

Note: The table shows, for every sample year, the fraction of political versus non-political chairmen who are appointed to the SOC boards in Norway and Sweden, respectively. *n* is the number of observations.

To gain an even richer understanding of the nature of political appointments, Table 6.3 describes whether political representatives are elected on party-political ground; that is, if they are appointed by their 'own' government or by rival government parties.[89] Interestingly, we note that while the fraction of political representatives on SOC boards is rather similar in Norway and Sweden, the two countries differ as regards the political affiliation of board chairmen. As shown in the table, the fraction of political chairmen who are appointed by their own government is significantly larger in Norway. In fact, the overall numbers tell us that, in Norway, 64% of the politically experienced chairmen are appointed by their political affiliates, while the similar number is Sweden is nearly 40%. Seeking to interpret this evidence, it is possibly easier to both identify and secure control with political rivals if they are currently holding Parliament seats. As to the more specific question of whether left-wing or right-wing governments are more inclined to appoint their own political representatives, the Norwegian data tells us that among the 25 political appointments made by the two right-wing governments, 14 chairmen are classified as political affiliates. By contrast, the left-wing government made a total of 8 political appointments, of which 7 chairmen are categorised as political affiliates. In Sweden, all board appointments in the sample period were made by a left-wing government.

[89] Chairmen are elected by their 'own' government if they have served (or are currently serving) as political representatives for the governing political party or coalition of parties, or for any of the political parties from which the (minority) government gains Parliamentary support.

Table 6.3. The political affiliation of board chairmen.

	Norway			Sweden		
Year	'Own' government	Rival government	*n*	'Own' government	Rival government	*n*
2000	75	25	4	27	73	11
2001	100	0	3	27	73	11
2002	67	33	6	29	71	14
2003	44	56	9	45	55	11
2004	67	33	6	50	50	12
2005	60	40	5	55	45	11
Total	64	36	33	39	61	70

Note: The table shows, for every sample year, the fraction of political chairmen who are appointed by their own versus rival governments in Norway and Sweden, respectively. *n* is the number of observations.

Another proxy for the chairman's professional background is given by sector affiliation; that is, we look at whether the chairman is recruited from the private or public sector at the time of appointment. According to Table 6.4, the most striking observation on this issue relates to the differing board recruitment pattern of Norway and Sweden. In Norway, 60% of the chairmen are recruited among private sector employees. By contrast, 70% of the chairmen in Swedish SOCs are recruited from the public sector. While this difference in recruitment pattern is non-trivial, one intuitive explanation is that the Norwegian state holds a larger fraction of partial ownership. Related to this, it should come as no surprise that when investing with others (private shareholders in particular) this might increase the possibility that chairmen are recruited from the private sector. But as we also know that the Norwegian state co-invests just as much with public investors as with private shareholders, this interpretation is not entirely satisfactory. From the point of view of Swedish SOCs, however, the public sector domination seems easier to explain, since the Swedish state is often represented on the SOC boards by currently serving politicians and/or state bureaucrats. Assuming that the government-owner seeks to exert profound influence over board decisions, it follows that state bureaucrats and political representatives are likely to serve as chairmen rather than as rank-and-file members of the boards.

Table 6.4. The board chairman's principal occupation.

	Norway			Sweden		
Year	Private sector	Public sector	*n*	Private sector	Public sector	*n*
2000	53	47	17	31	69	35
2001	62	38	21	32	68	38
2002	59	41	22	27	73	40
2003	52	48	33	30	70	40
2004	79	21	24	30	70	40
2005	56	44	27	31	69	39
Total	60	40	144	30	70	232

Note: The table shows, for every sample year, the fraction of board chairmen who are recruited from the private versus public sector. *n* is the number of observations (note that there is one missing value for sector affiliation in the Norwegian sample).

Again, however, some caution is warranted regarding the interpretation of results. Most importantly, by looking only at chairmen's sector affiliation at the time of appointment, we ignore the possibility that chairmen are considered as proper candidates due to their previous career track. In fact, the data might give a distorted picture of reality in those cases which chairmen have spend most of their career in the public sector but were recently employed in the private sector, or vice versa. Nevertheless, it seems reasonable to argue that chairmen's sector affiliation at the time of board appointment is an important proxy for their current *loyalty*. On the other hand, we cannot ignore the possibility that chairmen's former career track would have been a more suitable proxy for their *competence* requirements than their current position alone.

Finally, we should take into account that the two aspects pertaining to chairmen's professional background are not independent of each other. Instead, they partly overlap as both private and public sector employees are also classified as having political experience or not. Table 6.5 explores this issue and shows that, in Norway, chairmen with political experience are recruited both from the private and public sector, while non-politicians are more often recruited from the private sector. By contrast, all Swedish political representatives are recruited from the public sector, which reflects the fact that currently serving politicians are allowed to take seats on SOC boards. Among the non-political chairmen on Swedish boards, somewhat more are recruited from the public sector than the private sector.

Table 6.5. Political representation and sector affiliation on SOC boards.

	Norway					Sweden				
Year	___Political___		__Non-political__			___Political___		__Non-political__		
	Private	Public	Private	Public	*n*	Private	Public	Private	Public	*n*
2000	12	12	41	35	17	0	32	31	37	35
2001	5	9	57	29	21	0	29	32	39	38
2002	14	14	45	27	22	0	35	27	38	40
2003	18	9	33	40	33	0	27	30	43	40
2004	21	4	58	17	24	0	30	30	40	40
2005	8	11	48	33	27	0	28	31	41	39
Total	13	10	46	31	144	0	30	30	40	232

Note: The table shows, for every sample year, the fraction of board chairmen who are recruited from the private versus public sector according to political representation and nationality subsamples. *n* is the number of observations.

Overall, the descriptive data provides evidence of sufficient variation in the professional background of SOC chairmen so as to make further statistical analysis highly appropriate. Although the latter table suggests that I could benefit from using even more fine-grained categories, defined by different combinations of political experience and sector affiliation, such results quickly become unwieldy to interpret. The two aspects of chairman demography are therefore included as separate measures in the model.

6.3 Empirical Analysis

As we are now acquainted with the board recruitment patterns, it is time to investigate what factors might explain political (public sector) representation on SOC boards. The descriptive statistics (means and standard deviations) pertaining to the main variables are shown in Table 6.6. For ease of presentation, the table does not include any alternative measures, to which I return in the multivariate analysis. Except from the government party variable, all descriptive statistics are known from Chapter 3. Thus, no further comments upon these variables are needed (although, we should note that the present statistics might deviate somewhat from that of previous chapters, which is due some different measurement and sampling strategies). As regards which political party represents the government-owner, the table displays that, in the full sample, right-wing governments are responsible for 29% of the board appointments. While this leaves left-wing governments with an election rate of 71%, the government party variable demonstrates major national skewness. In fact, whereas, in Norway, right-wing politicians are in charge of 75% of the board appointments, all Swedish board

appointments are made by leftist politicians. Clearly, this indicates that we need to be careful in not confusing ideology and nationality effects.

Table 6.6. Descriptive statistics: Means and standard deviations.

	All SOCs			Norwegian SOCs			Swedish SOCs		
Variables	**Mean**	**St.dev.**	***n***	**Mean**	**St.dev.**	***n***	**Mean**	**St.dev.**	***n***
Political representation	0.27	0.45	377	0.23	0.42	145	0.30	0.46	232
Public sector employee	0.59	0.49	376	0.40	0.49	144	0.70	0.46	232
Corporate objective	0.50	0.50	377	0.37	0.49	145	0.57	0.50	232
Non-listed SOCs	0.23	0.42	377	0.36	0.48	145	0.14	0.35	232
Listed SOCs	0.09	0.28	377	0.08	0.28	145	0.09	0.29	232
State control	0.31	0.46	377	0.44	0.50	145	0.23	0.42	232
Largest co-investor simple majority	0.03	0.18	377	0.05	0.22	145	0.03	0.16	232
Largest co-investor negative control	0.07	0.25	377	0.08	0.27	145	0.06	0.25	232
Largest co-investor 5% control	0.16	0.37	377	0.25	0.43	145	0.10	0.31	232
Largest co-investor less 5% control	0.04	0.20	377	0.05	0.22	145	0.04	0.19	232
Largest co-investor non-public	0.19	0.39	377	0.21	0.41	145	0.17	0.37	232
Largest co-investor public	0.12	0.32	377	0.22	0.42	145	0.05	0.22	232
Equity (log)	2.75	1.23	374	2.49	1.35	143	2.90	1.13	231
Regional presence	0.60	0.49	377	0.55	0.50	145	0.63	0.48	232
Sponsor ministry	0.51	0.50	377	0.32	0.47	145	0.63	0.48	232
Debt ratio	59.1	26.3	377	60.6	23.7	145	58.2	27.7	232
Government party	0.29	0.45	377	0.75	0.44	145	0	0	232
Nationality	0.62	0.49	377	–	–	–	–	–	–
Time trend	3.63	1.66	377	3.74	1.62	145	3.56	1.69	232

Note: The table shows means and standard deviations for all main variables in the sample. Due to some different measurement procedures and sample strategy, the descriptive statistics might deviate somewhat from the statistics reported for the full sample (cf. the descriptive statistics displayed in Chapter 3).

An initial analysis of the relationships between all main variables is provided in Table 6.7, which shows bivariate correlations (Spearman's *rho*).[90] From the table, we note that some of the independent variables reflecting stock market listing, state control, and co-investment characteristics are highly correlated (variables 4–12 in the correlations matrix). This is not surprising, however, since these variables are all constructed from the same benchmark category; namely firms under full state control. The three variable groups thus reflect different ways of specifying the state ownership structure. To further explicate, a firm is basically under full or partial state control. But also, we might extract finer information about the characteristics of partly state-owned firms: The state ownership share might be high or low, the firms can be listed on the stock exchange or not, co-investments can be concentrated or dispersed, and co-investors might be private or public. Importantly, such information makes it possible to test some more advanced

[90] The reason for using Spearman correlation is due to the fact that one or both of the correlated variables are non-normal and non-linear.

hypotheses about the effects of firm characteristics. But, to avoid running into severe multicollinearity problems, the variables pertaining to state control, stock market listing, and co-investment characteristics need to be separately included in the models.[91] Additionally, we note from the table that the government party variable and the nationality variable display a strong positive correlation, which supports the descriptive statistics. The two variables are therefore separately analysed. Finally, to rule out the possibility that some of the other correlations between independent variables are causing estimation problems, I use the Variance Inflation Factor (VIF) test.[92] As the test shows no multicollinearity problems (all VIFs < 2.5), all of the remaining variables are included in the model.

[91] Naturally, some of the other alternative measures (not shown in the table) are also strongly internally related; for instance, the three firm size measures display significant positive correlations.

[92] Since the VIF test is not readily applied within the framework of random-effect models, I follow the approach of Menard (2002) who suggests that tests of multicollinearity can be fully transferred from procedures in OLS-regression. The reason is that the concern of multicollinearity is with the relationship among the independent variables, which means that the functional form of the model is not relevant to the estimation of multicollinearity. Accordingly, Menard suggests that we might simply run an OLS regression and ignore the results, but use the information that pertains to multicollinearity.

Table 6.7. Correlations among variables.

Variables	1	2	3	4	5	6	7	8	9	10	11
1. Political representation											
2. Public sector employee	0.28**										
3. Corporate objective	–0.06	–0.07									
4. Non-listed SOCs	–0.05	0.04	–0.23**								
5. Listed SOCs	–0.19**	–0.10*	0.31**	–0.14**							
6. State control	–0.18**	–0.02	–0.01	0.78**	0.46**						
7. Co-investor simple majority	–0.12*	0.07	–0.13*	0.36**	–0.06	0.28**					
8. Co-investor negative control	–0.10	–0.07	–0.12*	0.49**	–0.09	0.61**	–0.05				
9. Co-investor 5% control	–0.05	0.04	0.00	0.50**	0.34**	0.44**	–0.08	–0.12*			
10. Co-investor less 5% control	–0.13*	–0.12*	0.21**	–0.11*	0.63**	0.32**	–0.04	–0.06	–0.09		
11. Largest co-investor non-public	–0.09	0.00	0.16**	0.33**	0.66**	0.70**	–0.01	0.23**	0.47**	0.41**	
12. Largest co-investor public	–0.13*	0.00	–0.23**	0.68**	–0.11*	0.54**	0.43**	0.23**	0.37**	–0.08	–0.17**
13. Equity (log)	0.03	–0.12*	0.48**	–0.43**	0.40**	–0.15**	–0.19**	–0.26**	–0.09	0.32**	0.10
14. Regional presence	0.06	–0.02	0.17**	–0.16**	0.14**	–0.06	–0.09	–0.12*	–0.02	0.17**	0.05
15. Sponsor ministry	–0.01	0.10	0.45**	–0.10	0.19**	0.03	–0.14**	–0.09	0.09	0.10	0.22**
16. Debt ratio	–0.06	–0.03	0.12*	0.03	0.09	0.08	–0.15**	0.08	0.09	0.04	0.12*
17. Government party	–0.05	–0.23**	–0.17**	0.22**	0.01	0.19**	0.04	0.01	0.19**	0.01	0.06
18. Nationality	0.07	0.28**	0.19**	–0.24**	0.01	–0.21**	–0.06	–0.02	–0.19**	–0.02	–0.04
19. Time trend	–0.02	–0.04	–0.01	–0.00	0.06	0.02	–0.00	–0.02	0.03	0.02	0.03

Note: The table shows Spearman correlation coefficients. * $p < 0.05$ (two-tailed); ** $p < 0.01$ (two-tailed).

Table 6.7. ***(Continued)***

Variables	12	13	14	15	16	17	18
1. Political representation							
2. Public sector employee							
3. Corporate objective							
4. Non-listed SOCs							
5. Listed SOCs							
6. State control							
7. Co-investor simple majority							
8. Co-investor negative control							
9. Co-investor 5% control							
10. Co-investor less 5% control							
11. Largest co-investor non-public							
12. Largest co-investor public							
13. Equity (log)	–0.36**						
14. Regional presence	–0.13*	0.52**					
15. Sponsor ministry	–0.19**	0.25**	0.20**				
16. Debt ratio	–0.07	–0.06	–0.08	0.06			
17. Government party	0.23**	–0.12*	–0.09	–0.22**	0.03		
18. Nationality	–0.26**	0.15**	0.07	0.30**	–0.02	–0.80**	
19. Time trend	0.02	0.05	–0.03	0.12*	–0.06	0.30**	–0.06

Turning to the dependent variables, we find a significant positive correlation between political representation and public sector affiliation, which is ascribed to the Swedish practice of appointing currently serving politicians to the SOC boards. As regards the effects of independent variables, the correlation matrix indicates that only some of the predicted relationships find empirical support. In particular, we note that there is a significant negative relationship between stock market listing and political representatives on the boards. In line with the theory, we also find that state control is significantly and negatively correlated with political appointments. Apparently, therefore, firms under partial state control are less likely than fully state-owned firms to be headed by persons with political experience. Interestingly, it seems that the mere presence of co-investors is more important than the level of co-investor concentration as such, since both high and low concentration levels are negatively correlated with political representation. However, there is also the possibility that the effects of low (< 5%) co-investment concentration can mask the effects of listing, since the two measures are strongly correlated. Additionally, we find that political representation is negatively correlated with both non-public and public co-investors (note that only the latter is significant). None of the remaining variables are significantly correlated with political representation.

As regards the chairman's sector affiliation, the correlation analysis reveals a slightly different pattern. In this case, both government party and nationality are significantly related to public sector employment. While the latter finding supports the descriptive evidence that public sector employees on SOC boards are more common in Sweden than in Norway, the first result indicates that right-wing politicians are less likely than leftist politicians to appoint public sector employees as chairmen of SOC boards. Moreover, stock market listing, firm size, and the lowest level of co-investor ownership concentration all display significant negative correlations with public sector affiliation.

While the size of all bivariate associations between independent variables and the two dependent variables are only modest, this suggests that the explanatory power of the model is fairly weak. The results from the random-effects logistic regression analyses (shown in Tables 6.8–6.12) mainly confirm this allegation as the likelihood-ratio statistics indicate that the independent variables are jointly insignificant (with some exceptions, due to model specifications and subsample analyses). Also, an inspection of the error term shows that a large proportion of the total error variance is due to firm-specific factors and not to cross-sectional differences (with nearly all *rho* in the full sample > 0.70). Correspondingly, test statistics show strong support for the random-effects model over pooled OLS, as given by the likelihood-ratio test for logistic regression ($p < 0.000$).

With the aim of giving a thorough, yet reader-friendly, account of the multivariate regression results, I distinguish between full sample

analyses (Tables 6.8–6.9) and subsample analyses, where the latter is guided by the criteria of state control, government party, and nationality (Tables 6.10–6.12, respectively). To formally test whether the regression coefficients are significantly different across these subgroups, I also perform moderated regression analyses, which include interactions between all independent variables and the relevant subsample variables. The moderated regressions results are shown in Appendix D, while the marginal effects pertaining to the logistic regression coefficients are displayed in Appendix E. In the following, I report and discuss these results in some more detail.

Table 6.8. Random-effects logistic regression analysis with political experience as dependent variable. Main effects, full sample.

Independent variables	Model 1		Model 2		Model 3		Model 4		Model 5	
Intercept	–2.088*	(1.545)	–2.454	(1.616)	–1.991	(1.560)	–1.941	(1.587)	–2.179	(1.594)
Reputation model										
Commercial objective	–1.656*	(0.915)	–1.702*	(0.927)	–1.778*	(0.924)	–1.682*	(0.912)	–1.683*	(0.914)
Re-election model										
State control	–1.309	(0.863)	–1.232	(0.873)						
State ownership < 100% and ≥ 66.67%					0.813	(1.242)				
State ownership < 66.67% and > 50%					–1.144	(1.661)				
State ownership ≤ 50%					–2.962**	(1.334)				
Largest co-investor < 100% and > 33.33%							–1.438	(1.430)		
Largest co-investor ≤ 33.33 %							–1.375	(1.027)		
Largest co-investor non-public									–1.326	(1.509)
Largest co-investor public									–0.975	(1.282)
Equity (log)	0.702	(0.448)	0.712	(0.452)	0.690	(0.448)	0.662	(0.453)	0.717	(0.458)
Regional presence	–0.700	(0.996)	–0.749	(1.005)	–0.401	(1.000)	–0.640	(0.995)	–0.675	(0.992)
Ownership ministry	–0.371	(0.702)	–0.434	(0.711)	–0.350	(0.703)	–0.378	(0.701)	–0.337	(0.709)
Debt ratio	–0.004	(0.015)	–0.004	(0.015)	–0.006	(0.015)	–0.004	(0.015)	–0.004	(0.015)
Ideology model										
Government party	–0.285	(0.686)			–0.611	(0.718)	–0.285	(0.693)	–0.286	(0.688)
Controls										
Nationality			0.677	(0.882)						
Time trend	–0.013	(0.127)	–0.025	(0.117)	–0.006	(0.127)	–0.009	(0.127)	–0.012	(0.127)
Number of firm/year observations	374		374		374		374		374	
Number of firms	96		96		96		96		96	
Rho	0.75		0.76		0.74		0.75		0.76	
LR chi2	10.51		10.95		15.29		11.39		10.12	

Note: The table reports unstandardised regression coefficients with standard errors in parentheses. Rho denotes the proportion of total error variance contributed by the panel-level error component. The LR chi2 (likelihood-ratio) statistics report whether the independent variables are jointly significant. * $p < 0.10$ (two-tailed); ** $p < 0.05$ (two-tailed); *** $p < 0.01$ (two-tailed).

Table 6.9. Random-effects logistic regression analysis with sector affiliation as dependent variable. Main effects, full sample.

Independent variables	Model 1		Model 2		Model 3		Model 4		Model 5	
Intercept	2.827*	(1.559)	1.009	(1.488)	2.665*	(1.436)	2.428	(1.477)	2.870*	(1.506)
Reputation model										
Commercial objective	–1.093	(0.877)	–1.224	(0.907)	–1.182	(0.880)	–1.109	(0.875)	–1.133	(0.879)
Non-listing	0.304	(0.907)								
Listing	0.853	(1.310)								
Re-election model										
State control			0.896	(0.782)						
State ownership < 100% and ≥ 66.67%					0.191	(1.211)				
State ownership < 66.67% and > 50%					–0.871	(1.381)				
State ownership ≤ 50% and > 33.33%					1.320	(1.306)				
State ownership ≤ 33.33%					2.117	(1.538)				
Largest co-investor < 100% and > 50%							1.639	(2.072)		
Largest co-investor ≤ 50% and > 33.33%							–0.433	(1.297)		
Largest co-investor ≤ 33.33% and ≥ 5%							1.246	(1.014)		
Largest co-investor < 5%							–0.533	(1.453)		
Largest co-investor non-public									1.247	(0.983)
Largest co-investor public									0.056	(1.141)
Equity (log)	–0.527	(0.419)	–0.564	(0.400)	–0.514	(0.397)	–0.408	(0.401)	–0.520	(0.405)
Regional presence	–0.158	(0.935)	–0.125	(0.948)	–0.145	(0.964)	–0.212	(0.932)	–0.159	(0.938)
Ownership ministry	0.266	(0.707)	–0.070	(0.735)	0.360	(0.713)	0.324	(0.706)	0.148	(0.716)
Debt ratio	–0.006	(0.014)	–0.006	(0.014)	–0.006	(0.014)	–0.005	(0.014)	–0.007	(0.014)
Ideology model										
Government party	–1.621**	(0.637)			–1.597**	(0.646)	–1.671***	(0.641)	–1.690***	(0.643)
Controls										
Nationality			3.721***	(0.898)						
Time trend	0.073	(0.124)	–0.019	(0.115)	0.084	(0.125)	0.073		0.077	(0.125)
Number of firm/year observations	373		373		373		373		373	
Number of firms	96		96		96		96		96	
Rho	0.76		0.76		0.75		0.75		0.76	

LR chi2	12.37	24.62***	15.40	14.94	13.51

Note: As to the notation, see the note in Table 6.8.

Table 6.10. Random-effects logistic regression analysis by state control subsamples.

Independent variables	**Political experience**				**Sector affiliation**			
	Full state control		Partial state control		Full state control		Partial state control	
Intercept	–1.831	(1.873)	–4.371	(3.177)	4.175**	(1.819)	–1.392	(4.133)
Reputation model								
Commercial objective	–1.871*	(0.982)	–0.778	(2.745)	–0.958	(0.955)	–7.885**	(3.255)
Non-listing							0.431	(3.122)
Listing							–1.999	(3.290)
Re-election model								
Equity (log)	0.521	(0.552)	–0.076	(1.015)	–0.595	(0.525)	1.402	(0.964)
Regional presence	0.334	(1.204)	–3.335*	(1.723)	–0.652	(1.142)	0.293	(1.677)
Ownership ministry	–0.414	(0.753)	2.552	(2.003)	–0.315	(0.799)	4.093**	(1.851)
Debt ratio	–0.006	(0.017)	–0.004	(0.033)	–0.018	(0.017)	0.034	(0.029)
Ideology model								
Government party	–0.434	(0.842)	0.366	(1.466)	–2.439***	(0.886)	0.637	(1.219)
Controls								
Time trend	–0.037	(0.139)	0.352	(0.344)	0.172	(0.142)	–0.599*	(0.345)
Number of firm/year observations	258		116		257		116	
Number of firms	76		36		67		36	
Rho	0.74		0.79		0.75		0.78	
LR chi2	7.71		5.96		12.58*		12.51	

Note: As to the notation, see the note in Table 6.8.

Table 6.11. Random-effects logistic regression analysis by government party subsamples.

Independent variables	Political experience				Sector affiliation			
	Left-wing government		Right-wing government		Left-wing government		Right-wing government	
Intercept	–1.689	(1.791)	–2.420	(3.009)	2.307	(2.039)	3.611	(2.650)
Reputation model								
Commercial objective	–2.184**	(1.050)	0.677	(2.290)	–1.492	(1.077)	–1.459	(1.911)
Non-listing					–0.101	(1.335)	1.556	(1.287)
Listing					0.501	(1.961)	0.981	(2.233)
Re-election model								
State control	–2.189*	(1.172)	–0.751	(1.570)				
Equity (log)	0.491	(0.543)	1.582**	(0.781)	–0.718	(0.542)	0.076	(0.615)
Regional presence	0.033	(1.146)	–3.492*	(1.832)	0.398	(1.177)	–2.518*	(1.406)
Ownership ministry	0.292	(0.782)	–3.670*	(2.183)	–0.202	(0.849)	1.584	(1.714)
Debt ratio	–0.006	(0.017)	–0.017	(0.029)	0.012	(0.177)	–0.039	(0.025)
Controls								
Time trend	–0.025	(0.139)	–0.070	(0.359)	0.226	(0.149)	–0.422	(0.308)
Number of firm/year observations	267		107		267		106	
Number of firms	72		56		72		56	
Rho	0.75		0.74		0.79		0.72	
LR chi2	8.90		12.72*		9.53		10.41	

Note: As to the notation, see the note in Table 6.8.

Table 6.12. Random-effects logistic regression analysis by nationality subsamples.

Independent variables	Political experience				Sector affiliation			
	Norway		Sweden		Norway		Sweden	
Intercept	–2.194	(2.414)	–0.899	(2.244)	2.796	(2.103)	5.419**	(2.689)
Reputation model								
Commercial objective	–0.524	(1.695)	–2.180*	(1.255)	–1.326	(1.458)	–1.675	(1.288)
Non-listing					1.253	(1.038)	–0.375	(2.131)
Listing					1.469	(1.672)	0.651	(2.461)
Re-election model								
State control	–0.466	(1.197)	–3.512*	(1.819)				
Equity (log)	1.642**	(0.705)	–0.507	(0.739)	0.061	(0.520)	–1.711**	(0.773)
Regional presence	–3.973**	(1.690)	2.452	(1.611)	–2.469*	(1.267)	3.025*	(1.558)
Ownership ministry	–2.236	(1.497)	–0.202	(0.879)	1.027	(1.253)	–1.680*	(1.001)
Debt ratio	–0.017	(0.024)	0.008	(0.020)	–0.029	(0.021)	0.016	(0.021)
Ideology model								
Government party	0.462	(1.189)			0.759	(1.008)		
Controls								
Time trend	–0.203	(0.335)	0.048	(0.149)	–0.467	(0.290)	0.295*	(0.165)
Number of firm/year observations	143		231		142		231	
Number of firms	56		40		56		40	
Rho	0.72		0.76		0.69		0.81	
LR chi2	14.78*		10.40		13.13		18.66**	

Note: As to the notation, see the note in Table 6.8.

6.3.1 How to explain political board appointments?

Focusing first on the probability that SOC boards are headed by political representatives, Table 6.8 shows the results from the multivariate analysis. Because some of the independent variables are alternative measures (which means that Hypotheses 2–5 need to be tested separately), the table displays a number of alternative specifications of the basic model. Before commenting on the results from this analysis, we note that stock market listing is excluded from the table. Interestingly, this is due to the fact no political representatives are actually observed in the chairman position among listed SOCs, which means that this dependent variable is completely determined by stock market listing (Hypothesis 2). By contrast, non-listed firms under partial state control are not found to differ significantly from fully state-owned firms. Thus, there are strong indications that stock market listing rather than state control is the key factor to explain (non-)political board appointments. This notion is supported by the results from Model 1, in which the state control variable appears to be negative (consistent with theory), but insignificant. Accordingly, Hypothesis 3 is not supported. Neither is there corroboration for Hypotheses 6 through 9. In fact, the model estimates only lend some support to Hypothesis 1, but merely at the 10% level. Nonetheless, it seems that political representatives are less likely elected as chairmen in commercial SOCs than in non-commercial SOCs (coefficient of –1.656; $p < 0.10$). More precisely, compared to non-commercial SOCs, the SOCs that subscribe to a commercial objective have a 14% lower probability of being chaired by political representatives.[93] Model 2 produces similar results to that of Model 1, as the former only replaces the government party variable with that of nationality. Thus, neither political ideology nor nationality has any direct influence on political board appointments. We also note that the results in Model 1 and 2 are not significantly changed when using alternative measures of firm size, or when using lagged instead of non-lagged variables.

Attempting to explore whether the state control dummy is perhaps too imprecise to capture the effect of partial state control, Model 3 includes the threshold levels of state influence. Interestingly, initial analysis revealed that no political representatives are observed among those SOCs in which the state holds minority posts (≤ 33.33%). To obtain a more relevant classification of the state control variable I therefore combined the minority

[93] Using some finer specifications of the type of activity performed by SOCs, Appendix F illustrates how political appointments vary by sector classification. Overall, this descriptive evidence shows that political representatives are present in nearly all relevant sectors – with some between-group variations. Yet, the small number of firm/year observations within each sector makes it difficult to draw any sound conclusions on whether there exists any noteworthy board selection pattern across sectors.

post category with that of negative control. From this, it follows that firms in which the state holds less than simple majority are less likely chaired by political representatives than is the case for fully state-owned firms (coefficient of –2.962; $p < 0.05$; marginal effect of –12%).[94] No significant effects are found for higher threshold levels of state ownership. The results thus provide no support for the expectation of a successively stronger positive relationship between threshold levels of state control and political representation on the board. Furthermore, in examining the effect of co-investors' ownership concentration, the results showed that there are no political representatives within the two categories which the largest co-investor holds less than 5% control and simple majority. Therefore, I reconstructed the dummy variables describing co-investment concentration so as to distinguish between firms in which the largest co-investor holds (at least) negative control versus less than negative control. As shown by Model 4, the two dummy variables have the expected negative effect, but are not significant. Interestingly, this indicate that there is a curvilinear (inverted U-form) relationship between the ownership concentration of the largest co-investor and political board appointments, which provides mixed support for Hypothesis 4.[95] However, this result is not surprising, since we have already noted that a low level of co-investor ownership concentration is highly correlated with stock market listing (which is a perfect predictor of political board appointments). Finally, Model 5 tests the effect of co-investor identity and finds that both non-public and public co-investors are negatively related to the probability that SOC boards are headed by political representatives. Yet, these effects are not significant, which means that Hypothesis 5 is not confirmed.

To examine whether the results from the full sample are sensitive to whether firms are fully or partly owned by the state, I use a split sample approach. By this means, Table 6.10 reports that the significant effect of corporate objective is valid only for the group of fully state-owned firms (coefficient of –1.871; $p < 0.10$; marginal effect of –23%). Thus, the before-mentioned negative relationship between commercial SOCs and the probability that SOC boards are headed by political representatives pertains mainly to the group of firms that are 100% state-owned (the subgroup difference is, however, not significant), which provides even stronger support for the reputation model. A more puzzling result is that regional

[94] Using the state equity fraction instead of threshold levels of state control, the former was found to be significantly related to the probability that firms are chaired by political representatives (coefficient of 0.045; $p < 0.05$; marginal effect of 0.003).

[95] Using the equity fraction of the largest co-investor instead of threshold levels of co-investor ownership concentration, the equity fraction was not found to have a significant effect on the probability that firms are chaired by political representatives.

presence has a significant and negative impact on political board appointments among partly state-owned firms (coefficient of –3.335; $p < 0.10$; marginal effect of –8%), but has no significant effect among firms under full state control. Yet, it is possible to trace this subgroup difference (which is significant in terms of interaction effects) to co-investors' concern that politicians will make strategic use of regionally present SOCs; for instance to secure a high level of employment.

Seeking to find out whether these results are clarified by additional subsample analyses, Table 6.11 reveals that the negative impact of SOC commercial orientation on political board appointments is mainly due to left-wing governments (coefficient of –2.184; $p < 0.05$; marginal effect of –22%). However, as the results in Table 6.12 indicate that the corporate objective variable is only significant in the Swedish subsample (coefficient of –2.180; $p < 0.10$; marginal effect of –21%), this also suggests that there is a nationality rather than an ideology effect at work. Although none of these subgroup differences are significant, the results still indicate that corporate objective as a strategic indicator of political appointments is mainly due to the Swedish government-owner. Moreover, the results in Tables 6.11–6.12 show that the effect of regional presence is significant only within the right-wing government subsample (coefficient of –3.492; $p < 0.10$; marginal effect of –22%) and is accordingly subscribed to Norwegian SOCs (coefficient of –3.973; $p < 0.05$; marginal effect of –32%). However, as only the nationality subgroup difference is significant, it seems that the scepticism towards political influences on regionally present SOCs is due to nationality rather than ideology. Interestingly, the impact of firm size follows the same pattern, but with the opposite sign: Equity has a significant and positive effect on political board appointments within the right-wing government subsample (coefficient of 1.582; $p < 0.05$; marginal effect of 7%) and also within the Norwegian subsample (coefficient of 1.642 $p < 0.05$; marginal effect of 8%). Thus, in Norway, 'visibility' has a dual impact in that firm size and regional presence work in opposite ways – a result which indicates mixed support for Hypothesis 6.

From Table 6.11, we also note that, within the right-wing government subsample, there is a significant and negative effect pertaining to the ownership ministry on the probability that SOC boards will be chaired by political representatives (coefficient of –3.670; $p < 0.10$; marginal effect of –14%). Because the moderated regression results confirm that sponsor ministry significantly interact with government party, this provides some support for Hypothesis 7, but is inconsistent with the supposition that such commitment devices would be more dominant under leftist governments. Moreover, since ownership ministry has not a significant bearing on political appointments within the nationality subsample (yet, the sign is still negative within the Norwegian subsample), it thus seems that the sponsor ministry effect is mainly due to ideology rather than nationality effects.

Finally, it appears that state control has yet a significant effect on political board appointments, beyond that of stock market listing. In line with the results in Tables 6.11–6.12, there is a negative effect of partial state control that is associated with left-wing governments (coefficient of –2.189; $p < 0.10$; marginal effect of –13%) and Swedish firms (coefficient of –3.512; $p < 0.10$; marginal effect of –17%). However, while this suggests that the mere presence of co-investors might have a negative bearing on political board appointments, none of these subgroup differences are significant.

6.3.2 How to explain chairmen's sector affiliation?

If we now look at the probability that SOC boards are headed by public sector (versus private sector) employees, the multivariate analyses display some slightly different results. While Table 6.9 shows that most of the hypothesised relationships are insignificant (meaning that Hypotheses 1–8 are not confirmed), the government party and nationality variables appear as significant predictors of chairmen's sector affiliation.[96] More precisely, the results from Model 1 (as well as Model 3–5) show that right-wing governments are less likely than left-wing governments to recruit chairmen from the public sector (in Model 1 there is a coefficient of –1.621; $p < 0.05$; marginal effect of –38%). However, the findings also confirm the effect of nationality in that Model 2 (replacing government party with nationality) reveals a positive association between Swedish firms and the likelihood that public sector employees chair the SOC boards (coefficient of 3.721; $p < 0.01$). In practical terms, there is in fact a 71% higher probability that public sector employees will be recruited to the chairman position in Sweden than in Norway. But, since there is also a strong positive relationship between government party and nationality, it is not possible to discern the two effects in the full sample. Seeking to disentangle ideology and nationality effects by means of nationality subsample analysis (Table 6.12), we note that there is no significant relationship between government party and the sector affiliation of chairmen. While this result suggests that Hypothesis 9 is not substantiated, it also provides evidence that the Norwegian practice of prohibiting currently serving politicians and state bureaucrats to serve on SOC boards certainly lead to fewer public sector employees in the chairman position.

Although, in the full sample, there are no significant effects related to Hypotheses 1–8, some of these relationships actually turn up differently in

[96] Also note that the results in Model 1 and 2 are not sensitive to alternative measures of firm size. When using lagged instead of non-lagged variables, the government party variable now appears to be significant only at the 10% level, which is probably to due to fewer observations.

the subsample analyses. Particularly, Table 6.10 indicates that there are some significant subgroup differences between firms under full and partial state control, which is confirmed by the moderated regression analysis. First, there is a negative and significant association between commercial orientation and the probability that SOC boards are chaired by public sector employees (coefficient of –7.885; $p < 0.05$) – but this effect is evident only within the group of partly state-owned firms. In fact, compared to non-commercial SOCs, there is a 96% lower probability that commercial SOCs are recruiting their chairmen from the public sector.[97] Second, among partly state-owned firms, there is a positive and significant relationship between ownership ministry and the probability that SOC chairmen are public sector employees (coefficient of 4.093; $p < 0.05$; marginal effect of 76%), while no such relationship exists among fully state-owned firms. This result is, however, at odds with theoretical expectations, since it was expected that both partial state control and the fact that SOCs are being administered by the ownership ministry should have a negative effect on the probability that SOC boards will be headed by public sector employees. Thus, in contrast to Hypothesis 7, it seems that the ownership ministry is far more eager than sectoral ministries to secure public influence on SOC boards, but that this effect is only valid in the group of firms under partial state control. Third, we note that the government party effect (which is actually a nationality effect) only appears within the group of fully state-owned firms (coefficient of –2.439; $p < 0.01$; marginal effect of –54%), which indicates that Swedish SOCs are less likely than their Norwegian counterparts to appoint public sector employees to the chairman position in firms under full state control. Fourth, there is a significant negative time trend effect within the group of firms under partial state control (coefficient of –0.599; $p < 0.10$); from one year to another there is a 14% lower probability that SOCs will be chaired by public sector employees. Taken together, therefore, there are different factors at work in the state control subsamples with regard to the probability that SOC chairmen are recruited from the public sector.

Attempting to explore if the determinants of sector affiliation differ according to government party subsamples, the results in Table 6.11 largely refute this notion. The only exception is the result that, in the right-wing government subsample, regional presence is significantly and negatively related to public sector representation at the SOC boards.[98] As the nationality

[97] Again, we might ask if even better predictions could be made if breaking SOCs down into more specific sector groups. As in the case of political board appointments, the descriptive evidence in Appendix F shows that public sector employees are present in nearly all relevant sectors – with some variations across sectors and countries.

[98] While the moderated regression show that there are some significant subgroup differences with regard to firm size (equity) and time trend, none of these effects are significant within the subsamples.

subsample analysis (Table 6.12) and moderated regression results reveal, however, this visibility effect is due to nationality rather than ideology (coefficient of –2.469; $p < 0.10$; marginal effect of –49%). By contrast, in the Swedish subsample, there is both a positive effect of regional presence and a negative effect of firm size on the probability of recruiting public sector employees (coefficients of 3.025 and –1.711; $p < 0.10$ and 0.05; marginal effects of 37% and –14%, respectively). Again, the findings therefore indicate mixed support for the notion of visibility (Hypothesis 6). Moreover, in the Swedish case, the ownership ministry has a significant and negative impact on public sector representation on SOC boards (coefficient of –1.680; $p < 0.10$; marginal effect of –12%), which suggests that the above-noted positive effect pertaining to the ownership ministry among firms under partial state control is mainly due to Norwegian firms. This latter subsample difference is, however, not significant. Finally, within the Swedish subsample, there is a positive time trend effect on the probability of recruiting public sector employees to the chairman position (coefficient of 0.295; $p < 0.10$; marginal effect of 2%). This subsample difference is also significant.

6.4 Summary and Conclusions

Given the results of this study, it seems that the theoretical ideas about SOC board appointments are weakly associated with actual practices. Despite of some significant partial effects, the models have all low explanatory power (as given by the likelihood ratio-statistics). Moreover, nearly all significant results are traced to nation-specificity, which render the governance models less applicable across national boundaries. Perhaps most interesting is the finding that the negative effect of commercial orientation on the probability that SOCs will be chaired by political representatives is mainly due to Swedish firms, although the subsample difference is not significant. Also noteworthy is the result that the visibility effect works differently both within and across national boundaries. In Norway, regional presence is negatively associated with both political and public sector appointments, while the opposite holds for firm size (although the effect upon sector affiliation is not significant). By contrast, the findings for the Swedish subsample show that while regional presence is positively related to both political and public sector appointments, the opposite holds for firm size (none of the effects upon political experience are yet significant). Whereas we can only speculate that these seemingly puzzled results are due to strategic considerations regarding the impact of political influences, they nevertheless provide some support for the notion that political influences are more pronounced in visible firms. Among the few significant results that are not nation-specific, there is a remarkably strong negative relationship

between commercial orientation and public sector recruitment within the group of partly state-owned firms.

The general lack of significant results is though interesting *per se*, as it suggests that very few variables among the most obvious candidates are supported by empirical evidence. The questions yet remain how we should interpret the many insignificant effects and whether future research might produce some more insight into SOC board appointments. First, there is of course a chance that the results of this study pertain to the specific sample period and that the outcomes would have been altered if more years were included. For instance, the data set allowed no more than a weak test of the ideology model as it includes only one government change. Besides, there is the possibility of confounding nationality and ideology effects. Clearly, further studies covering more election periods and government changes would help discovering the validity of the present findings. Also, the inclusion of more election periods would allow the testing of some finer hypotheses about political strategies; for example, whether office-seeking politicians are more inclined to appoint politically affiliated chairmen at the end of the election period than at the beginning. As to why this should be the case, it seems that politicians have a greater opportunity for influencing SOC behaviour when in office than when in opposition, which means they might benefit more from having political affiliates in the chairman position when not longer themselves in government office.

Second, there is the possibility that the dependent variables represent insufficient measures of chairmen's professional background. Admittedly, the proxies used in this study might both be too conservative and too rough, which suggest that we should focus on some more specific attributes of chairmen's professional life. In support of this idea, corporate governance activists have generally recommended that shareholders recruit corporate directors on the basis of their functional expertise, specialised knowledge, and links with certain stakeholders (Kosnik, 1990). From this view, we might hypothesise that, say, firms with a high debt ratio might not be associated with private sector employees as such, but rather with representatives from financial institutions – regardless of sector affiliation. Thus, one possible venue for future research is to look onto the broader career track of chairmen to achieve a better understanding of why they are deemed as proper candidates for the job.

Third, the governance models might be inadequately specified to the extent that I have omitted some key explanatory factors. This possibility is already discussed as only a few criteria are included within the confines of the reputation model. Perhaps most important, firm performance is excluded from the model, which is otherwise claimed to be an important determinant of board appointments (Hermalin and Weisbach, 1991, 1998). Additionally, I have excluded some more refined contingency explanations of board appointments, which suggest that shareholders use board appointments as a

vehicle for dealing with certain aspects of the external environment (Pfeffer and Salancik, 1978). For instance, prior research has shown that shareholders might like to appoint chairmen with political power to obtain a favourable regulatory climate (Selznick, 1949; Pfeffer, 1972; Hillman, 2005). In line with this idea, future research could examine whether SOC board selection follows a pattern where politicians (and potential co-investors) attempt to match the personal attributes of chairmen (e.g., political experience) with the firm's particular needs (e.g., the need for building alliances with foreign political institutions).

Finally, the lack of robust results may be an indication that SOC board appointments follow other logics than those suggested in this thesis. Surely, I have already noted that most of the unexplained variance is firm-specific, which means that board selection patterns are not easily uncovered by cross-sectional analysis. For example, it might be the case that some SOCs are – for historical, contextual, or national reasons – perceived as more 'politicised' than others. Moreover, we cannot ignore the possibility that because SOCs are so different, it is not possible to identify any 'optimal' board recruitment pattern across firms. Yet another option is that board appointments are partly a result of political exchanges, like when politicians representing those political parties that provide support for minority governments are appointed as chairmen. In future work, qualitative research (e.g., by case studies and interview evidence) into these mechanisms might help to clarify the outcomes of board appointments.

While it is difficult to say *ex ante* which of these four interpretations is the most salient, the next two chapters will provide us with important information on this issue. Specifically, if the same independent variables are found to be equally weak predictors of CEO compensation contracts and dividend payments, this strongly suggests that the governance models are misspecified. If, however, the same variables turn out to be significant predictors, we might lend some support to the first and latter of the above interpretations. As it stands, the results have nonetheless implications for public policy as they provide support for the view that nation-specific institutional arrangements matter to board selection processes. In particular, when compared to the Swedish system, the Norwegian practice of excluding currently serving politicians and state bureaucrats from taking SOC board seats seems to result in fewer public sector employees being recruited to the chairman position. Moreover, the fraction of political chairmen who are appointed by their own government is significantly larger in Norway than in Sweden. This result is noteworthy, since it indicates that politicians possibly feel more comfortable with recruiting rival political representatives who are also members of the Parliament. For one thing, this might be due to the fact that both Parliamentary and government members are eventually accountable to the voters, which means they are likely to broadly agree on what kinds of governance decisions are politically legitimate. For another,

politicians in office might consider it easier to exert some influence on Parliamentary members than on prior political representatives. Also, it is probably easier to identify chairman candidates among those rival political representatives who are currently serving in Parliament. When also taking into account the need for role separation (e.g., ownership and regulation), public policy makers should therefore explore whether board diversity and board competence can actually be increased if state representatives were allowed to sit on SOC boards, because such practice would certainly lead to a larger pool of candidates being considered for SOC chairman positions.

Chapter 7

Chief Executive Compensation Contracts: Empirical Evidence

Over the past decade, CEO compensation contracts have come under major public scrutiny and populist attack. This results partly from the well-known corporate failures of firms like Enron and Skandia, which involved severe manipulations of accounting figures as a means to increase managerial bonuses and stock option values. But the attention to CEO pay is also a result of increased transparency on executive compensation data, with the accompanying effect that the financial press regularly reports instances of 'excessive' compensation levels. The fact that CEO pay has now become a public issue has also brought politicians to the managerial bargaining table, where politicians urge that corporate directors curb top-level pay in the interest of social equity and statesmanship (Jensen and Murphy, 1990b). Of course, in those countries which the state holds direct ownership stakes, the government (in its capacity as owner) has a legitimate voice in the design of CEO compensation contracts. The questions remain, however, how political influences are channelled and whether political pressure results in more than symbolic sacrifices at the top managerial level. Seeking answers to these questions, this chapter offers a thorough analysis of the CEO compensation contracts that were used in Norwegian and Swedish SOCs over the sample period. More specifically, I examine the level and structure of compensation contracts and the factors that might explain how these pay packages come to be the way they are.

The chapter progresses as follows: Section 7.1 gives an overview of the theory, data and method that are used to analyse CEO compensation contracts. Section 7.2 provides an in-depth empirical description of the basic compensation components, including pay levels, incentive schemes, and golden parachutes. Section 7.3 examines the factors that are hypothesised to have an impact on the level and structure of CEO compensation contracts. Section 7.4 concludes with a summary and discussion of the theoretical and empirical implications of the findings.

7.1 Theory, Data and Method: Recap and Specifications

The following model is used to examine the level and structure of CEO compensation contracts:

> Total level of CEO cash compensation = *f* {chairman's professional background, state control, corporate objective, stock market listing, firm size, CEO recruitment channel, board size, compensation committee, CEO tenure, chairman CEO, nationality, time trend, error term}.[99]

Previously, I have provided the theoretical justifications regarding the choice of these variables. To recap the main theoretical points, I start from the assumption that corporate directors are likely to care about their re-election prospects, which means they would design CEO compensation contracts so as to please the shareholder(s). More precisely, I suggest that the board of directors will be more attentive to political signals in those cases which state control is strong and the chairmen are political representatives (public sector employees) than in cases of partial state control and non-political (private sector employee) chairmen. Alternatively, we might assume that corporate directors care about their reputation, which suggests they attempt to signal competence by paying attention to the standard economic determinants of CEO compensation packages. In the case of state ownership, I propose that these economic determinants include corporate objective, stock market listing, firm size, and CEO recruitment channel. Finally, I recognise the possibility that top managers themselves might have a profound influence on the pay-setting process. In particular, the scope for managerial influences is likely to depend on aspects like board size, the presence of a compensation committee, CEO tenure, and the possibility that the chairman is also a CEO. Lastly, due to nation-specific institutional features and possible time trends, I control for nationality and time effects. Table 7.1 provides a summary of variable definitions and the predicted sign of bivariate relations between independent variables and the three compensation variables.

[99] Additionally, two more dependent variables are included in the analysis as I seek to examine the probability that the CEO contract includes (i) an incentive scheme and (ii) a golden parachute.

Table 7.1. Summary of variable definitions and theoretical predictions.

	Dependent variables		
Independent variables	**Total cash compensation**	**Incentive scheme**	**Golden parachute**
	Continuous variable: Sum of fixed salary, annual bonuses, and miscellaneous benefits in 2005-constant NOK (log)	Dummy variable: Incentive scheme adopted (=1) or not (=0)	Dummy variable: Golden parachute adopted (=1) or not (=0)
Re-election model (political influences)			
Chairman's professional background (hypotheses 1a–1c) Dummy variable: Political (=1) versus non-political (=0) representative	–	–	–
State control (hypotheses 2a–2c) Dummy variable: Partial (=1) versus full (=0) state ownership	+	+	+
Reputation model (economic citeria)			
Corporate objective (hypotheses 3a–3c) Dummy variable: Commercial (=1) versus non-commercial (=0) objective	+	+	–
Stock market listing (hypotheses 4a–4c) Dummy variable: Listed firms under partial state control versus non-listed firms under partial state control, with firms under full state control as benchmark category*	+	+	+
Firm size (hypotheses 5a–5c) Continuous variable: Firm size (log equity)	+	–	–
CEO recruitment channel (hypotheses 6) Dummy variables: CEO recruited from the private sector (=1) versus from the public sector or within the firm (=0)	+	?	?

Managerial influences			
Board size (hypotheses 7a–7b) Continuous variable: Number of corporate directors on the board	+	+/–	+
Compensation committee (hypotheses 8a–8b) Dummy variable: Compensation committee present (=1) versus non-present (=0)	–	+/–	–
CEO tenure (hypotheses 9a–9b) Continuous variable: Number of years in the CEO position	+	+/–	+
Chair is CEO (hypotheses 10a–10b) Dummy variables: Chair is a CEO (=1) versus non-CEO (=0)	+	+/–	+
Controls			
Nationality Dummy variable: Norway (=0) versus Sweden (=1)	+/–	+/–	+/–
Time trend Continuous variable ranging from 1-5 (2001,…, 2005)	?	–	?

Note: A plus (minus) sign in a column indicates that the independent variable is expected to have a positive (negative) effect on the compensation outcome. A combined plus/minus sign indicates that the prospective impact on compensation outcomes is uncertain (theoretical ambiguity). A question mark indicates no strong *à priori* expectation regarding the sign of the independent variable.

* The predicted sign is valid when comparing listed and non-listed firms under partial state control to the benchmark category. In line with theory, however, I expect the major difference between the categories is found between listed SOCs and non-listed SOCs.

To increase the robustness of analysis, I also test for some alternative measures. The *chairman's professional background* is also measured by a dummy variable that distinguishes between public sector employees (=1) and private sector employees (=0). The *state control* variable also includes the equity fraction held by the state. Additionally, I use a set of dummy variables indicating voting threshold levels with three cut-off points (33.34%, 50.01% and 66.67%) and state ownership stake = 100% as benchmark category. In line with theory, I expect a successively stronger negative relationship between these voting threshold levels and compensation outcomes. Similarly, *co-investment characteristics* are measured by both the equity fraction held by the largest co-investor and a set of dummy variables indicating voting and conventional cut-off points (5%, 33.34%, and 50.01%) and state ownership stake = 100% as benchmark category. According to theory, I expect a successively stronger positive relationship between these threshold levels and compensation outcomes. To account for co-investor identity I use a set of dummy variables, distinguishing between cases where the largest co-investor is public or non-public, and with state ownership stake = 100% as benchmark category. The *firm size* variable includes the additional measures of total assets (log) and number of employees (log). Finally, the *CEO tenure* variable includes the additional measure of board independence, which is assessed in terms of the tenure of the board chairman minus the tenure of the CEO. Two different specifications are used, one including all years the chairman has served on the board (i.e., including years served as a rank-and-file director), the other including only those years in the chairman position.

To analyse these issues, we note that the original sample covers data about CEO compensation contracts over the period 2000-2005. To ensure time-matching of data, however, we need to account for the fact that those compensation packages being observed in, say, the 2001 annual reports, were actually agreed upon by the SOC boards in year 2000. Therefore, to make sure that the independent variables might actually have an impact on the design of compensation contracts, they are lagged by one year. But, due to data unavailability prior to year 2000, this means that I use compensation data for five years only (2001-2005).

As regards the method that is used to analyse CEO compensation contracts, it includes random-effects models with linear regression for continuous outcomes (CEO pay levels) and logistic regression for binary outcomes (the presence of incentives schemes and golden parachutes). Besides the above-discussed advantages of the random-effects procedure, we should also note that this procedure is particularly helpful in mitigating compensation outliers (which are normally present in cross-sectional studies), in that it averages compensation outcomes over the five-year period. Previously, however, I have drawn attention to the problem that one of the independent variables in our compensation models – namely, the chairman's professional background – is possibly *explained* by some of the other independent variables (e.g., corporate objective and state control). Undeniably, this problem might severely impede our possibilities to estimate the effects of the various independent variables on CEO pay-setting. But, since the analysis in Chapter 6 revealed that the board appointment equations were largely insignificant, this suggests that I pay no special attention to this problem in the present analysis.

7.2 How do the CEO Compensation Contracts look like?

While today company annual reports often provide detailed data on CEO compensation contracts, such data might be reported in very different ways. Those interested parties who cursory inspect annual reports might therefore find it difficult to compare executive pay across firms and over time. Moreover, financial press reports of executive pay data are mostly anecdotal and non-representative. For these reasons, I provide in this section a thorough description of the basic components of CEO compensation contracts among our sample firms. Table 7.2 reports the summary statistics for the level and structure of executive compensation packages.

Table 7.2. Summary statistics for the CEO compensation variables.

CEO compensation variables	Norway						Sweden					
	Mean	Q1	Q2	Q3	Std.dev.	*n*	Mean	Q1	Q2	Q3	Std.dev.	*n*
Compensation levels												
Total cash compensation	1621.01	859	1326	1938	1121.14	254	2312.94	1063	1617	2696	2039.91	215
Fixed salary	1525.05	823	1314	1861	942.57	234	2093.00	1046	1612	2392	1516.00	208
Incentive components												
Incentive scheme	0.26	0	0	1	0.44	254	0.32	0	0	1	0.47	215
Short-term incentive programme	0.84	1	1	1	0.37	67	1	1	1	1	0	69
Internal performance standard	1	1	1	1	0	40	0.95	1	1	1	0.22	60
Multiple incentive dimensions	0.70	0	1	1	0.46	40	0.73	0	1	1	0.45	60
Bonus cap	29.01	20.8	25	30	12.86	34	30.33	15	30	50	18.52	51
Bonus payment	473.44	54.5	207	417.5	712.07	32	844.86	30.5	434	1156	1484.97	56
Bonus share	15.06	3	11.5	23	16.40	32	20.69	2.5	14	29.5	38.82	56
Long-term incentive programme	0.52	0	1	1	0.50	67	0.35	0	0	1	0.48	69
Value shareholding	1801.53	438	715	2666.5	2104.15	32	5008.75	430	1134.5	6084.5	7942.62	20
CEO ownership share	0.0001	0.0000	0.0000	0.0002	0.0002	32	0.0004	0.0000	0.0000	0.0009	0.0006	20
Golden parachutes												
Golden parachute	0.42	0	0	1	0.49	254	0.89	1	1	1	0.31	215
Golden parachute size	14.03	9	12	18	7.96	106	16.43	18	18	18	5.06	191

Note: The table reports the sample statistics, by nationality, for the principal components of CEO compensation contracts. The columns show the mean, quartiles, and the standard deviation of the compensation measures. Q1, Q2 (median) and Q3 refer to the 25th, 50th, and 75th percentile, respectively. *n* is the number of firm/year observations. *Total cash compensation* is the sum of fixed salary, annual bonuses, and miscellaneous benefits. *Fixed salary* is the base (non-contingent) salary. *Incentive scheme* is a dummy variable set to one if the compensation contract includes performance-based pay components (short-term and/or long-term), zero otherwise. *Short-term incentive programme* is a dummy variable set to one if the incentive scheme includes an annual bonus component, zero otherwise. *Internal performance standard* is a dummy variable set to one if the measure(s) used to evaluate managerial performance in the annual bonus plan are based on firm-specific goals, zero otherwise. *Multiple incentive dimensions* is a dummy variable set to one if the annual bonus plan includes multiple performance criteria to evaluate managerial performance, zero otherwise. *Bonus cap* states the maximum bonus paid (in percent of fixed salary) if the CEO achieves the pre-determined performance criteria. *Bonus payment* is the value of the actual bonus paid. *Bonus share* is the share (in percent of fixed salary) of actual bonus paid. *Long-term incentive programme* is a dummy variable set to one if the CEO holds shares and/or stock options, zero otherwise. *Value shareholding* is the number of shares held by the CEO multiplied by the market value of the stock at year-end. *CEO ownership share* is the percentage of the firm's outstanding shares held by the CEO. *Golden parachute* is a dummy variable set to one if the compensation contract includes a golden parachute, zero otherwise. *Golden parachute size* refers to the magnitude (number of months) of the golden parachute contract. All compensation amounts are expressed in 2005 NOK thousand and adjusted for CPI.

7.2.1 Compensation levels

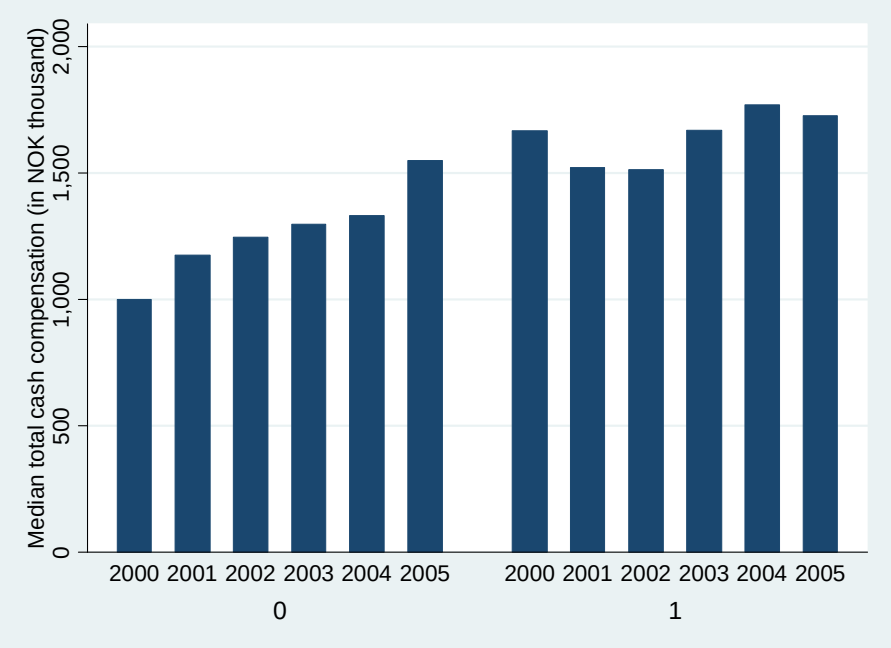
How much are CEOs in firms under state control really paid? Looking at the compensation measures in Table 7.2, some important facts emerge. The most striking aspect is that the level of total cash compensation is considerably higher among Swedish SOCs than among their Norwegian counterparts. This result corresponds with that of previous research, which has found the level of executive pay to be significantly higher among Swedish firms than among Norwegian ones, where the sample includes publicly traded firms (Randøy and Nielsen, 2002). Indeed, our data show that while Swedish CEOs receive, on average, an annual total cash compensation of NOK 2313 thousand, Norwegian CEOs obtain an annual average total pay of NOK 1621 thousand. These pay differences are also reflected in terms of fixed salary, in which case top managers in Swedish and Norwegian SOCs receive, on average, a base annual salary of NOK 2093 thousand and NOK 1525 thousand, respectively. Even more interesting, we might infer from these numbers that total cash compensation is largely attributable to non-contingent pay and only limitedly so to annual bonuses. Moreover, in both countries, the median levels of pay are below average pay levels (median levels are shown in the Q2, or second quartile, column), which indicate some skewness in the compensation measures. Additionally, the pay data reveals substantial variation in executive pay levels across SOCs. More precisely, data shows that, in Norway, the SOC at the 25th percentile (Q1) pays its CEO a total amount of NOK 859 thousand whereas the SOC at the 75th percentile (Q3) offers a cash compensation of NOK 1938 thousand. Likewise, in Sweden, the SOC at the 25th percentile grants its CEO a total pay of NOK 1063 thousand whereas the SOC at the 75th percentile pays a cash compensation of NOK 2696 thousand.

To examine if, and by how much, compensation levels have changed over the sample period, Figure 7.1 depicts the median levels of total cash compensation in Norway and Sweden over the years 2000-2005.[100] In line with the dummy variable notation, Norwegian compensation data are displayed at the left-hand side (value 0) and Swedish compensation data are shown at the right hand-side (value 1) of the figure. One striking observation is that, in Norway, the compensation level has increased substantially between 2000 and 2005 (in 2005-constant NOK thousand); from NOK 999.5 thousand in 2000 to NOK 1548 thousand in 2005. By contrast, Swedish compensation levels are fairly stable over the six-year period, increasing from NOK 1666.5 thousand in 2000 to NOK 1726 thousand in 2005 (with some annual drops in compensation levels over the period). Importantly,

[100] For the sake of parsimony, the figure only shows the level of total cash compensation. The same pattern applies to the level of fixed salary.

these patterns indicate that Norwegian CEOs are about to catch up to the compensation levels of their Swedish counterparts.

Figure 7.1. Level of total CEO cash compensation, by nationality.



Note: The figure shows the median level of total cash compensation (in 2005-constant NOK thousand) in Norway and Sweden over the years 2000-2005. In line with the dummy variable notation, Norwegian SOCs are assigned the value 0 and Swedish SOCs are assigned the value 1 (Norwegian and Swedish SOCs thus appear at the left-hand and right hand-side of the figure, respectively). The samples include all SOCs from which compensation data are available (n = 254 and n = 215 for Norway and Sweden, respectively).

7.2.2 Incentive schemes

Now that we know *how much* the CEOs in sample are paid, we turn our attention to the question of *how* they are paid. Is the compensation of top managers in SOCs dependent on performance or are CEOs virtually paid like bureaucrats?[101] While incentives schemes have grown to become natural parts of CEO compensation contracts in for-profit and publicly traded firms,

[101] This question paraphrases that of Jensen and Murphy (1990b). More generally, the trade-off between contingent and non-contingent pay is probably the most central concern in the US literature on executive compensation.

there are strong reasons to expect that performance-based pay components are less pervasive among firms under state control. As discussed in Chapter 4, this might be due to political concerns about incentive schemes leading to excessive compensation levels, difficulties in measuring performance in non-commercial SOCs, and a low political risk profile. The data in Table 7.2 confirms this expectation insofar as incentive schemes are, on average, included in 26% and 32% of the CEO compensation contracts in Norway and Sweden, respectively. Among those SOCs including incentive schemes in the CEO compensation contracts, nearly all use short-term incentives, which are recorded in 84% of the Norwegian cases and 100% of the Swedish cases. However, long-term incentives are also present in the compensation packages. Indeed, shareholdings, stock options, or both are present in 52% and 35% of the incentive schemes in Norway and Sweden, respectively.

To improve our understanding of the type of incentive schemes used in SOCs, we take a closer look at some of the different components in CEO annual bonus plans. Following Murphy (2001), annual bonus plans can be categorised in terms of three basic elements, including performance standards, performance measures, and bonus caps.[102] Broadly speaking, *performance standards* refer to whether the CEO's performance is measured relative to internal or external factors. More specifically, performance standards are categorised as internal if the measure(s) used to evaluate managerial performance are based on firm-specific goals. By contrast, performance standards are categorised as external if based on performance measured relative to other firms in the industry or market. From Table 7.2, we note that for those SOCs which data on performance standards are available, almost every firm uses an internal performance standard (which is present in 100% and 95% of the observations in Norway and Sweden, respectively). Although we should expect that both internal and external performance standards provide incentives to improve firm performance, there are yet some additional incentive effects in firms with internally determined standards. Most important, the CEO can take actions that affect the standard in a current or future year (e.g., income smoothing), which might actually conflict with the corporate objective(s) (Murphy, 2001). While the present data set does not allow empirical testing of this proposition, we only note the possibility that top managers in SOCs might have profound influence over the standard-setting process.

As to the specific *performance measures* used in the annual bonus plans, Appendix C provides a detailed overview of these criteria as well as

[102] Actually, the bonus cap is only a sub-element in the incentive component covering pay-performance relations. According to Murphy (2001), pay-performance relations signify the shape of the bonus plan (convex, linear, or concave), whether bonus is paid at a performance threshold, and whether the bonus is capped. As regards the first two among these measures, the annual reports at hand do not provide such information.

the other incentive components being included in the CEO compensation contracts of individual firms. One result emerging from this descriptive analysis is that SOCs use a variety of financial and non-financial performance measures. As documented in Table 7.2, the vast majority of SOCs in Norway and Sweden uses in fact multiple performance criteria (instead of a single criterion) to evaluate managerial performance, which appear in 70% and 73% of the cases, respectively. While the financial measures typically include accounting figures, budgetary plans, or economic value added, the non-financial measures include product quality, customer satisfaction, and safety, amongst others. Another result is that while the incentive schemes are largely explicit, some are even based on discretion. In line with US data on annual bonus plans, discretion shows up in that boards might exercise discretion in allocating the bonus pool or in that the CEOs might have some portion of their bonus depend on 'individual performance' (Murphy, 2001). Also, we should note that only one sample firm explicitly states the need to adjust for external fluctuations (e.g., unforeseen price increases) in order not to reward or punish the CEO for factors he cannot control.

Finally, the *bonus cap* states the maximum bonus paid if the CEO achieves the pre-determined performance criteria. Interestingly, nearly 40% of the SOCs do not provide any information about such threshold levels. Among those SOCs that report on this issue, the incentive plans are averagely capped at 29% and 30% of fixed salary in Norway and Sweden, respectively. While, in Table 7.2, it is reported that the average bonus share paid amounts to 15% (in Norway) and 21% (in Sweden) of fixed salary, there is thus a gap between actual bonus payments and target bonuses. Given this, it seems that the criteria underlying incentive schemes are not only stated for symbolic purposes, but are actually not easy to fulfil. Again, however, we should note that the data reveals substantial variation. This observation becomes particularly evident when looking at the absolute numbers of bonus payments. In both countries, the median level of annual bonus payment is significantly lower than the average bonus level. Also, when using the average bonus payments to estimate the bonus share in percent of (average) fixed salary, these numbers now amount to 31% and 40% in Norway and Sweden, respectively. Although the small sample size of firms using incentive schemes prevents us from drawing any statistically sound conclusions on this matter (remember that the *n* in Table 7.2 refers to firm/year observations and not the absolute number of SOCs), the data strongly suggest that short-term incentive pay is very unequally distributed across SOCs.

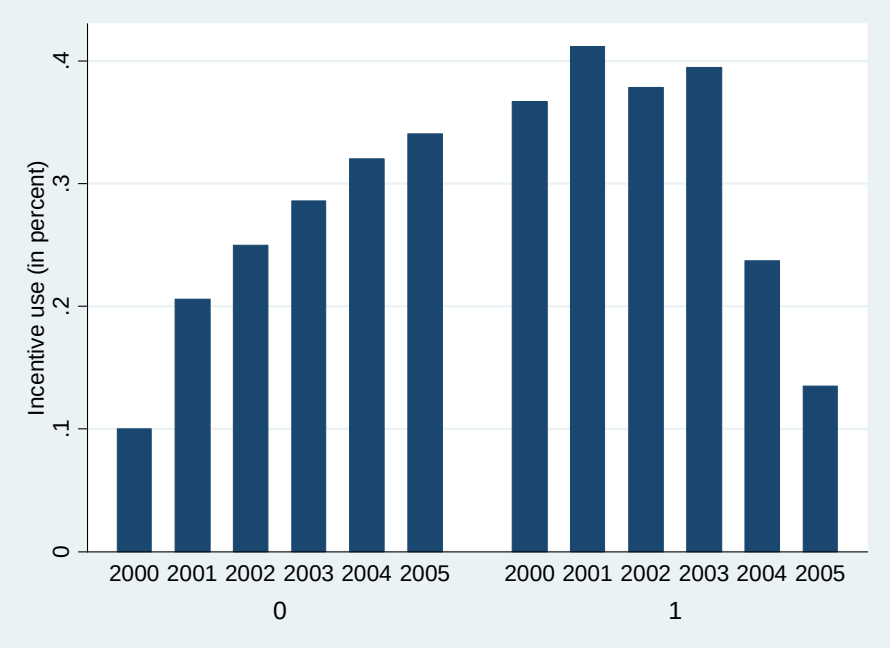
To examine whether the use of incentive schemes has changed over the sample period, Figure 7.2 shows the annual percentage of SOCs using incentive schemes (short-term or long-term incentives, or both). Once again, Norwegian SOCs are displayed at the left-hand side (value 0) and Swedish

SOCs at the right hand-side (value 1) of the figure, in which two striking patterns emerge. The first observation is that, in Norway, incentive schemes have successively grown in importance from 2000 to 2005, from 10% in 2000 to 34% in 2005. Interestingly, this result largely corresponds with the increase in Norwegian pay levels over the six-year period (cf. Figure 7.1). But since we have already documented that fixed salaries are also increasing over the sample period (not shown in figure), this suggests that bonus payments are merely put on the top of CEOs' fixed salary. Accordingly, there are no indications that SOCs substitute contingent for non-contingent compensation. The second observation concerns the considerable drop in the use of incentive schemes (from 37% in 2000 to 14% in 2005) among Swedish SOCs, which coincides with the government policy of prohibiting incentives at the top managerial level. Thus, while in the period 2000-2003, incentive schemes were more commonly employed among Swedish SOCs than among their Norwegian counterparts, the pattern is reversed from 2004. In support of the Norwegian case (but in the opposite direction), we also note that the reduction in incentive schemes among Swedish SOCs are not followed by any cutbacks in total compensation levels. By contrast, it seems that top managers who were previously candidates for receiving annual bonuses are somewhat compensated for the removal of potential bonus payments by receiving higher levels of fixed salaries. By and large, therefore, there are strong indications that the incentive schemes employed by Norwegian and Swedish SOCs provide the CEOs with beneficial effects only and few (if any) compensation risks (like financial penalties for poor performance).

As regards long-term incentive schemes, these mostly include shareholdings and stock options. Among the two, direct ownership of shares represents the most powerful link between shareholder wealth and executive wealth (Jensen and Murphy, 1990b). Table 7.2 reports that, among those CEOs holding ownership in SOCs, the average value of such shareholdings amounts to NOK 1802 thousand and NOK 5009 thousand in Norway and Sweden, respectively. Yet, variation across SOCs is high in that the corresponding median value of these shareholdings equals NOK 715 thousand and NOK 1135 thousand (with standard deviations equal to NOK 2104 thousand and NOK 7943 thousand, respectively). However, rather than merely looking at the cash value of CEOs' shareholdings, one might argue that the incentive effects of direct ownership are mainly tied to the *percentage* of the firm's outstanding shares the CEO owns (Jensen and Murphy, 1990a). Looking at the data, this incentive effect is very small as the average CEO controls only 0.0001% and 0.0004% of the stock in Norway and Sweden, respectively (the corresponding median numbers equal 0.0000% and 0.0000%). Although we do not have sufficient information to estimate the value of CEO stock options, there is no indication that options

might bear some stronger incentive effects than direct ownership (using the number of stock options granted as a rough proxy).

Figure 7.2. Percentage of SOCs using incentive schemes, by nationality.



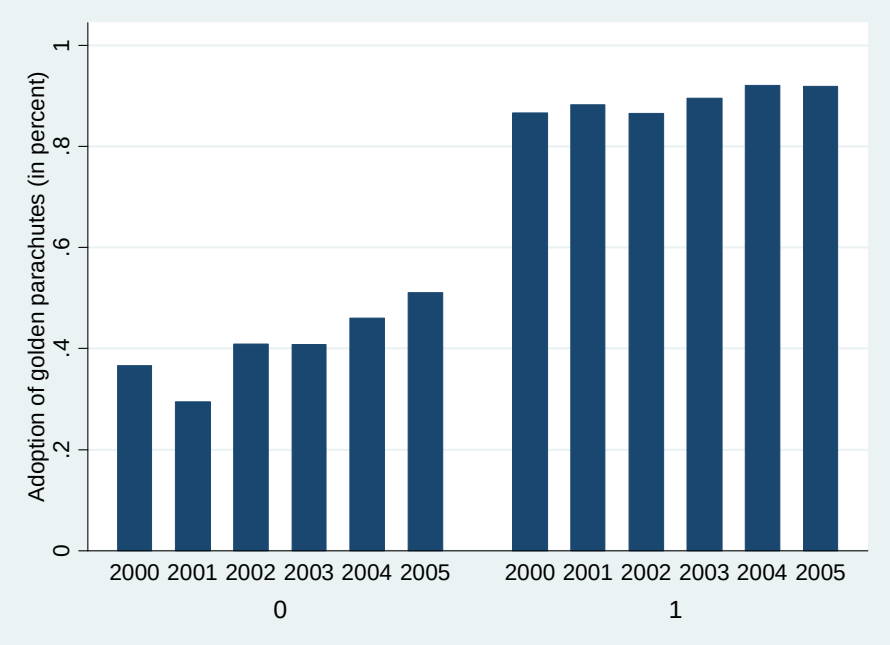
Note: The figure shows the percentage of SOCs using incentive schemes in Norway and Sweden over the years 2000-2005. In line with the dummy variable notation, Norwegian SOCs are assigned the value 0 and Swedish SOCs are assigned the value 1 (Norwegian and Swedish SOCs thus appear at the left-hand and right hand-side of the figure, respectively). The samples include all SOCs from which compensation data are available (n = 254 and n = 215 for Norway and Sweden, respectively).

7.2.3 Golden parachutes

With regard to SOC boards' inclination to adopt golden parachutes, there are once again significant national differences. In fact, while 42% of Norwegian SOCs include golden parachutes in their CEO compensation contracts, as much as 89% of Swedish SOCs provide such contractual agreements. Intuitively, this is a striking result since most Swedish SOCs are under full state control. Thus, the standard argument that golden parachutes are offered to managers who are forced to leave the firm when a change of control takes place, seems not to be valid. Yet, the prevalence of golden parachutes should not come as a surprise, since the governments' guidelines concerning terms of employment offer the possibility of providing CEOs security during a

transitional period. While this might not explain the fact that golden parachutes are more commonly employed among Swedish SOCs than among Norwegian ones, we might only speculate that Swedish firms are more likely to 'import' governance elements (like the adoption of golden parachutes) from the Anglo-American corporate governance system (Oxelheim and Randøy, 2003). Focusing on the adoption of golden parachutes on a year-to-year basis, Figure 7.3 shows that, in Norway, golden parachute contracts have slightly gained more importance (increasing by an order of magnitude from 37% in 2000 to 51% in 2005). By contrast, the Swedish data indicate that the frequency with which SOCs have adopted golden parachutes has changed little over the sample period.

Figure 7.3. Percentage of SOCs adopting golden parachutes, by nationality.



Note: The figure shows the percentage of SOCs adopting golden parachutes in Norway and Sweden over the years 2000-2005. In line with the dummy variable notation, Norwegian SOCs are assigned the value 0 and Swedish SOCs are assigned the value 1 (Norwegian and Swedish SOCs thus appear at the left-hand and right hand-side of the figure, respectively). The samples include all SOCs from which compensation data are available (n = 254 and n = 215 for Norway and Sweden, respectively).

As to the magnitude of golden parachutes, we recall that these number are obtained by adding the net notice period (i.e., the number of months of which the notice period in the event of employer termination exceeds that of

employee termination) and the number of months with severance pay (i.e., the number of months of which compensation is paid to the CEO who has his or her employment 'severed' and which does not include the required notice of termination on any parts). Given this, the size of payment in the case of dismissal is fairly similar across the two countries. In Norway, CEOs who are candidates for golden parachutes are, on average, offered 14 monthly (fixed) salary payments, whereas Swedish CEOs are averagely granted 16 months of fixed salary pay. Moreover, these numbers roughly correspond to those described in the governments' compensation guidelines, which suggest that if notice of termination is given on the part of the firm, golden parachutes may be payable to at most 12 and 18 monthly salary payments in Norway and Sweden, respectively.[103]

7.3 Empirical Analysis

Table 7.3 presents descriptive statistics (means and standard deviations) for the main variables (any alternative measures are only commented upon in the multivariate analysis). While some of the descriptive statistics are known from the above, there are some variables that are unique to the CEO compensation issue. As to the CEO recruitment channel, we note that, in the full sample, 38% of the CEOs are recruited from the private sector, which means that 62% are recruited from the public sector or from within the firm. In Norway, however, an even larger proportion of the CEOs are recruited from the private sector, while the opposite holds for Swedish SOCs. On the issue of board structure, it sits, on average, eight members on SOC boards in the full sample. The average board size is yet somewhat larger in Sweden (9.3 board members) than in Norway (7.7 board members). Moreover, a total of 20% of the SOC boards have established a compensation committee. The two countries differ significantly, however, in that such a committee is used by only 5% of Norwegian SOCs, while the corresponding number for Swedish SOCs is 36%. As regards CEO tenure, the average top manager has served for a period of 4.5 years, a finding which holds for both countries. Finally, in both Norway and Sweden, the chairman occupies himself a CEO position in about 30% of the cases.

[103] Note, however, that these guidelines mainly apply to fully state-owned firms, which might explain why, in Norway, the average size of golden parachutes exceeds 12 months.

Table 7.3. Descriptive statistics: Means and standard deviations.

	All SOCs			Norwegian SOCs			Swedish SOCs		
Variables	**Mean**	**St.dev.**	***n***	**Mean**	**St.dev.**	***n***	**Mean**	**St.dev.**	***n***
Total cash compensation (log)	3.19	0.27	382	3.14	0.24	203	3.24	0.29	179
Incentive scheme	0.30	0.46	382	0.30	0.46	203	0.31	0.46	179
Golden parachute	0.64	0.48	382	0.42	0.50	203	0.89	0.31	179
Chairman political representative	0.29	0.45	382	0.27	0.44	203	0.32	0.47	179
State control	0.34	0.47	382	0.45	0.50	203	0.21	0.41	179
Corporate objective	0.49	0.50	382	0.41	0.49	203	0.58	0.49	179
Non-listed SOCs	0.24	0.43	382	0.35	0.48	203	0.11	0.32	179
Listed SOCs	0.10	0.30	382	0.10	0.30	203	0.10	0.30	179
Firm size (log equity)	2.78	1.24	376	2.58	1.36	198	3.00	1.05	178
CEO recruited private sector	0.38	0.49	314	0.46	0.50	172	0.29	0.45	142
Board size	8.46	1.76	382	7.71	7.71	203	9.30	1.63	179
Compensation committee	0.20	0.40	382	0.05	0.05	203	0.36	0.48	179
CEO tenure	4.48	3.28	368	4.52	4.52	194	4.43	2.87	174
Chair is CEO	0.30	0.46	380	0.28	0.28	201	0.32	0.47	179
Nationality	0.47	0.50	382	–	–	–	–	–	–
Time trend	3.16	1.38	382	3.22	3.22	203	3.10	1.39	179

Note: The table shows means and standard deviations for all main variables in the lagged sample. Due to the use of lagged data, the descriptive statistics might deviate somewhat from the statistics reported for the full sample (cf. Table 7.2 and the descriptive statistics displayed in Chapter 3).

Correlations among all main variables are shown in Table 7.4.[104] Overall, the correlation matrix indicates no severe multicollinearity problems, except for the fact that the state control variable and the two dummy variables pertaining to stock market listing (non-listed SOCs and listed SOCs) are highly correlated (0.72 and 0.55, respectively).[105] Such correlations were expected, since the listing variables are only finer specifications of the state control variable. Thus, the two variables essentially measure the same thing and are thereby used in separate models. Moreover, following the same procedure as in Chapter 6, I use the Variance Inflation Factor (VIF) test to rule out the possibility that some of the modest correlations are causing problems of estimation. As this test shows no multicollinearity problems (all VIFs < 2.5), all main variables are included within the model.

[104] Like in Chapter 6, I use Spearman correlation to handle non-parametric data.

[105] Additionally, some of the alternative measures (not shown in the table) are strongly internally related.

Table 7.4. Correlations among variables.

Variables	1	2	3	4	5	6	7	8	9	10
1. Total cash compensation (log)										
2. Incentive scheme	0.56**									
3. Golden parachute	0.31**	0.20**								
4. Chairman political representative	–0.15**	–0.07	–0.03							
5. State control	0.12*	0.46**	–0.02	–0.18**						
6. Corporate objective	0.61**	0.54**	0.40**	–0.08	0.26**					
7. Non-listed SOCs	–0.30**	0.07	–0.18**	–0.00	0.72**	0.00				
8. Listed SOCs	0.53**	0.57**	0.18**	–0.25**	0.55**	0.36**	–0.18**			
9. Firm size (log equity)	0.69**	0.41**	0.37**	–0.05	–0.01	0.43**	–0.38**	0.44**		
10. CEO recruited private sector	0.19**	–0.03	–0.13*	0.03	–0.00	0.05	0.07	–0.08	0.06	
11. Board size	0.35**	0.12*	0.29**	–0.11	–0.18**	0.21**	–0.36**	0.18**	0.43**	–0.18**
12. Compensation committee	0.52**	0.19**	0.29**	–0.05	0.06	0.42**	–0.27**	0.40**	0.40**	0.04
13. CEO tenure	–0.04	0.05	–0.06	0.08	0.03	–0.03	0.11	–0.08	–0.04	0.01
14. Chair is CEO	–0.06	–0.02	0.06	–0.24**	–0.08	–0.07	–0.04	–0.07	0.01	–0.12*
15. Nationality	0.18**	–0.02	0.48**	–0.03	–0.22**	0.26**	–0.27**	0.01	0.14*	–0.15**
16. Time trend	0.10	–0.09	0.05	0.02	0.00	–0.05	–0.01	0.02	0.02	0.05

Note: The table shows Spearman correlation coefficients. * $p < 0.05$ (two-tailed); ** $p < 0.01$ (two-tailed).

Table 7.4. ***(Continued)***

Variables	11	12	13	14	15
1. Total cash compensation (log)					
2. Incentive scheme					
3. Golden parachute					
4. Chairman political representative					
5. State control					
6. Corporate objective					
7. Non-listed SOCs					
8. Listed SOCs					
9. Firm size (log equity)					
10. CEO recruited private sector					
11. Board size					
12. Compensation committee	0.40**				
13. CEO tenure	–0.19**	–0.12*			
14. Chair is CEO	0.11	–0.07	–0.14*		
15. Nationality	0.47**	0.43**	–0.03	–0.06	
16. Time trend	–0.03	0.15**	0.08	–0.07	–0.06

In support of the descriptive evidence discussed in Section 7.2, we find a significant positive correlation between total compensation level and the use of incentives schemes. Thus, SOCs which are including incentive schemes in the CEO compensation contracts also tend to pay their top managers higher levels of compensation. Moreover, the correlations show that there is a positive and significant correlation between golden parachutes on the one hand and pay levels and incentive schemes on the other. All in all, therefore, it seems that some CEOs are being offered considerably more lucrative compensation packages than others.

Looking at the independent variables, the table confirms many of the predicted relationships. In particular, we note that the variables pertaining to economic reasoning (i.e., corporate objective, stock market listing, firm size, and CEO recruitment channel) are significantly correlated with the CEO compensation measures, although some signs contrast with those predicted by theory. Moreover, the correlations display that both compensation levels and incentive schemes are positively and significantly related to partial state control. By contrast, there is no simple relationship between state control and golden parachutes. While there is a significant and negative association between political representation on boards and the level of compensation, there are no associations between the chairman's professional background and the two other compensation components. As to the scope for managerial influences, both board size and the presence of a compensation committee show a significant and positive relationship with all three aspects of the CEO compensation contract, albeit the latter in the opposite direction to theory. Neither CEO tenure nor the fact that the chairman is a CEO is associated with any of the compensation measures. Finally, nationality is positively and significantly related to compensation levels and golden parachutes, but not to incentive schemes. The time trend variable has seemingly little influence on the compensation measures. As will be shown below, however, some of the bivariate relationships disappear or change when we are instead examining partial effects.

The results of the random-effects regression analyses are shown in Table 7.5 for the level of total cash compensation, the use of incentive schemes, and the adoption of golden parachutes, respectively.[106] The table is presented with separate models for tests of state control (Model 1) and stock market listing (Model 2) (only one model is reported for the use of incentive scheme, since stock market listing came out as a complete determinant). Evidently, each compensation measure appears to be influenced by some different sets of independent variables, which indicates a complex dynamic

[106] Note that the analyses include all independent variables, also those for which I have previously made no theoretical predictions. The reason why I include all variables is simply to obtain a richer analysis, which might possibly give some new insights into the issue of CEO compensation in the case of state ownership.

in board decision-making about CEO compensation contracts. As regards the level of total cash compensation, there are several statistically significant predictors: Corporate objective, state control/stock market listing, firm size, CEO recruitment channel, the presence of a compensation committee, CEO tenure, and time trend. By contrast, there are fewer significant predictors of the probability that SOCs adopt incentive schemes and golden parachutes. Regarding incentive schemes, the significant predictors include state control/stock market listing, corporate objective, and firm size. While corporate objective and firm size are also significantly related to golden parachutes, this dependent variable is mainly explained by nationality and time trend. As I return to the interpretation of these findings below, suffice it to note here that the equations are statistically significant in terms of the Wald and likelihood-ratio statistics (as well as R-square for the linear regression). In support of the random-effects model, we also note that *rho* is very high (spanning from 0.93 to 0.72 in the full sample), which indicates that a large proportion of the total error variance is due to the panel-level error component. In other words, most of the unexplained variance in the three models is contributed by firm-specific factors and not by differences across SOCs. Accordingly, it seems that the random-effect model is the preferred alternative to pooled OLS, which is supported by the Breusch-Pagan LM-test for linear regression and the likelihood-ratio test for logistic regression ($rho \neq 0$, $p < 0.000$, respectively).

To test for the moderating effects of political influences I also divide the sample into political chairmen and non-political chairmen subsamples (Table 7.6) as well as full state control and partial state control subsamples (Table 7.7). Moreover, to examine whether the impact of independent variables differs across Norway and Sweden, Table 7.8 presents separate regression analyses for the two nationality subgroups. However, as a very large share of Swedish SOCs (89%) have adopted golden parachutes, variation on this variable is deemed too small for separate analysis to be performed, which means that the subsample analysis for this dependent variable includes only Norwegian SOCs. To formally inspect whether the regression coefficients are significantly different across subgroups, I also perform moderated regression analyses, which include interactions between independent variables and the subsample variable of interest (e.g., chairman is a political representative). The results from these moderated regressions are reported in Appendix D, while the marginal effects pertaining to the logistic regression coefficients are shown in Appendix E. Together, the results from Tables 7.5–7.8 and the Appendices will serve as basis for the following reporting and discussion of results.

Table 7.5. Random-effects regression analysis for the compensation measures. Main effects, full sample.

Independent variables	Total cash compensation				Incentive scheme		Golden parachute			
	Model 1		Model 2		Model 1		Model 1		Model 2	
Intercept	2.770***	(0.090)	2.781***	(0.088)	–10.623***	(2.814)	–8.308**	(3.323)	–8.232**	(3.430)
Political influences										
Chairman political representative	–0.010	(0.011)	–0.005	(0.012)	0.121	(0.975)	0.424	(0.932)	0.449	(0.965)
State control	0.036*	(0.021)			4.102***	(1.174)	–0.410	(1.013)		
Economic criteria										
Commercial objective	0.090***	(0.032)	0.094***	(0.031)	4.727***	(1.295)	2.525*	(1.300)	2.528*	(1.301)
Non-listing			–0.011	(0.027)					–0.489	(1.308)
Listing			0.122**	(0.050)					–0.274	(1.627)
Firm size (log equity)	0.101***	(0.019)	0.096***	(0.018)	1.584***	(0.581)	0.895*	(0.484)	0.874	(0.532)
CEO recruited private sector	0.031*	(0.017)	0.027	(0.017)	–0.614	(0.935)	–0.353	(1.071)	–0.340	(1.080)
Managerial influences										
Board size	–0.001	(0.007)	–0.000	(0.007)	0.045	(0.285)	0.197	(0.386)	0.193	(0.387)
Compensation committee	0.039***	(0.013)	0.033**	(0.013)	–1.028	(0.870)	0.150	(1.215)	0.110	(1.286)
CEO tenure	0.003**	(0.002)	0.004**	(0.002)	0.144	(0.120)	0.038	(0.109)	0.039	(0.109)
Chair is CEO	0.007	(0.011)	0.007	(0.011)	0.131	(0.925)	1.038	(0.860)	1.044	(0.863)
Controls										
Nationality	0.059	(0.042)	0.051	(0.039)	–0.980	(1.250)	5.022***	(1.265)	5.019***	(1.266)
Time trend	0.017***	(0.003)	0.017***	(0.003)	–0.230	(0.207)	0.564**	(0.225)	0.564**	(0.225)
Number of firm/year observations	307		307		307		307		307	
Number of firms	77		77		77		77		77	
Rho	0.93		0.91		0.72		0.79		0.79	
Wald chi2/LR chi2	211.07***		222.81***		72.35***		58.31***		58.35***	
R^2 (overall)	0.66		0.71							
Estimation method	Linear		Linear		Logistic		Logistic		Logistic	

Note: The table reports unstandardised regression coefficients with standard errors in parentheses. Rho denotes the proportion of total error variance contributed by the panel-level error component. The Wald chi2 (for linear regression) and LR chi2 (likelihood-ratio) (for logistic regression) statistics report whether the independent variables are jointly significant. R^2 is the overall variation explained by the model. * $p < 0.10$ (two-tailed); ** $p < 0.05$ (two-tailed); *** $p < 0.01$ (two-tailed).

Table 7.6. Random-effects regression analysis for the compensation measures by SOC chairman subsamples.

Independent variables	Total cash compensation				Incentive scheme				Golden parachute			
	Political chairmen		Non-political chairmen		Political chairmen		Non-political chairmen		Political chairmen		Non-political chairmen	
Intercept	2.706***	(0.097)	2.796***	(0.107)	–15.493**	(7.050)	–12.810***	(3.646)	–10.209	(6.365)	–6.034	(4.220)
Political influences												
State control	–0.032	(0.021)			1.712	(2.643)	5.328***	(1.425)	0.932	(2.342)	–0.816	(1.414)
Economic criteria												
Commercial objective	0.125**	(0.053)	0.086**	(0.034)	4.505*	(2.655)	6.502***	(2.016)	1.475	(2.260)	2.998*	(1.654)
Non-listing			–0.002	(0.037)								
Listing			0.183***	(0.070)								
Equity (log)	0.098***	(0.021)	0.084***	(0.022)	3.777**	(1.750)	1.036	(0.712)	0.936	(1.004)	1.854***	(0.651)
CEO recruited private sector	0.075	(0.048)	0.030*	(0.017)	1.344	(1.443)	–2.322*	(1.333)	–1.563	(2.068)	–0.552	(1.265)
Managerial influences												
Board size	–0.001	(0.012)	0.004	(0.008)	–0.055	(0.529)	0.244	(0.369)	0.143	(0.775)	–0.175	(0.508)
Compensation committee	0.030	(0.020)	0.045***	(0.017)	–0.641	(1.449)	–2.197*	(1.242)	0.658	(2.408)	–2.793	(2.049)
CEO tenure	0.023***	(0.006)	0.001	(0.002)	–0.027	(0.273)	0.151	(0.154)	–0.284	(0.332)	0.008	(0.129)
Chair is CEO	0.013	(0.016)	–0.006	(0.018)	–1.546	(1.723)	0.873	(1.262)	–0.074	(2.003)	1.513	(1.128)
Control												
Nationality	0.045	(0.047)	0.043	(0.046)	–1.944	(2.695)	–0.663	(1.477)	6.086**	(2.777)	6.492***	(1.721)
Time trend	–0.002	(0.005)	0.018***	(0.003)	–0.297	(0.406)	–0.029	(0.278)	1.989***	(0.628)	–0.039	(0.292)
Number of firm/year observations	94		213		94		213		94		213	
Number of firms	32		62		32		62		32		62	
Rho	0.95		0.88		0.53		0.74		0.78		0.79	
Wald chi2/LR chi2	141.17***		169.30***		27.23***		64.79***		32.99***		49.92***	
R^2 (overall)	0.59		0.75									
Estimation method	Linear		Linear		Logistic		Logistic		Logistic		Logistic	

Note: As to the notation, see the note in Table 7.5.

Table 7.7. Random-effects regression analysis for the compensation measures by state control subsamples.

Independent variables	Total cash compensation				Incentive scheme				Golden parachute			
	Full state control		Partial state control		Full state control		Partial state control		Full state control		Partial state control	
Intercept	2.922***	(0.108)	2.632***	(0.074)	–6.012*	(3.084)	–10.110*	(5.909)	–11.538**	(4.847)	–8.395	(5.479)
Political influences												
Chairman political representative	0.001	(0.011)	–0.074**	(0.032)	0.781	(1.141)	1.174	(2.289)	0.351	(1.252)	2.201	(2.464)
Economic criteria												
Commercial objective	0.048**	(0.024)	0.228***	(0.068)	4.947***	(1.545)			2.653*	(1.515)	3.567	(4.930)
Stock market listing			0.201***	(0.058)								
Equity (log)	0.058**	(0.024)	0.103***	(0.025)	0.144	(0.662)			2.235***	(0.727)	0.228	(1.635)
CEO recruited private sector	0.037*	(0.020)	0.050*	(0.026)	–0.137	(1.091)	–1.353	(1.864)	0.213	(1.471)	–2.877	(2.063)
Managerial influences												
Board size	–0.002	(0.008)	–0.003	(0.010)	0.154	(0.308)	1.061	(0.653)	–0.036	(0.546)	0.532	(0.650)
Compensation committee	0.033**	(0.013)	0.080**	(0.034)	–0.786	(0.961)			0.907	(1.674)	–3.034	(3.093)
CEO tenure	0.004**	(0.002)	0.004	(0.003)	0.111	(0.137)	0.239	(0.271)	–0.144	(0.179)	0.356	(0.235)
Chair is CEO	0.009	(0.011)	0.002	(0.022)	0.220	(1.115)	0.352	(1.515)	1.914	(1.336)	0.036	(1.536)
Control												
Nationality	0.058	(0.045)	0.113**	(0.049)	–1.769	(1.453)	1.907	(2.127)	6.835***	(1.787)	5.475**	(2.393)
Time trend	0.015***	(0.003)	0.026***	(0.005)	–0.517**	(0.254)	0.381	(0.403)	0.806**	(0.338)	0.152	(0.407)
Number of firm/year observations	210		97		210		102		210		97	
Number of firms	56		26		56		26		56		26	
Rho	0.95		0.71		0.70		0.83		0.79		0.81	
Wald chi2/LR chi2	137.26***		772.80***		26.64***		8.51		56.53***		16.90*	
R^2 (overall)	0.42		0.69									
Estimation method	Linear		Linear		Logistic		Logistic		Logistic		Logistic	

Note: As to the notation, see the note in Table 7.5.

Table 7.8. Random-effects regression analysis for the compensation measures by nationality subsamples.

Independent variables	Total cash compensation				Incentive scheme				Golden parachute	
	Norway		Sweden		Norway		Sweden		Norway	
Intercept	2.876***	(0.177)	2.802***	(0.123)	–18.502***	(5.304)	–13.213**	(5.497)	–11.148**	(4.826)
Political influences										
Chairman political representative	–0.014	(0.014)	–0.000	(0.017)	0.292	(1.457)	–0.296	(1.735)	0.319	(1.254)
State control					2.363	(1.608)	7.957**	(3.221)	0.190	(1.360)
Economic criteria										
Commercial objective	0.195***	(0.050)	0.048*	(0.029)	6.541***	(1.903)			3.582**	(1.709)
Non-listing	–0.022	(0.036)	–0.012	(0.047)						
Listing	0.040	(0.037)	0.405***	(0.106)						
Firm size (log equity)	0.084***	(0.020)	0.098***	(0.032)	0.627	(0.813)	4.655***	(1.542)	0.928	(0.648)
CEO recruited private sector	0.022	(0.026)	0.031	(0.024)	0.395	(1.455)	–1.852	(1.785)	–1.448	(1.340)
Managerial influences										
Board size	–0.012	(0.018)	0.002	(0.008)	0.764	(0.611)	–0.096	(0.405)	0.566	(0.579)
Compensation committee	0.039*	(0.023)	0.029*	(0.017)	1.148	(2.358)	–0.641	(1.332)	–1.464	(1.950)
CEO tenure	0.002	(0.002)	0.003	(0.003)	0.165	(0.194)	0.152	(0.226)	–0.219	(0.175)
Chair is CEO	–0.000	(0.015)	0.020	(0.023)	1.151	(1.322)	–1.389	(1.900)	–0.219	(1.158)
Control										
Time trend	0.021***	(0.003)	0.015***	(0.004)	0.769**	(0.367)	–1.427***	(0.505)	0.933***	(0.319)
Number of firm/year observations	166		141		166		141		166	
Number of firms	46		31		46		31		46	
Rho	0.93		0.91		0.78		0.74		0.80	
Wald chi2/LR chi2	208.16***		137.39***		46.22***		49.96***		28.94***	
R^2 (overall)	0.68		0.72							
Estimation method	Linear		Linear		Logistic		Logistic		Logistic	

Note: As to the notation, see the note in Table 7.5.

7.3.1 Political influences

Although politicians have no direct say on the compensation issue, theory suggests that they might indeed succeed in putting some constraints on the level and structure of CEO compensation contracts. More specifically, Hypotheses 1a–1c and 2a–2c postulate that political influences might operate through board appointments and state ownership positions. According to Table 7.5, the results only partly support this notion. In particular, the results show that firms being headed by political chairmen are not distinguishable from firms being chaired by non-politicians. While the results remain largely unchanged when using sector affiliation as an alternative measure to political experience (not shown in table), public sector employees are found to have a significant negative impact on the probability that SOCs will adopt golden parachutes (coefficient of –1.962; $p < 0.05$).[107] Even more interesting, the marginal effect is non-trivial, since SOCs with public sector employees in the chairman position have a 20% lower probability of adopting golden parachutes than SOCs being chaired by private sector employees. However, since this result contrasts markedly with other insignificant results related to sector affiliation, we are led to speculate if public sector employees are associated with lower chances for golden parachute adoption for other reasons than to signify adherence to political preferences. For instance, it seems plausible that, when compared to private sector employees, public sector employees have less personal experience with golden parachute agreements, which also make them less prone to adopt such compensation elements.

As to the effect of state control (shown in Model 1), there is some evidence that partly state-owned firms pay their CEOs more than firms under full state control. More precisely, CEOs in partly state-owned firms are paid 3.6% more than CEOs in firms under full state control ($p < 0.10$). Moreover, partial state control significantly increases the chance that the CEO compensation contract includes an incentive scheme (coefficient of 4.102; $p < 0.01$). In a practical sense, the impact of a firm being partly state-owned leads to about 52 % higher probability of using incentive schemes than if the firm is fully controlled by the state. In both cases, however, it seems that the effect of partial state control is confounded with the effect of stock market listing. In fact, the use of incentive schemes is perfectly determined by listing (which also means that Model 2 is dropped for this dependent variable). Moreover, for total cash compensation, Model 2 shows that listed firms pay their CEOs significantly higher levels than fully state-owned firms insofar as the pay difference between the two groups of firms amounts to 12.2% ($p < 0.05$). By contrast, there is no significant difference between

[107] This result is obtained from Model 2. Model 1 produces a coefficient of –1.846 and $p < 0.05$.

firms under full state control and non-listed firms under partial state control, which indicate that stock market listing is the key important predictor of CEO pay levels (also note that the reason why the significant listing effect is not captured by the state control measure in Model 1 is due to the small number of listed firms). Surprisingly, neither state control nor stock market listing has any profound impact on the probability that SOCs will adopt golden parachutes.

Seeking to further explicate the effect of ownership characteristics, I performed some additional tests using more precise variable specifications (not reported in table). While none of the finer measures had any significant impact on the likelihood that firms are adopting golden parachutes, several interesting results emerged regarding total compensation levels and the use of incentive schemes. First, it appeared that the probability that SOCs will provide incentive schemes as part of their compensation contracts is positively and significantly related to different threshold levels of state control (except for the category of state super-majority). Indeed, the results showed that incentive schemes were employed by all firms in which the state holds simple majority, and that firms in both the negative control and the minority post categories were more likely than fully state-owned firms to offer incentive schemes (coefficients of 4.872 and 5.745; $p < 0.01$ and < 0.05; marginal effects of 80% and 89%, respectively). With regard to the compensation level, the threshold levels were largely insignificant – except for the finding that firms in the negative control category paid their CEOs more than firms under full state control (coefficient of 0.062; $p < 0.10$; marginal effect of 6.2%).[108] While these results intuitively suggest that the mere presence of co-investors is more important than how much the state owns, we should also note that the lower threshold levels of state control are strongly associated with stock market listing. Once again, therefore, the results indicate that state ownership characteristics actually mask the impact of listing.

Second, regarding co-investment characteristics, the results further support the idea that listing is more important than state control, since both compensation levels and incentive usage were significantly explained by lower levels of co-investor concentration. More precisely, the results showed that in those firms where the largest co-investor holds either 5% control or less than 5% control (which is typical for publicly traded SOCs), pay levels were significantly higher than among firms under full state control (coefficients of 0.054 and 0.050, respectively; $p < 0.10$ for both groups;

[108] Using the state equity fraction instead of threshold levels of state control, the former was found to be significantly related to both the probability that firms employ incentives schemes (coefficient of –0.084; $p < 0.01$; marginal effect of –0.5%) and the compensation level (coefficient of –0.001; $p < 0.05$; marginal effect of –0.1%).

marginal effects of 5.4% and 5%, respectively). Also, the probability that SOCs will compensate their CEOs by way of incentive schemes was positively affected by lower levels of co-investor concentration. In fact, all firms with less than 5% co-investor control were found to provide incentive schemes, while firms with 5% co-investor control were significantly more likely than firms under full state control to include this element in the compensation contract (coefficient of 3.406; $p < 0.05$; marginal effect of 46%).[109]

Finally, the results revealed that among those firms where the largest co-investor is non-public, pay levels were significantly higher than among firms under full state control (coefficient of 0.051; $p < 0.05$; marginal effect of 5.1%), while firms controlled by public co-investors were no different from 100% state-owned firms. Similarly, non-public co-investors affected the propensity to employ incentive scheme in a positive way (coefficient of 5.001; $p < 0.01$; marginal effect of 76%), while public co-investors had no significant effect on incentive usage. But, since there is a high correlation between listing and the presence of non-public co-investors, these results mainly confirm the interpretation that stock market listing is the underlying mechanism explaining the level and structure of CEO compensation contracts.

7.3.2 Economic criteria

Focusing our attention on the economic criteria conducive to 'optimal' design of CEO compensation packages, I have already confirmed that stock market listing is a key important predictor of pay levels and the probability that firms will offer incentive schemes as part of their CEO compensation contracts. Accordingly, the results from Table 7.5 provide strong support for Hypotheses 4a and 4b, but do not confirm Hypothesis 4c. The latter non-result is tricky, since stock market listing is indeed the main economic rationale why SOCs should adopt golden parachutes. Yet, the insignificant influence of listing is not difficult to explain, since most practitioners would consider the takeover threat of SOCs as illusory.

Moreover, the findings confirm Hypotheses 3a and 3b, which state that commercial SOCs offer higher pay levels than non-commercial SOCs and that commercially oriented SOCs are more likely than societal-oriented SOCs to provide incentive schemes. Even more precisely, the results tells us that CEOs in commercial SOCs are paid about 9% more and have a 40%

[109] Using the equity fraction of the largest co-investor instead of threshold levels of co-investor concentration, I found that the equity fraction had a significant effect on the probability that firms employ incentive schemes (coefficient of 0.073; $p < 0.05$; marginal effect of 0.3%). As regards the compensation level, this measure had no significant effect.

higher probability of being offered incentive schemes than CEOs in non-commercial SOCs ($p < 0.01$ for both groups). By contrast, the probability that firms will adopt golden parachutes is traced to corporate objective with a sign opposite to that predicted by theory (in Model 1 there is a coefficient of 2.525; $p < 0.10$). Interestingly, the magnitude of the estimated effect is non-trivial as commercial SOCs have a 31% higher probability than non-commercial SOCs of granting golden parachutes. Yet, this finding is not surprising, since Hypothesis 3c rests on theoretical reasoning alone rather than more conventional ideas about the conditions under which golden parachutes are adopted.

To test the sensitivity of these results to alternative specifications of the type of activity performed by SOCs, I also produced descriptive statistics to check whether the level and structure of CEO compensation contracts vary by sector classification (tables are shown in Appendix F). While these results are more speculative than conclusive (due to small within-group numbers), there are yet some crucial differences to be noted. Most important, the descriptive evidence illustrate that, in Sweden, SOCs in the utilities sector pay their CEOs considerably higher levels of compensation than do SOCs in other sectors. In Norway, the highest pay levels are found within the telecommunication service sector. But not only do pay levels differ across sectors; CEOs in different sectors are also paid differently. In particular, Norwegian top managers in the sectors of consumer staples and telecommunications are more likely than CEOs in other sectors to receive pay in the form of annual bonuses, stock options, shareholdings, and alike. In Sweden, the use of incentive schemes is concentrated among a few sectors only (mainly telecommunication services and utilities). As regards the adoption of golden parachutes, it seems that, in both countries, CEOs within the sector of consumer discretionary have a lower probability than CEOs in other sectors to be compensated in the case of dismissal (in Norway, the adoption of golden parachutes is even less commonly employed among SOCs in the utilities sector).

The results of the multivariate analyses also confirm Hypothesis 5a, which postulates that firm size is positively related to compensation levels, with the elasticity roughly equal to 0.10 ($p < 0.01$). Thus, a 1% increase in equity leads to a modest 0.1% increase in total cash compensation. Additionally, both the probability that firms will adopt incentive schemes and golden parachutes is significantly related to firm size in the very same magnitude as pay levels ($p < 0.01$ and < 0.10, respectively). However, the signs appear in the opposite direction from that of Hypotheses 5b and 5c. The results therefore indicate that the presumed complexity of large SOCs does not prevent these firms from offering performance-based pay, and that CEOs are to some extent compensated for the increased risk exposure which is often associated with running large firms. Importantly, these results are not altered when using alternative measures of firm size (log number of

employees and log total assets), which makes firm size a robust, although fairly modest, predictor of CEO compensation contract design. Finally, the results provide support for Hypothesis 6, which states that CEOs who are recruited from the private sector are paid a premium over the compensation level being offered to CEOs recruited from the public sector or from within the firm. In practice, however, this effect is fairly small as private sector employees are paid a premium of 3.1% over public sector employees and internal candidates ($p < 0.10$).

7.3.3 Managerial influences

As Table 7.5 indicates, managerial influences on the pay-setting process are fairly modest. In fact, regarding both the adoption of incentives schemes and golden parachutes, none of the Hypotheses 7–10 are confirmed under the full sample (which also means that the bivariate significant correlations between the three compensation measures on the one hand and board size and the presence of a compensation committee on the other, simply mask the effect of other independent variables). By contrast, the findings suggest that the presence of a compensation committee significantly enhances the level of CEO pay. While the result is practically small – firms with a compensation committee are paying their CEOs 3–4% more than firms without such a specialised committee – it still supports the opposite statement of Hypothesis 8a ($p < 0.01$ and < 0.05 in Model 1 and 2, respectively). Intuitively, this finding seems hard to explain, given the *ceteris paribus* assumption of the model. Yet, we might speculate that the very formalisation of the task of designing compensation contracts can stimulate more lucrative compensation packages; for instance, if members on such expert committees may believe they own talent is partly reflected by the status, and thus the pay level, of the firm's CEO (Finkelstein and Hambrick, 1988). Alternatively, compensation committees could be more willing than 'ordinary boards' to pay a premium to attract high-quality CEOs or to compensate for the non-provision of incentive schemes with higher levels of pay. The latter idea seems particularly compelling as there is a negative (although insignificant) relationship between the presence of a compensation committee and the probability that SOCs are offering incentive schemes.

The results also provide statistical support for Hypothesis 9a, which states that CEO tenure has a significant impact on the level of compensation. However, this effect is only trivial as an additional year in position results in a maximum of 0.4% pay increase ($p < 0.05$). More interesting is to examine whether the tenure effect is increasing or decreasing over the sample period, which means I also estimate the tenure effect by way of a quadratic function (not shown in table). Using Model 2 (Table 7.5) to calculate this effect, it seems that CEO tenure has a diminishing effect on the total compensation level (tenure coefficient of 0.013 and quadratic tenure coefficient of –

0.00089, $p < 0.01$ for both coefficients). The result thus suggests that while the first year in office is worth about a 1.3% pay increase, adding one year to the average tenure (4.5 years) yields a pay increase of 0.5%. The curvilinear tenure effect peaks at 7.3 years in office.

Finally, neither board size nor the fact that the chairman holds a CEO position seems to be putting upward pressure on CEO compensation levels, which means that Hypotheses 7a and 10a are not confirmed. Additionally, we note that using board independence as an alternative measure to CEO tenure does not alter the results.

7.3.4 Is there still room for political influences?

Having confirmed the relevance of economic and other criteria in the CEO pay-setting process and contested any direct political manoeuvres therein, we might still ask if there is scope for political influences. More specifically, I have suggested above that political influences can be identified to the extent that they suppress the importance of economic criteria, since the latter are possibly not perceived as politically legitimate reasons why contractual differences should exist. Also, it would be interesting to explore whether the impact of managerial influences differs according to the presumed strength of political influences. To investigate these issues, Tables 7.6 and 7.7 provides the results of subsample analyses, where I split the sample into subgroups according to political representation (public sector employees) on SOC boards and state control.

In line with these results, the proposition that political chairmen and full state control might play a moderating role in the compensation design achieves mixed support. To further elaborate, we note that regarding the CEO compensation level, there are no significant subgroup differences as to the economic criteria pertaining to corporate objective and firm size – except for the finding that the commercialisation effect is significantly stronger within the group of partly state-owned firms than within the group of firms under full state control (marginal effects of 22.8% and 4.8%; $p < 0.01$ and < 0.05 respectively).[110] We also note that while stock market listing is excluded from the subgroups of political chairmen (since there are no political representatives on the boards of listed SOCs) and full state control, the magnitude of the listing effect is even larger within these subsamples than in the full sample (marginal effects of 18.3% and 20.1%, respectively; p

[110] While the moderated regression suggests that there is a firm size effect related to SOC chairman background, this effect is masked by the listing effect pertaining to partly state-owned firms (which is confirmed by using the state control dummy in both SOC chairman subsamples).

< 0.01 for both groups).[111] There are no significant differences between subgroups regarding their propensity to pay a premium to CEOs recruited from the private sector.

As to managerial influences, a particular interesting result relates to the positive impact of CEO tenure on pay levels within the group of SOCs being chaired by political representatives (marginal effect of 2.3%; $p < 0.01$). While the two subgroups are statistically different on this issue, it is yet important to note that the inclusion of a quadratic term to capture any diminishing returns to time-in-office only yields a significant contribution within the subsample of SOCs being headed by non-politicians (not shown in table). Thus, the results suggest that the previously identified curvilinear tenure effect can largely be ascribed to SOCs being chaired by non-politicians. Moreover, we note that the presence of a compensation committee is a significant predictor of pay levels within all four subgroups, except for the group of SOCs being chaired by political representatives. The moderated regression displays, however, that there are no significant subgroup differences. Additionally, when using sector affiliation instead of political experience as the subsample division criteria (not shown in table), the results showed that there were no significant differences between those firms being chaired by public sector employees and those being chaired by private sector employees.

Focusing on the probability that SOCs will offer incentive schemes there is evidence that the relationship between commercial orientation and incentive usage is stronger among SOCs being chaired by non-politicians than among those firms being headed by political representatives, but the difference is not statistically significant. Moreover, this relationship seems to hold also with regard to state control, as the percentage of commercial SOCs under partial state control that use incentive schemes largely outweighs the equivalent number for the group of firms under full state control (in fact, due to no incentive observations among non-commercial SOCs, the corporate objective variable is removed from the partial state control subgroup).[112] We also note that there are significant differences between SOCs being chaired by political versus non-political chairmen regarding the (not hypothesised) relationship between CEO recruitment channel and incentive schemes (coefficients of 1.344 and –2.322, respectively; only the latter coefficient is significant with $p < 0.10$). More precisely, among firms with non-political chairmen, CEOs recruited from the private sector have a 11% lower

[111] Also note that the significant interaction effect pertaining to state control and political representation on SOC boards is presumably somewhat confounded with stock market listing.

[112] Also removed from the subgroup of partly state-owned firms are the variables pertaining to the presence of a compensation committee (due to perfect prediction) and firm size (due to collinearity with the remaining variables).

probability of being offered incentive schemes than have CEOs recruited from the public sector or from within the firm. Conversely, in SOCs being headed by political chairmen, there is about 3% higher probability that CEOs recruited from the private sector will be offered incentive schemes. Attempting to explain these results, it is possible that non-politicians consider private sector employees to be so accustomed to think about corporate value that they are less in need of such incentives than are public sector employees. Alternatively, they might deem it important that private sector employees shift their focus away from narrowly specified performance criteria to some broader concerns. Conversely, non-politicians might find it wanted to sharpen the focus of CEOs recruited from the public sector by way of offering them explicit incentives. From the point of view of political chairmen, it seems that they are more apt to adjust to conventional pay practices.[113]

As regards the adoption of golden parachutes, it appears that the effects pertaining to corporate objective and firm size in the full sample are mainly due to SOCs being chaired by non-political chairmen. However, as shown by the moderated regression, this difference is not significant.[114] Actually, the only significant subsample difference relates to CEO tenure in that time-in-office is apparently a more important determinant within the subsample of partial state control than within that of full state control. Due to large standard errors, however, the tenure effect is not statistically significant *per se*. It is interesting, however, to note that some more significant subgroup differences came into view when using sector affiliation as the subsample division criterion (not shown in table). In particular, the results showed that, within the group of SOCs being chaired by private sector employees, both the presence of a compensation committee and the fact that the chair is also a CEO are significantly and negatively associated with golden parachute adoption (coefficients of –5.644 and –3.012, respectively;

[113] The subsample analysis also indicates that compared to the subgroup of SOCs with non-political chairmen, SOCs being chaired by political representatives are more positively associated with firm size and the presence of a compensation committee. According to the moderated regression results, however, these differences are not statistically significant. Using instead sector affiliation as the subsample division criteria, it was now displayed a significant subgroup difference with respect to the presence of a compensation committee (for private sector chairmen there is a coefficient of –4.107; $p < 0.05$. For public sector chairmen, this effect is insignificant). In economic terms, there is a 17.3% lower probability that SOCs with compensation committees are offering incentive schemes if the chairman is recruited from the private sector than if recruited from the public sector.

[114] Also note that, due to large standard errors, the significant effects of corporate objective and firm size that are identified within the subgroup of fully state-owned firms are not captured by the interaction effects.

$p < 0.10$ for both groups; marginal effects of –12.5% and –25.9%).[115] Thus, it seems that private sector employees might be concerned about not mimicking the compensation practices of private businesses. By contrast, within the group of SOCs being headed by public sector employees, golden parachute adoption is significantly and positively influenced by the chair–CEO combination (coefficient of 3.978; $p < 0.01$; marginal effect of 31.3%), while the effect of compensation committees is insignificant. Interestingly, this result is consistent with the already noted finding of a direct and negative association between public sector employees and golden parachute adoption. Namely, if golden parachute adoption is sensitive to the presumed fact that public sector employees have little experience with such contractual agreements, it might still be the case that public sector CEOs are more familiar with this element than non-CEOs, and thereby more disposed to adopt golden parachutes. A cruder explanation is that CEOs are only pursuing their own interests as they seek to make golden parachutes more commonly accepted within the public sector.

7.3.5 Nationality and time effects

While, in Section 7.2, it was shown that the design of CEO compensation contracts differ across Norway and Sweden, the descriptive evidence also demonstrated that some of these differences were actually wiped out (with regard to pay levels) or reversed (with regard to the use of incentive schemes) over the sample period. These patterns are confirmed by the multivariate regression results in Table 7.5, in which nationality has no direct effect on pay levels or the probability that SOCs compensate their CEOs by way of incentive schemes. By contrast, nationality is the key important predictor of the probability that firms will adopt golden parachutes – and the results support the descriptive evidence that this compensation element is significantly more prevalent among Swedish SOCs than among their Norwegian counterparts (in Model 1 there is a coefficient of 5.022; $p < 0.01$). In fact, the marginal effects estimations show that Swedish CEOs have a 58% higher probability than their Norwegian counterparts of being granted golden parachutes, all else considered.

Apart from examining direct effects, we also want to know whether nationality might have some indirect effects on the results. To investigate whether the results from the full sample differ according to nationality, I therefore performed subsample analyses distinguishing between Norwegian and Swedish SOCs. While these results (reported in Table 7.8) corroborate

[115] In fact, the marginal effect pertaining to the presence of a compensation committee is understated, since the estimation of marginal effects required that nationality was removed from the regression (due to nearly perfect prediction). But since nationality is somewhat confounded with the presence of a compensation committee, the marginal effect became reduced.

several findings from the full sample, some striking results emerge. For one thing, the above-discussed effect of stock market listing on CEO pay levels is entirely subscribed to Swedish firms ($p < 0.01$), as confirmed by the moderated regression and the fact that listing is not a significant predictor among Norwegian firms. Actually, Swedish CEOs in listed firms are paid 40.5% more than CEOs in firms under full state control, while the corresponding number for Norway is 0.4%.[116] Another interesting result from the split sample analysis is that the influence of corporate objective on CEO compensation levels seems mainly associated with Norwegian firms. In support of this finding, the moderated regression shows that there is a significantly stronger relationship between commercial SOCs and pay levels in Norway than in Sweden (with marginal effects of 19.5% and 4.8%; $p < 0.01$ and < 0.10, respectively). Thus, whereas in Sweden, the link between market exposure and pay levels works through the stock market, it seems that, in Norway, higher pay levels are more broadly associated with corporate activity. Apparently, the former result is easier to explain than the latter, since the competition for CEO talent is normally stronger among listed firms. We also note that the significant impacts of firm size and the presence of a compensation committee that were identified in the full sample are valid in both subgroups, which means that these effects are not sensitive to nationality. The same argument holds for the impact of CEO tenure, although this effect is not longer significant in the split sample. The results do not provide any support for the supposition that political representation or public sector affiliation on SOC boards are more important determinants of CEO pay packages in Sweden than in Norway.

From the subsample analysis it also seems that nationality matters to which variables have the most impact on incentive usage. Although every listed firm in both Norway and Sweden are offering incentive schemes, the state control coefficient is only significant in the Swedish subsample. There are thus indications that Swedish non-listed firms under partial state control have a higher probability than their Norwegian counterparts of providing performance-based pay components. Moreover, the relationship between firm size and incentive schemes which is evident in the full sample is only apparent among Swedish SOCs. Seemingly, however, some parts of both the state control and firm size effects are confounded with corporate objective, which is excluded from the Swedish subsample as incentive schemes are used by less than 1% of non-commercial SOCs (i.e., corporate objective is almost a perfect predictor in the Swedish subsample). The relative effect of

[116] Moreover, in Norway, there are no significant differences between fully and partly state-owned firms with respect to any of the other ownership characteristics (i.e., state equity fraction, co-investor ownership concentration, and co-investor identity), which means that the previously described ownership effects are mainly due to Swedish SOCs.

corporate objective versus state control and firm size is therefore difficult to discern within the Swedish subsample.

With respect to golden parachute adoption, the results from the Norwegian subsample again confirm the importance of corporate objective (coefficient of 3.582; $p < 0.05$; marginal effect of 67%), while firm size is not longer a significant predictor. Interestingly, we also note that stock market listing is nearly a perfect predictor of the probability that firms will adopt golden parachutes and is therefore excluded from the model (golden parachutes are present in 95% of the firm/year observations).[117] While this result is consistent with the theoretical prediction (Hypothesis 4c), it also suggests that the insignificant effect pertaining to stock market listing in the full sample is due to Swedish firms.

Regarding time effects, the time trend variable largely supports the descriptive evidence from Section 7.2 in that CEO pay levels show a steady increase over the five-year period. In both full sample models, there is an annual time trend effect of 1.7% ($p < 0.01$ in both models). More interesting, however, is the finding that time effects are sensitive to both the professional background of chairmen and state control. Specifically, the positive time effect is only due to SOCs being chaired by non-politicians and mainly to firms under partial state control (with marginal effects of 1.8% and 2.6%; $p < 0.01$ for both groups, respectively), which suggests that political influences slow down any time influences. In addition, the adoption of golden parachutes shows a positive association with the time trend variable in the full sample (in Model 1 there is a coefficient of 0.564; $p < 0.05$); from one year to another there is a 6.2% higher probability that firms will adopt golden parachutes. In contrast to the case of pay levels, however, there is a positive time trend effect due to SOCs being chaired by political representatives coefficient of 1.989; $p < 0.01$). Among those SOCs which are headed by political chairmen, the probability of granting golden parachutes increases with about 21% from one year to the next, while the corresponding number for SOCs chaired by non-politicians is –0.4%. Contrary to the expectation, this means that the increase in golden parachute adoption over the sample period has taken place in those firms where political influences are presumably the strongest.[118] Finally, the probability that SOCs use incentive schemes is not significantly related to the time trend variable in the

[117] The exclusion of stock market listing also means that the effect of corporate objective is somewhat overstated.

[118] The subsample analysis also displays evidence that the positive time trend effect is mainly due to SOCs under full state control, but the moderated regression suggests that the difference between firms under full and partial state control is not statistically significant.

full sample – or to any of the political channel subsamples.[119] In line with the descriptive evidence, however, there is a significant time effect related to incentive usage in both the Norwegian and Swedish subsamples (coefficients of 0.769 and –1.427; $p < 0.05$ and < 0.01, respectively). Over the sample period, the probability that Norwegian SOCs will offer incentive schemes increases with roughly 3% on an annual basis. Conversely, the probability that Swedish SOCs will include incentives schemes as part of their CEO compensation contract is annually reduced by about 7%.

7.3.6 Some further issues of interpretation

Apart from the results discussed above, there are still some issues that raise questions of interpretations. One question which arises from the descriptive evidence relates to the mix of compensation elements: Why are there so many golden parachutes and so few incentive schemes (reported in 64% and 30% of the total cases, respectively)? One explanation that would seemingly be consistent with the observed pattern is that the two compensation elements are viewed in terms of a trade-off. That is, for SOC boards being able to offer competitive pay packages without exposing themselves to the risks associated with incentive schemes (e.g., that CEOs take manipulative actions or engage in unwanted activities), they choose to add golden parachutes as these represent some less-risk compensation extras. Yet, this explanation is not entirely satisfactory as the two elements are often used in combination. Moreover, golden parachutes are certainly not risk-free as they might actually induce CEOs to take on extra risk, knowing that they would be compensated for any bad results. Thus, rather than looking at the two compensation elements as interdependent parts of the CEO pay package, it seems more fruitful to explain the use of incentives schemes and golden parachutes as separate phenomena.

As to the low fraction of incentive schemes, theory indeed suggests that incentive usage could be optimally low. In particular, the multi-tasking of many SOCs means that incentives might substitute CEO effort away from those tasks that are difficult to measure to those that are easily measured. In support of this argument, the results of this study confirm that performance-based pay is deemed to be inappropriate in most non-commercial SOCs. Yet, there might also be other reasons why SOC boards optimally choose flat wages. In the literature, particular attention is devoted to the notion that incentive schemes might actually be counterproductive if CEOs care about the 'intrinsic rewards' that they receive from the job (e.g., in terms of self-esteem). More precisely, explicit incentives can erode this other motivation

[119] Surely, there is a negative and significant relationship between time trend and incentive schemes in the subsample of full state control, but the moderated regression indicates that the subsample difference is not significant.

as they send a signal that the relationship between the CEO and the firm is a pure market relationship (see, for example, Baker et al., 1988; Kreps, 1997; Burgess and Ratto, 2003). Alternatively, SOC boards might consider explicit incentives as redundant to the extent that such schemes encourage behaviour that is already prompted by implicit incentives. In fact, the latter may be deemed as very strong in the public sector, since there are many stakeholders to evaluate CEO performance. The idea is thus that top managers' concern for their reputation in the labour market, the political milieu, the firm, and the broader community will provide CEOs with adequate incentives. Yet, within a political context, there is also a risk that non-pecuniary rewards do not vary positively with the predefined goals subscribed to SOCs. Instead, implicit incentives might have severe implications as there are strong political and organisational forces that tend to define success in dimensions other than the publicly stated objectives of SOCs (e.g., trade unions and local communities exert pressure to maintain employment above efficient levels in commercial SOCs) (Jensen and Murphy, 1990a). For that reason, it might be that implicit incentives do not strengthen the case for goal fulfilment, but actually come at the expense of the realisation of corporate objective.

Whereas these arguments suggest that the rationale underlying incentive scheme provision is difficult to interpret, it seems even more demanding to explain the adoption of golden parachutes. On this issue, theory provides us with few clues other than suggesting that this kind of contractual agreement might be influenced by fashion: To attract and retain managerial talents, SOC boards will adopt compensation elements that have gained widespread acceptance, which eventually results in firms following an imitative pattern in the pay-setting process (Larcker, 1983; Finkelstein and Hambrick, 1988). But we might also speculate that SOC boards are particularly apt to adopt golden parachutes for the purposes of easing the potential dismissal of CEOs and thereby increasing labour market mobility, since public sector employment is conventionally rather sticky.

Another issue which requires interpretation relates to the impact of political influences. Notwithstanding the finding that political forces matter to *which criteria* are emphasised in the CEO compensation design, this result also raises the question of what are the implications for the very *substance* of pay packages. Thus, can we reveal any impact of politics on the content of CEO compensation contracts, even though we know that political forces do no directly translate into lower pay levels or lesser use of incentive schemes and golden parachutes? A direct test of this issue is to look at whether political influences result in both the lower and upper tail of the payoff distribution being truncated (Jensen and Murphy, 1990a), since such a pay strategy would allow politicians both to keep pay levels in check and to provide most CEOs with competitive salaries. The idea is thus that political influences might result in SOC boards deciding on pay levels which are close to an 'accepted' benchmark. The present data give little support to this

notion in that the SOC chairman and state control subsamples display few significant pay differences at the lower and higher percentiles.[120] As this pattern also holds across countries, it is therefore little evidence that the political forces operating through SOC boards and direct state ownership stakes put restrictions on the payoff scale. Neither is there any strong evidence that political influences result in less lucrative golden parachute agreements (in terms of months of fixed salary pay) – a result which again holds for both countries. However, if we look at the bonus payments following the use of incentive schemes, some interesting results emerge. While the SOCs being chaired by political representatives pay an average bonus share of 2%, the corresponding number is 10% for those SOCs being chaired by non-politicians. The same pattern is observed for the state control subsamples, in which the average bonus shares paid by firms under full and partial state control amount to 6% and 11%, respectively. Although the number of observations is very small, this pattern seems to hold for both Norway and Sweden. Moreover, while these numbers reveal that the largest share of bonus payments is associated with listed firms (because the average bonus share in the full sample exceeds those reported above), they also indicate that incentive schemes are more low-powered in SOCs that are more susceptible to political demands. However, we should also note that the bonus caps exceed the bonus shares that are actually paid, which suggests that not only are bonus payments set deliberately low, but the performance criteria might also be difficult to attain or perhaps even badly constructed. In any case, it seems that the political forces which are putting restrictions on executive compensation packages relate not to the pay level *per se*, but rather to *how* CEOs are paid.

7.4 Summary and Conclusions

While there is much political antagonism towards CEO compensation contracts, little is known empirically about how political influences translate into executive pay design. Nor do we have much knowledge about the relative importance of economic factors, political forces, and managerial influences. The results of this study reveal that the CEO compensation design of firms under state control is responsive to a complex set of factors and is not easily explained by a single governance model. Yet, it seems that the observed empirical regularities are broadly consistent with some distinct

[120] Listed firms are excluded from all subsample analyses, since listing would have masked the actual effects of partial state control and non-politicians in the chairman position (remember that there are no political representatives on the boards of listed firms). As regards the other significant predictors of CEO compensation elements, the descriptive statistics display that there are few differences across the subsamples, which means that the influence of other independent variables do not differ significantly across the subsamples.

motivational logics. For one thing, the results provide some support for the reputation model, since the economic criteria appear as significant predictors of all three compensation elements (although not all economic criteria are significant for all three pay elements and some effects run counter to theory). In terms of practical significance, the effects of economic criteria seem mainly related to corporate activity and stock market listing, which suggests that there is an upward pressure on CEO pay levels and the adoption of other pay elements due to market forces. It is though interesting to note that these findings are sensitive to nationality. In particular, the relationship between commercial orientation and pay levels is significantly stronger among Norwegian SOCs than among Swedish ones. Conversely, the listing effect on CEO pay levels is due to Swedish SOCs only. Accordingly, it seems that Norwegian and Swedish SOC boards differ as regards how they define the 'market'; that is, how they decide on the appropriate points of reference for making pay decisions (Barkema and Gomez-Mejia, 1998).

For another, the findings provide some support for the widely held belief that politics matters to compensation design. However, rather than providing direct influences on the level and structure of CEO compensation contracts, political forces work in more subtle ways as they interact with economic criteria, managerial influences, and even time effects. In support of the theoretical predictions, it seems that political channels somewhat suppress the impact of economic criteria insofar as both pay levels and incentive usage are more sensitive to the commercial orientation of SOCs within the group of partly state-owned firms than within the group of firms under full state control. In addition, the positive time effect on CEO pay levels is mainly due to firms under partial state control. Moreover, SOC boards seem responsive to political pressure conditioned on the chairman's professional background. In particular, there is a significant difference between those SOCs being chaired by political representatives and those being chaired by non-politicians as regards their proclivity for rewarding seniority. Not only is there is a positive relationship between CEO tenure and pay levels within the group of SOCs being chaired by political representatives, but there are no indications that this effect diminishes over time. By contrast, there is a positive time effect on pay levels which is only due to SOCs being chaired by non-politicians. Thus, while in those SOCs being chaired by political representatives, time effects work through the traditional merit pay systems of the public sector, pay levels are simply increased on a yearly basis among those SOCs being headed by non-politicians.

Even though it is possible to interpret these findings in terms that political representatives and non-politicians are accustomed to different pay practices, other results raise doubt about this view. For instance, compared to SOCs being headed by political chairmen, SOCs with non-political chairmen are significantly less likely to offer incentive schemes if the CEO is recruited

from the private sector than if being recruited from the public sector or from within the firm. Moreover, compared to SOCs being chaired by public sector employees, SOCs with private sector chairmen are significantly less likely to offer both incentive schemes and golden parachutes if the pay package is designed by a compensation committee (i.e., if the chairman is even more hands-on the pay-setting process). The same pattern holds regards the adoption of golden parachutes in the case which the chairman is also a CEO. Given this, it may seem that non-politicians and private sector employees are concerned about not simply imitating the pay practices by which they are familiar. Instead, it looks as if they consider what pay design is the most appropriate for the firm (e.g., some CEOs are more in need for incentives than others), which might certainly signal competence. Also, they send a signal of taking responsibility for not putting upward pressure on the pay package, which might be particularly important for chair–CEOs. In this way, non-politicians and private sector employees might actually be satisfying both reputation and re-election concerns.

Interestingly, chairmen who are employed in the public sector seem to engage in CEO compensation design in ways that are more narrowly self-dealing. In fact, the results show that among those SOCs being chaired by public sector employees, chair–CEOs are more likely than chairmen who are non-CEOs to adopt golden parachutes (while the opposite holds for private sector chairmen) – a practice which might possibly benefit chair–CEOs if becoming widely accepted in the political milieu. In support of this view, there is a positive time effect on golden parachute adoption among those SOCs being chaired by political representatives, but not among SOCs being chaired by non-politicians. Contrary to the theoretical expectations, but consistent with prior findings, the study thus provides evidence that some parts of the compensation package are more politically accepted than others. While such a pay practice is certainly not conducive to the reputation concern of chairmen, the seemingly broad accept of golden parachutes within the public sector makes it more difficult to assess whether it will negatively affect the chairman's re-election prospects.

To complete the summary of empirical findings, four broad patterns seem to emerge from this study. First, economic criteria are indeed important determinants of CEO compensation design, although the concept of 'market forces' is clearly differently interpreted within different national contexts. Second, while the observed compensation outcomes somehow reflect that political forces are at work, the effects are mixed. In particular, it seems that chairmen who are political experienced and/or recruited from the public sector are more likely to prefer those kinds of compensation decisions by which they are familiar or from which they might personally benefit than those that might signal competence or political loyalty (although seniority might naturally reflect some sort of loyalty to public sector pay systems). In contrast, the pay strategies of non-politicians and private sector employees

seemingly support both reputation and re-election concerns. Third, although one main conjecture is that political factors work to constrain the level and mix of CEO pay packages, there is actually no evidence that pay levels are more restrained or truncated within firms under strong political control. Nor is the size of golden parachutes responsive to political influences. In sharp contrast, there are stark political constraints on the bonus share paid to CEOs. Thus, to the extent that political channels are putting restrictions on the very content of CEO pay packages, their impact leads to the puzzling conclusion that it seems more acceptable to compensate top managers for bad results (as in the case of dismissal) than for good results (as in the case of bonus payments). Fourth, and related to this, the results highlight the importance of examining several pay components in order to achieve a more complete understanding of CEO compensation practices. In particular, it is possible to discover a positive relationship between pay levels and the use of incentive schemes. When also taking into account the evidence of low-powered incentive contracts, we might conclude that CEOs do not incur any particular risk with their pay. Also consistent with the results of previous studies it is confirmed that the determinants of pay levels differ.

The findings of this study carry implications for research both in the area of corporate governance and political economics. For corporate governance researchers, the results are broadly consistent with the political constraints hypothesis that has been explored for firms with non-political ownership. There is thus evidence that political pressures are mediated both through direct ownership stakes and via regulatory control. Moreover, the study adds important insights to the stream of research that focuses on the role of owner identity in the pay-setting process (see, for example, David et al., 1998; Gomez-Mejia et al., 2003; Hartzell and Starks, 2003). Paraphrasing Gomez-Mejia et al. (2003, p. 226), I use a population that is inherently interesting given the significant role of SOCs in several Western European countries and the hitherto lack of information on their CEO compensation practices. In addition, I build on agency theory in a meaningful way to better understand the compensation issues that are unique to CEO pay in firms under state control. Clearly, the findings of this study and other work suggest that further research into related forms of ownership might be fruitful. In particular, state institutional ownership is a viable candidate for empirical investigation, since public institutions (like state pension funds) are increasingly voicing their opinions about corporate governance (Hartzell and Starks, 2003).

For political economics scholars, the results amplify the conclusions reached by previous studies that divestments of state ownership stakes affect both pay levels and incentive usage in a positive direction. Although the present study carries evidence of a similar pattern, the ownership effect pertains mostly to listed firms. Thus, it seems that governance decisions are not only sensitive to private ownership, but also to the very marketplace in

which they are made. But also, the results demonstrate that criteria other than the ownership structure are important to grasp the variety in CEO compensation contracts; notably, the corporate activity in which SOCs are engaged. Moreover, as the study has documented some peculiarities in the compensation design (e.g., the pervasiveness of golden parachutes and the low-powered incentive contracts), one interesting avenue for future research within this field is simply to better interpret this evidence. For instance, do SOC boards follow trends in designing compensation packages? Moreover, do SOC boards shy away from incentive schemes because they believe that such extrinsic rewards are at odds with other strong motivators, such as the intrinsic value of the job? Or, do they see incentive schemes as redundant to the extent that such schemes encourage behaviour that is already prompted by other motivators; for instance, if prestige among peers in the business community is in great part a function of firm performance? Apparently, to reveal such subtleties it is required that we draw on qualitative evidence, like documentary record examination and personal interviews (see, for example, Cragg and Dyck, 2003).

More generally, it seems that further evidence on the issue of CEO compensation design can most successfully be achieved by looking more closely into board processes. In line with prior research, it seems particularly interesting to examine how SOC boards communicate the rationale underlying their compensation decisions (Zajac and Westphal, 1995). Specifically, the very strong role of third parties in the SOC contracting process suggests that the 'reasonableness' of a compensation package is strongly influenced by the political process (Jensen and Murphy, 1990a). One conjecture that could be tested by future studies is therefore that corporate directors seek to justify compensation contracts in terms of devaluing any aspects of managerial self-dealing while instead emphasising the potential benefits that accrue to the organisation (e.g., by designing 'reduced-windfall' bonus or option plans so as to protect the firm against managerial opportunism and luck). Moreover, although the government-owners focus on 'competitive salaries' as the main criterion to set CEO pay levels, very little is known about how the market's 'going rate' is actually defined; that is, what it takes to pay a CEO at a level that is competitive to other similar firms (Gomez-Mejia and Wiseman, 1997). Given this, evidence needs to be brought to the table about how SOC boards interpret this notion – is it only for symbolic purposes or do SOC boards actually engage in social comparison processes? In the latter case, do SOC boards seek advice from external compensation consultants to provide input in the pay-setting process, and if so, are such consultants likely to put an upward pressure on CEO pay levels (Bebchuk and Fried, 2003)? Additionally, since this study reveals that CEO compensation design is sensitive to the presence of a compensation committee, it is appealing to contrast the pay-setting processes

within such committees to those of SOCs boards without such a specialised committee.

Another direction for future research is to examine pay-performance relationships to see whether CEOs are partly paid on the basis of shareholder wealth. While this study indicates that the compensation contracts generally provide few value-increasing incentives, some incentive schemes are even based on discretion, which makes it is difficult to evaluate whether bonuses are tied to financial performance or not. Moreover, we cannot neglect the possibility that fixed salaries are to some extent adjusted to performance improvements. However, because any full-sample analysis of SOCs can only involve some crude measures of firm performance, it seems that the most promising venue for this test is to perform intra-industry comparisons (which, due to few SOC observations, might possibly also involve some comparable private-owned firms or firms being held by regional/municipal authorities). Indeed, the informal sector test provided by this study displays that pay differences do exist, which is not very surprising given the large heterogeneity of the state ownership portfolio. An additional benefit of focusing on CEOs within a singly industry is that we might better control for the impact of contingency factors at the sector-level. Thus, we avoid any correlation of unmeasured job attributes (e.g., job complexity and autonomy) with variations in sector or regulatory environment (Wolfram, 1998; see also Finkelstein and Boyd, 1988).

Finally, the results have implications for public policy makers in that the evidence suggests a strategic role for board appointments, since chairman personal characteristics (i.e., political experience, sector affiliation, and CEO position) is likely to have an effect on pay decisions. Moreover, it seems that the distinction between commercial and non-commercial SOCs does not only serves for symbolic purposes, but has actual effects on the level and structure of CEO compensation contracts. Moreover, the results suggest that both policy makers and practitioners should pay more attention to the costs and benefits of different incentive aspects rather than to the absolute value of bonus payment alone. For one thing, the very fact that a significant fraction of incentive-providing SOCs does not provide any information on bonus caps indicates that the potential (average) bonus share available to the CEOs in sample might actually be understated. In addition, such non-reporting might fuel public scepticism towards incentive pay. For another, it seems that organisational efficiencies might be gained by focusing on the possibility that internal performance standards might induce CEOs to manipulate the incentive scheme while at the same time steering clear of external comparisons.

Chapter 8

Dividend Payments: Empirical Evidence

Do politicians generally insist on SOCs to pay dividends? If so, how much dividends are extracted from SOCs, and what factors might possibly explain the observed dividend patterns? Seeking answers to these questions is crucial to improve our understanding of the financial governance of SOCs – a topic which has not only important implications for the financial health of these firms, but also for voter welfare. The possibility for using SOCs as instrumental vehicles for public spending purposes is reflected in Norwegian corporate legislation, which allows the government-owner to overrule SOC boards' judgments on the dividend issue in fully state-owned firms. Yet, to evaluate the effects of this institutional practice, we are so far left only with anecdotal evidence. For instance, in 2002, the dividend payments were raised for two SOCs – Statkraft (power generation) and Statnett (electricity transmission) – in the fiscal budget proposal from the government-owner. Rather than following a dividend policy of 'approximately 50% of annual earnings', the government-owner based its budget on a dividend of 90% of the earnings for each of the two, resulting in public complaints by the firms that these decisions would adversely affect their ability to raise investment capital. Using dividend data from an extensive sample of Norwegian and Swedish SOCs, I perform in this chapter a closer examination of the scope for political influence on dividend payments.

The rest of the chapter is organised as follows. Section 8.1 provides a summary and specification of the theory, data and method that are used to examine dividend payments. Section 8.2 presents some basic facts about dividend payments in Norwegian and Swedish SOCs, while Section 8.3 investigates the factors that are conjectured to affect the dividend payment ratio. Section 8.4 concludes with a summary and discussion of the theoretical and practical implications from this study.

8.1 Theory, Data and Method: Recap and Specifications

In line with the theoretical discussion, I use the following model to explain the dividend payment ratio:

Dividend payment ratio = *f*{growth opportunities, debt ratio, corporate objective, income level, state control, chairman's professional background, sponsor ministry, nationality, time trend, error term}.

Since I have already explicated the theoretical ideas underlying the choice of these variables, suffice it here to provide a brief summary. The reputation model rests on the assumption that both politicians and corporate directors seek to behave as skilled representatives of shareholder welfare, which means they seek to control managerial opportunism by commanding SOCs to pay out excess cash. However, to ensure an efficient running of SOCs, they also give emphasis to other criteria, such as growth opportunities, debt ratio, and corporate objective. In comparison, the re-election model suggests that politicians and corporate directors make strategic use of the dividend decision to satisfy political and voter demands. More specifically, I propose that high-income SOCs are particularly at risk of being used as financial drains, since they posit more money to be spent on welfare purposes. As regards the scope for political influence, this is expected to hinge on both state control and the presence of political (public sector employee) representatives in the SOC chairman position. Additionally, I suggest that different sponsor ministries are not equally susceptible to political demands, and that the ownership ministry is particularly apt to resist any non-economic claims on dividends. Moreover, I control for nationality as it likely that nation-specific legislation might have a substantial bearing on dividend payments. Finally, I also control for any time effects on dividend payments. Table 8.1 gives a summary of variable definitions and the hypothesised sign of bivariate relations between independent variables and the dividend payment ratio.

The original sample comprises data over six years (2000-2005). Again, however, we need to ensure time-matching of data. In the present case, this means I first account for the fact that each year's dividend allocation should reflect the firm's financial condition in the very same year. Accordingly, the financial data that include debt ratio and income level match the dividend data on a year-to-year basis. However, as I rely on past growth in sales (amongst other measures) to capture growth opportunities, this variable is lagged by one year. Due to data unavailability prior to year 2000, we are thus left with a five-year sample (2001-2005).[121]

[121] While there are good reasons for employing even two- and three years lag of growth opportunities, this would severely affect the sample size.

Table 8.1. Summary of variable definitions and theoretical predictions.

Variables	Predicted sign
Dependent variable	
Dividend payment ratio Continuous variable: Dividend-to-earnings	
Independent variables	
Reputation model (economic criteria)	
Growth opportunities (hypothesis 1) Continuous variable: Annual sales growth rate	–
Debt ratio (hypothesis 2) Continuous variable: Debt to total assets	–
Corporate objective (hypothesis 3) Dummy variable: Commercial (=1) versus non-commercial (=0) objective	+
Re-election model (political influences)	
Income level (hypothesis 4) Continuous variable: Operating revenue (log)	+
State control (hypotheses 5) Dummy variable: Partial (=1) versus full (=0) state ownership	–
Chairman's professional background (hypotheses 6) Dummy variable: Political (=1) versus non-political (=0) representative	+
Sponsor ministry (hypothesis 7) Dummy variable: Ownership (=1) versus sectoral (=0) ministry	–
Controls	
Nationality Dummy variable: Norway (=0) versus Sweden (=1)	+/–
Time trend Continuous variable ranging from 1-5 (2001,…,2005)	?

Note: A plus (minus) sign in a column indicates that the independent variable is expected to have a positive (negative) effect on the dividend payment ratio. A combined plus/minus sign indicates that the prospective impact on dividend payments is uncertain (theoretical ambiguity). A question mark indicates no strong *à priori* expectation regarding the sign of the independent variable.

To increase the robustness of analysis, I also test for some alternative measures. The two alternative measures of the *dividend payment ratio* include dividend-to-sales and dividend-to-cash-flow. Moreover, I use four alternative measures of growth opportunities, which include annual growth rates of earnings, fixed assets, total assets, and total cash flow. The *state control* variable also includes the equity fraction held by the state. Additionally, I use a set of dummy variables indicating voting threshold levels with three cut-off points (33.34%, 50.01% and 66.67%) and state ownership stake = 100% as benchmark category. In line with theory, I expect a successively stronger (i.e., gradually less negative) relationship between these voting threshold levels and the dividend payment ratio. Similarly, *co-investment characteristics* are measured by both the equity fraction held by the largest co-investor and a set of dummy variables indicating voting and conventional cut-off points (5%, 33.34%, and 50.01%) and state ownership stake = 100% as benchmark category. According to theory, I expect a successively stronger (i.e., increasingly negative) relationship between these threshold levels and the dividend payment ratio. To account for co-investor identity I use a set of dummy variables, distinguishing between cases where the largest co-investor is public or non-public, and with state ownership stake = 100% as benchmark category.

As regards the impact of other variables, I seek to identify their relevant value at the time when the dividend is deliberately set. With regard to state control, this suggest I record the ownership stake at the general assembly meeting, in which shareholders give their consent to the board's dividend proposal. But surely, as shareholders cannot raise the dividends payments proposed by the SOC boards, they will seek to influence the dividend decision ahead of this meeting. Normally, such influence operates through the establishment of dividend policies for each firm. Besides, in Norway, the government-owner is given a special privilege as the dividends are set through the state budget for 100% state-owned firms. Given these facts, I will carefully time-match ownership and dividend data so as to avoid a false link between any changes in state ownership positions approved at the general assembly and dividend decisions. In a similar manner, I will time-match SOC board and dividend data so as to avoid any false link between the professional background of newly elected chairmen and dividend decisions. As to the final two variables, corporate objective and sponsor ministry, they are coded so as to reflect any changes in corporate activity or between-ministry transfers of SOCs during the year.

Like in the previous two chapters, I use random-effect models as the basic estimation method, which allows the inclusion of both cross-sectional and fixed firm effects. Moreover, since the dividend payment ratio is a continuous variable, I rely on linear regression to examine the impact of independent variables.

8.2 Basic Facts about SOC Dividend Payments

As previously noted, there are often significant values at stake in dividend decisions. Seeking to enrich our knowledge about this very issue, I answer in this section a series of basic questions about dividend practices in Norwegian and Swedish SOCs. How many firms are potential dividend-payers, and how many firms do actually pay dividends over the sample period? What is the total value of dividend payments? Is corporate cash distributed to shareholders by other methods than paying dividends? Are dividend payment ratios increasing or decreasing over the sample period? Are there any significant differences in dividend payment practices between Norway and Sweden? Table 8.2 reports summary statistics on these issues.[122]

[122] To maximise the number of dividend observations, data are drawn from the non-lagged sample (covering the years 2000-2005).

Table 8.2. Summary statistics for dividend measures and payouts to shareholders.

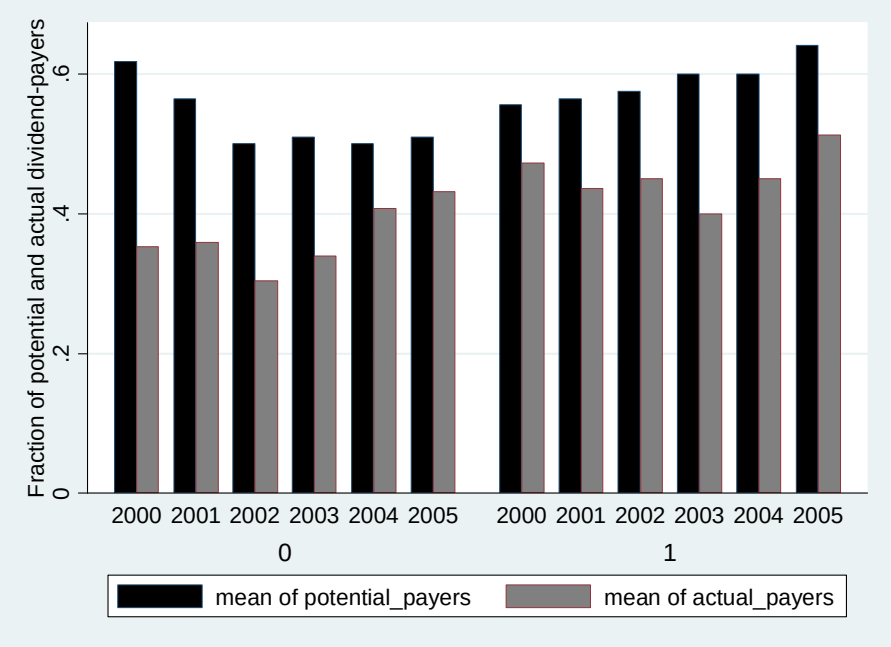
Dividend payment variables	Norway						Sweden					
	Mean	Q1	Q2	Q3	Std.dev.	*n*	Mean	Q1	Q2	Q3	Std.dev.	*n*
General dividend characteristics												
Potential dividend-payers	0.53	0	1	1	0.50	277	0.59	0	1	1	0.49	234
Actual dividend-payers	0.37	0	0	1	0.48	277	0.45	0	0	1	0.50	234
Dividend payments	1188.48	23	99	688	2600.32	102	924.11	49	160.50	518	2057.01	106
Total payments (dividends + share buyback)	1265.79	23	99	688	2688.27	102	1015.81	49	160.50	518	2681.27	106
Net payments (dividends – share emissions)	845.68	10	63	524	3243.83	102	818.60	34	144.50	479	2915.37	106
Dividend payment ratios												
Dividend-to-earnings	51.11	31.50	46	75	25.20	92	43.60	31	43.50	51	21.06	90
Dividend-to-sales	6.54	1	3	6	9.69	99	6.77	1	4	7	11.30	108
Dividend-to-cash-flow	27.97	15	24	39	18.88	77	24.67	10	18	36	19.20	87

Note: The table reports the sample statistics, by country, for different dividend measures. The columns show the mean, quartiles, and the standard deviation of these measures. Q1, Q2 (median) and Q3 refer to the 25th, 50th, and 75th percentile, respectively. *n* is the number of firm/year observations. Potential dividend-payers is a dummy variable set to one if the government-owner makes a public announcement that the firm is candidate for paying dividends, zero otherwise. Actual dividend-payers is a dummy variable set to one if the firm pays dividend, zero otherwise. Dividend payments are the total cash dividends paid to shareholders. Total payments are the sum of dividend payments and share buyback, where the latter is defined as a firm's repurchase of own shares. Net payments are the sum of total payments less share emissions (equity sale). All payments are expressed in 2005 NOK million and adjusted for CPI. The numerator in the dividend payment ratios is the total cash dividend paid to shareholders, while the denominators are earnings, sales, and operating cash-flow.

From Table 8.2, we note that more than half of the SOCs in sample are candidates for paying dividends (53% and 59% of Norwegian and Swedish SOCs, respectively).[123] However, as should be expected, fewer SOCs are actually paying dividends (37% and 45% of Norwegian and Swedish SOCs, respectively). Nevertheless, this means that among the potential dividend-paying firms, a great majority are actual dividend-payers (70% and 75% of Norwegian and Swedish SOCs, respectively). While these numbers suggest that the general dividend pattern is fairly similar in Norway and Sweden, there are some noticeable differences between the two countries *over time*. In fact, Figure 8.1 reveals that while, in Norway, the fraction of potential dividend-paying SOCs is reduced over the sample period, the opposite pattern holds for Swedish SOCs (like above, Norwegian and Swedish SOCs are displayed at the left-hand side (value 0) and right-hand side (value 1) of the figure, respectively). More precisely, in Norway, the fraction of dividend candidates drops from 62% in 2000 to about 50% over the period 2002-2005. By contrast, in Sweden, the number of dividend candidates increases from 56% in 2000 to 64% in 2005. For one thing, it seems possible to explain these patterns in terms of changes in the state ownership portfolios. In Norway, there became more non-commercial than commercial SOCs over the six-year period, while, for Sweden, it was observed an opposite pattern (cf. Table 3.2, Chapter 3). But also, it is possible that these changes are the result of a deliberate shareholder policy of seeking a better match between dividend candidates and their dividend-paying ability. Importantly, this latter interpretation receives some support from the Norwegian data as the fraction of actual dividend-payers raise from 36% in 2000 to 43% in 2005, thus reducing the gap between potential and actual dividend-paying SOCs. Yet, as no similar pattern is observed for Swedish SOCs, this explanation is at best nation-specific.

[123] More precisely, these numbers refer to firm/year observations. Because I have an unbalanced panel, this means that the number of actual *firms* that are candidates for paying dividends might slightly deviate from the registered numbers.

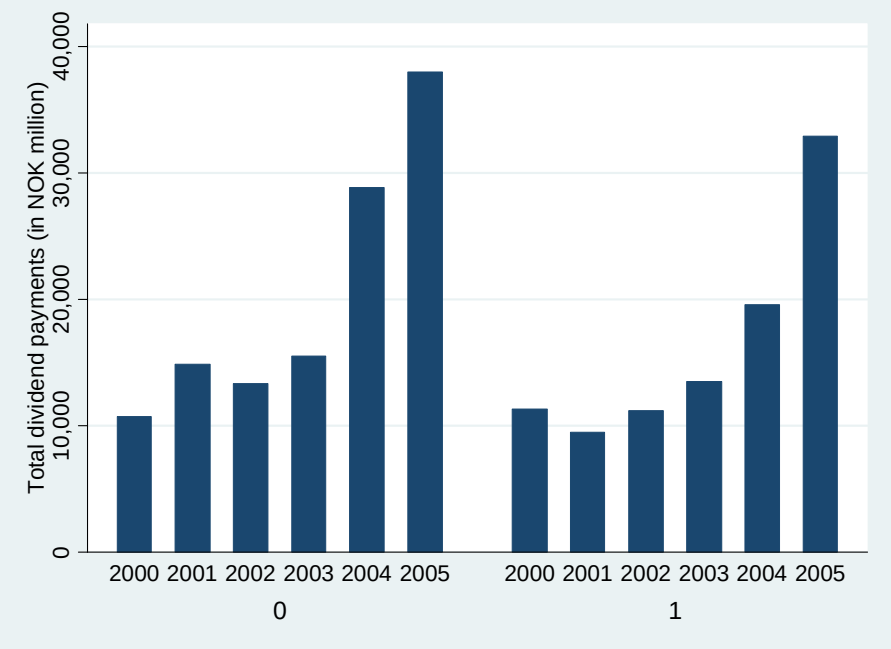
Figure 8.1. Percentage of potential and actual dividend-payers, by nationality.



Note: The figure shows the fraction of potential and actual dividend-paying SOCs in Norway and Sweden over the years 2000-2005. In line with the dummy variable notation, Norwegian SOCs are assigned the value 0 and Swedish SOCs are assigned the value 1 (Norwegian and Swedish SOCs thus appear at the left-hand and right hand-side of the figure, respectively). The samples include all SOCs from which dividend data are available (n = 277 and n = 234 for Norway and Sweden, respectively).

As regards the real value of total dividend payments, Figure 8.2 shows that, in both Norway and Sweden, the dividend paid has increased significantly over the six-year period. After remaining in the range between 10725 and 15508 NOK million from 2000 to 2003, Norwegian dividend payments increased sharply in the years 2004 and 2005 (with total dividends equal to 28821 and 37991 NOK million, respectively). Interestingly, a very similar pattern is observed for Swedish SOCs. Whereas total dividend payments remained in the range between 11317 and 13492 NOK million from 2000 to 2003, they increased sharply in the last two sample years (with total dividends equal to 19559 and 32909 NOK million, respectively). In both countries, the rising dividend payments reflected strong developments in the national economies.

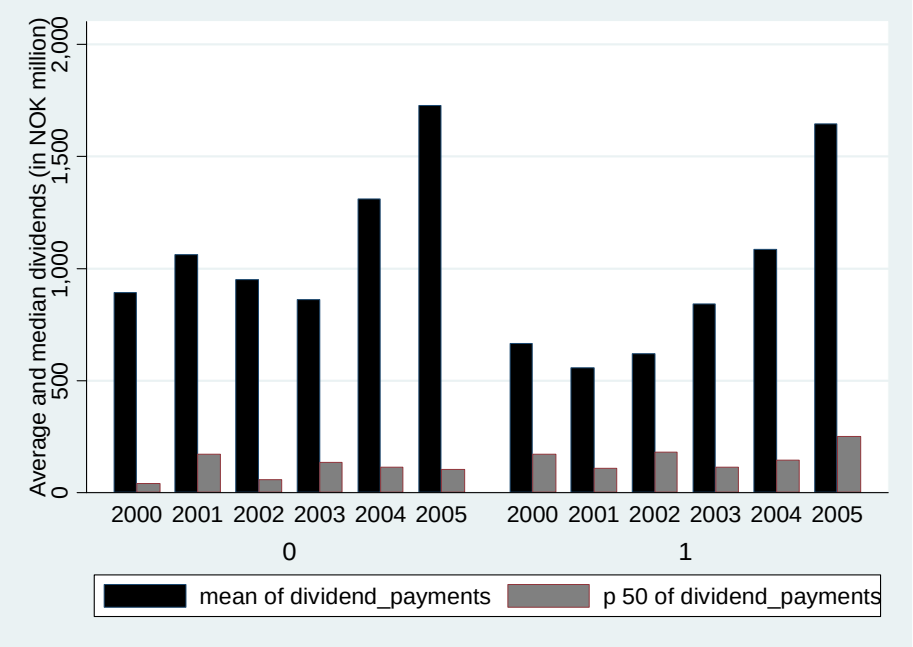
Figure 8.2. Total level of dividend payments, by nationality.



Note: The figure shows the total level of dividend payments (in 2005-constant NOK million) in Norway and Sweden over the years 2000-2005. In line with the dummy variable notation, Norwegian SOCs are assigned the value 0 and Swedish SOCs are assigned the value 1 (Norwegian and Swedish SOCs thus appear at the left-hand and right hand-side of the figure, respectively). The samples include all actual dividend-paying SOCs (n = 102 and n = 106 for Norway and Sweden, respectively).

Due to differences in firm size and other factors, it is naturally so that some SOCs pay much larger dividends than others. The summary statistics in Table 8.2 supports this notion as it shows that, in both Norway and Sweden, there is a considerable disparity between the mean and median dividend payment levels. More specifically, the average dividend payment is significantly higher than the median dividend value, with a mean–to–median ratio of 12–to–1 in Norway and roughly 6–to–1 in Sweden. Moreover, as the average dividend payments in the two countries exceed even the dividend values at the 75th percentile, this provides further evidence that dividends are concentrating among relatively few SOCs. As shown in Figure 8.3, however, there is no consistent pattern of an increasing disparity between mean and median total dividend payments.

Figure 8.3. Average and median levels of dividend payments, by nationality.



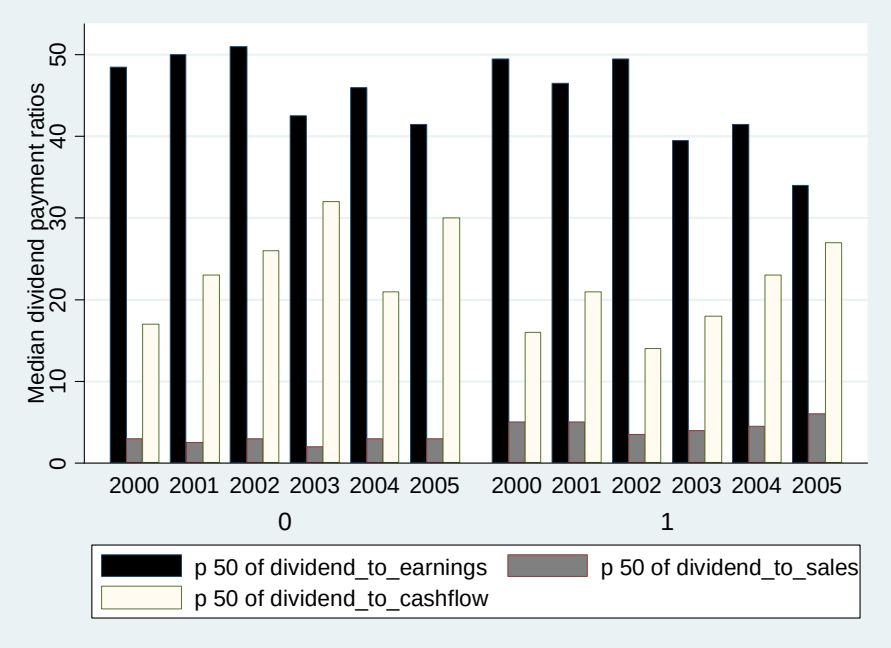
Note: The figure shows the average (mean) and median (p50) levels of total dividend payments (in 2005-constant NOK million) in Norway and Sweden over the years 2000-2005. In line with the dummy variable notation, Norwegian SOCs are assigned the value 0 and Swedish SOCs are assigned the value 1 (Norwegian and Swedish SOCs thus appear at the left-hand and right hand-side of the figure, respectively). The samples include all actual dividend-paying SOCs (n = 102 and n = 106 for Norway and Sweden, respectively).

Apart from paying dividends, we would also like to know whether SOCs distribute corporate cash to shareholders by other methods, which typically include the repurchase of own shares. However, because such buybacks are only appropriate for partly state-owned firms in general and listed firms in particular, we should not expect them to have any major impact on the total payment distribution. This notion is supported by the descriptive statistics in Table 8.2, which show that the quartile numbers, Q1–Q3, do not change with the inclusion of buybacks. The results thus indicate that share repurchases are mostly due to large (listed) firms (in both Norway and Sweden, the inclusion of buybacks changes the mean payment value by nearly 100 NOK millions). Interestingly, the pattern is somewhat different for net payments, which means we also account for cash transfers from (existing and/or new) shareholders to the firm (stock emissions). In fact, the changes in quartile numbers demonstrate that stock emissions are both small- and large-sized.

While the real cash value of dividend payments provides information about the economic importance of firms' cash allocation, the dividend payment ratio tells us more about the very distribution of money between shareholders and the firms themselves. In line with prior research, our primary measure of dividend payments is the dividend-to-earnings ratio (see, for example, La Porta et al., 2000). As shown in Table 8.2, the dividend-to-earnings ratio is, on average, somewhat higher among Norwegian SOCs than among their Swedish counterparts (51% and 44%, respectively).[124] Moreover, in both countries, the mean and median ratios are fairly similar, which means there are no indications that the dividend-to-earning ratio is concentrating in the lower or upper percentiles. However, as revealed by Figure 8.4, there is a tendency in both countries that the median dividend-to-earnings ratio is somewhat lower over the period 2003-2005 than over the years 2000-2002. As regards the two other measures of dividend payment ratios (dividend-to-sales and dividend-to-cash-flow), their average values are fairly similar in Norway and Sweden (7% (28%) and 7% (25%), respectively). Additionally, there is no evidence that these ratios are concentrating (their mean values are well below or roughly equal to the ratios at the 75th percentile). From Figure 8.4, we see that the median dividend-to-sales ratio is rather stable over the six-year period. By contrast, the median dividend-to-cash-flow ratio shows no consistent pattern over time, although there is an increasing four-year trend in both countries.

[124] Note that the actual dividend-paying observations exceed the number of firm/year observations for the dividend payments ratios, which is due to elimination of firms with missing accounting data and firms with negative earnings or cash flow.

Figure 8.4. Median dividend payment ratios, by nationality.



Note: The figure shows the median ratio of dividend payments (p50) in Norway and Sweden over the years 2000-2005, which includes dividend-to-earnings, dividend-to-sales, and dividend-to-cash-flow. In line with the dummy variable notation, Norwegian SOCs are assigned the value 0 and Swedish SOCs are assigned the value 1 (Norwegian and Swedish SOCs thus appear at the left-hand and right hand-side of the figure, respectively). The samples include all SOCs which are actual dividend-payers (n = 92 (99, 77) and n = 90 (105, 87) for Norway and Sweden, respectively).

8.3 Empirical Analysis

The dividend payment of SOCs is a scarcely examined issue. Thus, we know little about which firms are not required to pay dividends, which firms are candidates for dividend payments, and why some firms pay more dividends than others. Some evidence on these matters is shown in Table 8.3, which contrasts non-dividend paying firms with non-paying dividend candidates and actual dividend-payers concerning the main variables of this study.[125] Intriguingly, the descriptive statistics demonstrate that there are important differences between non-dividend paying firms and dividend candidates.

[125] While the alternative measures to state control and the chairman's professional background are commented upon only in the multivariate analysis, I include here all measures of the growth opportunities variable. The reason for this detailed treatment relates to the difficulties in measuring growth opportunities across very different firms, which suggests that we run several robustness checks.

Table 8.3. Descriptive statistics by firms' dividend-paying status.

	Non-dividend paying firms				Dividend candidates							
					Non-payers				Actual payers			
	Mean	Median	St.dev.	*n*	Mean	Median	St.dev.	*n*	Mean	Median	St.dev.	*n*
Dividend-to-earnings									46.81	44.5	23.72	150
Dividend-to-sales									6.68	3	11.08	170
Dividend-to-cash-flow									26.69	22	19.04	137
Annual growth in sales	29.26	1	207.40	179	2.49	0	24.34	59	5.19	3.5	25.13	170
Annual growth in earnings	-216.74	-2.5	2879.96	150	-38.95	34	593.10	59	110.88	16	411.65	171
Annual growth in fixed assets	47.36	3	267.60	169	-5.87	-7	27.67	52	88.40	4	955.11	154
Annual growth in total assets	12.88	3	72.98	182	-2.64	-2	22.36	59	5.93	3.5	19.14	172
Annual growth in total cash-flow	57.79	4	503.74	135	118.25	46	880.68	51	171	-8.5	1190.49	166
Debt ratio	56.56	57.5	28.26	182	68.58	68	22.57	59	59.64	61	22.83	173
Corporate objective	0.10	0	0.30	182	0.83	1	0.38	59	0.74	1	0.44	173
Income level	2375.72	167.5	5007.26	182	7164.02	2013	12488.34	59	26056.54	5244	58333.81	173
State control	0.35	0	0.48	182	0.36	0	0.48	59	0.38	0	0.49	173
Chairman political representative	0.21	0	0.41	182	0.32	0	0.47	59	0.34	0	0.47	173
Sponsor ministry	0.26	0	0.44	182	0.75	1	0.44	59	0.64	1	0.48	173
Nationality	0.43	0	0.50	182	0.46	0	0.50	59	0.51	1	0.50	173
Time trend	3.16	3	1.37	182	2.86	3	1.36	59	3.18	3	1.43	173

Note: The table shows means, medians, and standard deviations for all main variables by firms' dividend-paying status in the lagged sample. The number of observations changes by variables, due to elimination of firms with missing accounting data and firms with negative earnings or cash flow.

One striking result is that, compared to actual dividend-payers in particular, the annual sales growth rate is considerably more skewed among those firms which are not required to pay dividends. More precisely, the average growth rate of the latter firms largely exceeds the median, which suggests that high growth rates are concentrated among relatively few SOCs. Moreover, the average annual earnings growth rate is negative for both groups of non-paying firms (i.e., both non-dividend and dividend candidates), but greatly positive for the group of actual dividend-payers. Again, however, the mean values are skewed. As regards the growth rates in fixed and total assets, non-paying dividend candidates appear with negative mean and median values. By contrast, non-dividend paying firms and actual dividend-paying firms appear with positive mean and median values. In addition, within both of the latter groups, it seems that the growth rates in fixed assets are somewhat concentrated. As to the annual growth rate in cash-flow, this variable is also widely spread, and mostly so within the group of actual dividend-payers.

As expected, and in contrast to dividend candidates, we also see that most non-dividend paying firms are non-commercial. In fact, among those SOCs which are not eligible for dividend payments, only 10% pursue a commercial objective. In comparison, the great majority among non-paying dividend candidates and actual dividend-payers are commercially oriented (83% and 74%, respectively). Additionally, the income level is significantly higher among dividend candidates than among non-dividend paying firms, which means that dividends are extracted from those firms that generate the most cash (in real value). To be even more specific, the median income level becomes successively higher as we move from non-dividend paying firms (167.5 NOK million), to non-paying dividend candidates (2013 NOK million) and actual dividend-payers (5244 NOK million). Interestingly, there is also evidence that, when compared to non-dividend paying firms, dividend candidates are more often chaired by a political representative (21% and 32/34%, respectively). Thus, we are led to speculate whether government-owners perceive it more important to control dividend-paying firms than non-dividend paying ones. We also note that non-dividend paying firms are more often administered by sectoral ministries than the ownership ministry (the latter ministry is the sponsor in 21% of the cases), while the opposite is true for non-paying dividend candidates and actual dividend-payers (the ownership ministry is the sponsor in 75% and 64% of the cases, respectively). Finally, there are few notable differences between the three subgroups as regards the debt ratio, state control, nationality and time trend variables, except for the fact that the average (and median) debt ratio is somewhat higher among non-paying dividend candidates.

Directing our attention towards actual dividend-paying firms, Table 8.4 presents a national breakdown of the above descriptive statistics. From this table, we note that while the dividend-to-sales and dividend-to-cash-flow ratios are fairly similar in Norway and Sweden, the average dividend-

to-earnings ratio is higher among Norwegian SOCs (51%, compared to 42% among Swedish SOCs). Moreover, with the exception of annual growth in cash-flow, all average growth measures are higher in Norway than in Sweden. In both countries, all growth variables also display a large spread. As regards the corporate objective of dividend-paying firms, the fraction of commercially oriented SOCs is higher in Sweden than in Norway (80% versus 68%, respectively). Thus, in Norway, more than 30% of the dividend-paying firms are actually non-commercial. Additionally, the income level of dividend-paying firms is, on average, higher in Norway than in Sweden. But, again, there is a large spread in the variable. Interestingly, the two countries also differ regarding the level of state control as the fraction of dividend-paying firms under partial state ownership is much larger in Norway than in Sweden (51% versus 26%, respectively). As to which is the sponsor ministry of dividend-paying firms, the ownership ministry plays a more dominant role in Sweden than in Norway (76% versus 51%, respectively). To end with, there are no significant differences between the two countries regarding debt ratio, the professional background of chairman, and the time trend variable.

Table 8.4. Descriptive statistics of dividend-paying firms: Means and standard deviations.

	Norwegian SOCs			Swedish SOCs		
Variables	**Mean**	**St.dev.**	***n***	**Mean**	**St.dev.**	***n***
Dividend-to-earnings	51.21	25.82	77	42.18	20.45	73
Dividend-to-sales	6.58	10.15	83	6.78	11.95	87
Dividend-to-cash-flow	27.17	17.71	66	26.25	20.32	71
Annual growth in sales	7.54	23.63	82	3.01	26.39	88
Annual growth in earnings	142.56	459.17	85	77.77	356.86	87
Annual growth in fixed assets	165.89	1359.22	76	12.73	37.31	79
Annual growth in total assets	6.96	12.81	85	4.59	23.85	88
Annual growth in cash-flow	71.68	765.23	81	261.03	1477.66	86
Debt ratio	61.05	21.25	85	58.27	24.29	88
Corporate objective	0.68	0.47	85	0.80	0.41	88
Income level	33334	77082.86	85	19027.97	29813.57	88
State control	0.51	0.50	85	0.26	0.44	88
Chairman political representative	0.31	0.46	85	0.36	0.48	88
Sponsor ministry	0.51	0.50	85	0.76	0.43	88
Nationality	–	–	–	–	–	–
Time trend	3.29	1.40	85	3.08	1.45	88

Note: The table shows means and standard deviations for all main variables, by country, in the lagged sample. The number of observations changes by variables, due to elimination of firms with missing accounting data and firms with negative earnings or cash flow.

Correlations among all main variables are shown in Table 8.5.[126] Also note that, to handle widely spread variables, I employ from here onwards some

[126] Like in previous chapters, I use Spearman correlation to handle non-parametric data.

different calculations of growth opportunities and income level. However, while the income variable is conventionally log-transformed, this method is not suitable for the growth rate variables (due to a non-trivial fraction of negative values). As an alternative, I therefore use the decile rank to divide the dividend-paying SOCs into 10 equal-sized groups (La Porta et al., 2000).[127] Given these adjustments, the correlation matrix indicates no severe multicollinearity problems, except for the strong positive link between corporate objective and sponsor ministry (0.66).[128] Among dividend-paying firms, there is thus a positive relationship between commercial orientation and the ownership ministry. But, since the Variance Inflation Factor (VIF) test indicates no multicollinearity problems (all VIFs < 2.5), all main variables are included within the model.

As expected, the table shows that the three dividend payments ratios are significantly and positively related. Regarding the independent variables, the correlations confirm some of the predicted relationships. Noticeably, the state control variable shows a significant and negative association with all three dividend measures, which indicates that partly state-owned firms are paying lower dividend ratios than firms under full state control. Moreover, the ownership ministry is significantly and negatively related to both the dividend-to-earnings and dividend-to-cash-flow ratios. However, while there is a significant and positive relationship between the commercial orientation of SOCs and the dividend-to-sales ratio, commercial firms are actually negatively (but insignificantly) linked to the other dividend payments ratios. Among the growth opportunities measures, there is only scant evidence of any significant relationships between growth rates and dividend payment ratios, and two of these links even run counter to theory. The correlations show no evidence of any significant relationships between the dividend payments ratios and the other independent variables (i.e., debt ratio, income level, chairman's professional background, nationality, and time trend). Yet, some of these bivariate relationships are significantly altered when examining partial effects.

---

[127] The rank deciles range from 1 to 10 in ascending order.

[128] Also, some of the alternative measures relating to state control and the chairman's professional background (not shown in the table) are strongly internally related.

Table 8.5. Correlations among variables.

Variables	1	2	3	4	5	6	7	8	9	10
1. Dividend-to-earnings										
2. Dividend-to-sales	0.53**									
3. Dividend-to-cash-flow	0.42**	0.34**								
4. Annual growth in sales (deciles)	0.06	0.19*	–0.13							
5. Annual growth in earnings (deciles)	–0.10	0.19*	0.02	0.18						
6. Annual growth in fixed assets (deciles)	–0.06	–0.02	0.06	0.17	–0.08					
7. Annual growth in total assets (deciles)	–0.21*	0.03	0.06	0.28**	0.13	0.49**				
8. Annual growth in cash-flow (deciles)	–0.06	0.02	–0.04	0.06	0.20*	–0.23*	0.05			
9. Debt ratio	0.01	–0.10	–0.04	0.04	–0.30**	0.08	0.06	–0.05		
10. Corporate objective	–0.17	0.38**	–0.16	0.17	0.21*	0.01	0.06	0.06	0.03	
11. Income level (log)	–0.02	–0.13	0.05	0.04	0.05	0.01	–0.03	–0.03	0.19*	0.11
12. State control	–0.27**	–0.27**	–0.33**	0.01	0.02	0.03	0.08	–0.05	–0.12	0.18
13. Chairman political representative	–0.09	–0.11	0.05	–0.16	0.08	0.05	–0.03	0.01	–0.27**	–0.35**
14. Sponsor ministry	–0.30**	0.12	–0.28**	0.09	0.20*	–0.09	0.03	0.01	–0.17	0.66**
15. Nationality	–0.06	0.08	–0.04	–0.05	0.02	0.00	–0.12	–0.13	–0.00	0.17
16. Time trend	–0.08	0.06	0.13	–0.05	0.21*	0.12	0.42**	0.10	–0.17	–0.10

Note: The table shows Spearman correlation coefficients. * $p < 0.05$ (two-tailed); ** $p < 0.01$ (two-tailed).

Table 8.5. ***(Continued)***

Variables	11	12	13	14	15
1. Dividend-to-earnings					
2. Dividend-to-sales					
3. Dividend-to-cash-flow					
4. Annual growth in sales (deciles)					
5. Annual growth in earnings (deciles)					
6. Annual growth in fixed assets(deciles)					
7. Annual growth in total assets (deciles)					
8. Annual growth in cash-flow (deciles)					
9. Debt ratio					
10. Corporate objective					
11. Income level (log)					
12. State control	0.16				
13. Chairman political representative	–0.30**	–0.20*			
14. Sponsor ministry	–0.06	0.26**	–0.16		
15. Nationality	–0.07	–0.41**	0.14	0.29**	
16. Time trend	–0.02	0.00	0.11	0.09	–0.13

The results of the random-effects regression analyses are presented in Table 8.6 for the three dividend measures (dividend-to-earnings, dividend-to-sales, and dividend-to-cash-flow). In the regressions are used different proxies for growth opportunities, depending on which measure improves the statistical fit of the model.[129] Among the economic criteria, the growth opportunities variable is significantly related to all three dividend payments ratios, while the corporate objective dummy is only statistically significant in the dividend-to-sales ratio regression. As regards the scope for political influence, the state control variable appears with significant and negative effects in all three regressions. Additionally, the time trend variable is significantly related to the dividend-to-sales ratio. Intriguingly, some of these relationships become even more manifest (and some new relationships enter) when testing for the moderating effects of political influences in state control (Table 8.7) and SOC chairman subsamples (Table 8.8). In addition, some relationships are being altered as I test for the impact of nationality interaction effects (Table 8.9). Like before, I perform moderated regression analyses to formally inspect whether the subsample coefficients are significantly different. The results from these regressions, which include interactions between independent variables and the relevant subsample variable, are reported in Appendix D.

Noticeably, several of the below regressions are estimated by way of pooled OLS instead of random-effect models, which is due to the fact that most of the unexplained variance in these models is contributed by cross-sectional differences and not firm-specific factors (i.e., the Breusch-Pagan LM-test shows that rho = 0). In this case, the use of pooled OLS both improves the overall model fit and makes several more variables enter as significant predictors of dividend payment ratios. With one exception, all equations are statistically significant in terms of the Wald (for random-effects) and *F*-ratio (for pooled OLS) statistics. Together, the results from Tables 8.6–8.9 and the Appendix will serve as basis for the following reporting and interpretation of findings.

[129] For the dividend-to-earnings ratio is used the annual growth rate in total assets. For the dividend-to-sales ratio is used the annual growth rate in earnings, while for the dividend-to-cash-flow ratio is used the annual sales growth rate.

Table 8.6. Random-effects and pooled OLS regression analysis for the dividend payment ratios. Main effects, full sample.

Independent variables	Dividend-to-earnings		Dividend-to-sales		Dividend-to-cash-flow	
Intercept	77.859***	(13.648)	11.342	(8.223)	40.041***	(10.248)
Economic criteria						
Growth opportunities (deciles)	–1.361**	(0.630)	0.542***	(0.180)	–1.377*	(0.706)
Debt ratio	0.144	(0.138)	–0.063	(0.069)	–0.026	(0.101)
Commercial objective	–4.410	(6.716)	5.200**	(2.573)	5.799	(4.571)
Political influences						
Income level (log)	–4.739	(3.237)	–2.124	(2.256)	–0.164	(1.627)
State control	–10.912*	(6.150)	–4.675**	(2.370)	–9.991**	(4.564)
Chairman political representative	–5.257	(5.280)	–0.003	(1.003)	0.045	(4.342)
Ownership ministry	–3.084	(4.453)	–1.946	(2.047)	–7.736	(5.182)
Controls						
Nationality	–8.936	(6.289)	3.537	(5.564)	–3.470	(4.123)
Time trend	0.375	(1.144)	0.799***	(0.224)	0.975	(1.124)
Number of firm/year observations	150		169		137	
Number of firms	47		48		43	
Rho	0.55		0.93			
Wald chi2/F	19.68**		35.72***		2.70***	
R^2 (overall)	0.19		0.08		0.14	
Model	RE		RE		OLS	

Note: The table reports unstandardised regression coefficients with robust standard errors in parentheses. Rho denotes the proportion of total error variance contributed by the panel-level error component. The Wald chi2 (for random-effects estimation) an F (for pooled OLS) statistics report whether the independent variables are jointly significant. Model estimation is performed by random-effects (RE) or pooled OLS (OLS). R^2 is the overall variation explained by the model. * $p < 0.10$ (two-tailed); ** $p < 0.05$ (two-tailed); *** $p < 0.01$ (two-tailed).

Table 8.7. Random-effects and pooled OLS regression analysis for the dividend payment ratios by state control subsamples.

Independent variables	Dividend-to-earnings				Dividend-to-sales				Dividend-to-cash-flow			
	Full state control		Partial state control		Full state control		Partial state control		Full state control		Partial state control	
Intercept	102.620***	(14.939)	13.729	(23.042)	11.917	(13.405)	–12.730***	(3.278)	56.422***	(10.762)	11.293	(22.279)
Economic criteria												
Growth opportunities	–0.725	(0.771)	–2.750**	(1.148)	0.621**	(0.264)	0.308	(0.190)	–1.911**	(0.796)	–0.525	(1.063)
Debt ratio	0.145	(0.177)	0.454*	(0.236)	–0.050	(0.077)	0.088**	(0.038)	–0.071	(0.121)	0.087	(0.205)
Commercial objective	–14.574	(9.121)	10.551	(8.609)	6.945	(7.953)	6.551***	(2.192)	–12.137	(8.155)	22.431	(14.219)
Political influences												
Income level (log)	–10.309**	(4.786)	–2.214	(4.045)	–2.772	(4.025)	–0.536	(0.633)	–1.604	(2.706)	–1.974	(3.577)
Chairman political repr.	–0.476	(6.143)	–15.124*	(8.933)	0.683	(1.003)	–4.061***	(1.082)	–3.681	(4.887)	0.299	(7.781)
Ownership ministry	5.137	(4.937)	–3.962	(7.201)	–2.344	(2.379)	–0.211	(1.327)	8.110	(8.190)	–12.641	(7.752)
Controls												
Nationality	–9.743	(9.271)	6.127	(8.936)	2.778	(9.571)	6.447***	(2.063)	–3.112	(6.116)	10.550	(12.410)
Time trend	–2.078	(1.412)	5.226***	(1.945)	0.534*	(0.280)	1.386***	(0.418)	0.542	(1.457)	0.983	(1.884)
Number of firm/year obs.	96		54		105		64		85		52	
Number of firms	30		18		31		19		26		17	
Rho	0.61		0.59		0.95							
Wald chi2	20.07**		53.06***		20.11***		5.79***		2.53**		2.96***	
R^2 (overall)	0.20		0.39		0.07		0.49		0.13		0.20	
Model	RE		RE		RE		OLS		OLS		OLS	

Note: As to the notation, see the note in Table 8.6.

Table 8.8. Random-effects and pooled OLS regression analysis for the dividend payment ratios by SOC chairman subsamples.

Independent variables	Dividend-to-earnings				Dividend-to-sales				Dividend-to-cash-flow			
	Political chairmen		Non-political chairmen		Political chairmen		Non-political chairmen		Political chairmen		Non-political chairmen	
Intercept	26.694	(17.847)	83.944***	(15.080)	8.682**	(3.258)	24.319**	(9.913)	20.607	(24.548)	44.908***	(13.139)
Economic criteria												
Growth opportunities	0.112	(1.390)	–1.458*	(0.747)	0.263	(0.254)	0.680**	(0.283)	–1.117	(1.053)	–1.496	(0.971)
Debt ratio	–0.279	(0.224)	0.138	(0.162)	–0.020	(0.035)	–0.124	(0.093)	–0.115	(0.207)	–0.059	(0.121)
Commercial objective	0.363	(5.300)	0.558	(8.123)	4.389***	(1.607)	5.125*	(2.825)	20.546*	(10.951)	1.371	(5.527)
Political influences												
Income level (log)	17.664**	(7.031)	–9.527**	(3.751)	–2.373**	(1.116)	–4.571	(3.205)	4.219	(5.629)	–0.172	(1.984)
State control	–15.478	(9.857)	–3.704	(7.311)	–5.244***	(1.655)	–4.643*	(2.578)	–2.535	(11.178)	–11.599**	(5.241)
Ownership ministry	–7.763	(9.156)	–7.571	(4.933)	–1.516	(2.423)	–2.580	(2.239)	–25.818	(16.819)	–2.224	(4.858)
Controls												
Nationality	–17.928**	(7.716)	–0.974	(6.880)	0.659	(1.550)	4.704	(7.362)	3.005	(8.681)	–5.666	(5.180)
Time trend	–4.120	(2.816)	2.175*	(1.297)	0.724	(0.507)	0.863***	(0.325)	2.008	(2.744)	0.764	(1.204)
Number of firm/year obs.	51		99		56		113		47		90	
Number of firms	17		36		71		37		17		31	
Rho			0.64				0.95					
Wald chi2/F	9.92***		24.04***		3.84***		28.12***		3.61***		1.38	
R^2 (overall)	0.43		0.19		0.40		0.06		0.22		0.13	
Model	OLS		RE		OLS		OLS		OLS		OLS	

Note: As to the notation, see the note in Table 8.6.

Table 8.9. Random-effects and pooled OLS regression analysis for the dividend payment ratios by nationality subsamples.

Independent variables	Dividend-to-earnings				Dividend-to-sales				Dividend-to-cash-flow			
	Norway		Sweden		Norway		Sweden		Norway		Sweden	
Intercept	51.10***	(17.461)	90.743***	(11.872)	0.612	(4.728)	22.729*	(12.337)	48.861***	(15.192)	23.414*	(13.028)
Economic criteria												
Growth opportunities	–0.289	(0.879)	–2.562***	(0.869)	0.742**	(0.291)	0.561	(0.467)	–1.156	(1.002)	–1.912**	(0.903)
Debt ratio	0.255	(0.221)	–0.109	(0.095)	–0.040	(0.070)	–0.058	(0.045)	0.081	(0.155)	–0.108	(0.124)
Commercial objective	2.199	(8.799)	–2.326	(5.843)	7.469*	(4.042)	8.185***	(2.714)	8.258	(12.059)	8.172	(7.878)
Political influences												
Income level (log)	–2.037	(4.483)	–4.042	(2.976)	0.617	(1.288)	–5.654**	(2.832)	–2.161	(1.925)	3.007	(2.787)
State control	–20.254***	(7.791)	0.561	(5.225)	–7.061**	(3.014)	3.240	(2.185)	–13.485	(8.599)	–6.829	(9.068)
Chairman political repr.	4.777	(8.725)	–15.796***	(5.367)	–1.176	(1.807)	–4.632	(3.760)	0.238	(5.866)	0.029	(5.048)
Ownership ministry	1.177	(7.564)	–17.910***	(6.495)	–1.220	(5.063)	–8.158***	(2.766)	–7.266	(7.393)	–10.040	(7.742)
Controls												
Time trend	–0.025	(1.455)	2.561	(2.005)	0.207	(0.268)	1.968***	(0.740)	–1.722	(1.548)	3.597**	(1.602)
Number of firm/year obs.	77		73		83		86		66		71	
Number of firms	25		22		25		23		22		21	
Rho	0.67				0.76							
Wald chi2/F	10.17		4.39***		13.70*		2.95***		2.32**		3.43***	
R^2 (overall)	0.26		0.31		0.39		0.21		0.20		0.19	
Model	RE		OLS		RE		OLS		OLS		OLS	

Note: As to the notation, see the note in Table 8.6.

8.3.1 Economic criteria versus political influences

In evaluating the relevance of the reputation model, we first note that the results from the main effects regressions (Table 8.6) provide partial support for Hypothesis 1. Specifically, using the total assets growth rate to proxy for growth opportunities, the results show that moving from the bottom to the top decile of this growth rate is associated with a 12.2 percentage point lower dividend-to-earnings ratio ($p < 0.05$). Similarly, moving from the bottom to the top decile of the sales growth rate is associated with a 12.4 percentage point lower dividend-to-cash-flow ratio ($p < 0.10$). In contrast to the theoretical prediction, however, the findings reveal that moving from the bottom to the top decile of the earnings growth rate leads to a 4.9 percentage point *higher* dividend-to-sales ratio ($p < 0.01$). Yet, compared to the other two ratios, we should not that the economic interpretation of the dividend-to-sales ratio is not very transparent (La Porta et al., 2000). If accentuating those dividend measures which have a natural economic interpretation, the results therefore support the prediction that high-growth firms experience lower dividend payment ratios.

Moreover, the debt ratio shows no significant relationship with any of the dividend measures, which means that Hypothesis 2 is not supported. By contrast, the results provide some support for Hypothesis 3, in that the dividend-to-sales ratio is higher among commercial SOCs than among non-commercial SOCs. Specifically, commercial firms have a 5.2 percentage point higher payment ratio ($p < 0.05$). The effect of corporate objective is not significant for the two other dividend payment ratios. Using some finer specifications of the corporate objective variable, Appendix F indicates that there is little uniform distribution of dividend payment ratios across sectors – with the exception of consistently high payout ratios in the Norwegian utilities sector.

As to the impact of political influences, there is evidence that firms under full state control are paying higher dividend payment ratios than partly state-owned firms. These results are consistent with Hypothesis 5, and the practical implication is that firms under partial state control have about an 11% percentage point lower dividend-to-earnings ratio ($p < 0.10$), a 5% percentage point lower dividend-to-sales ratio ($p < 0.05$), and a 10% percentage point lower dividend-to-cash-flow ratio ($p < 0.05$). Evidently, and in line with the re-election model, politicians thus seem to prefer higher dividend payment ratios to lower ones. When using some more precise ownership measures (not reported in table), it appeared that the dividend-to-earnings ratio was negatively related to all higher threshold levels of state control (as compared to the benchmark category of full state control), but positively related to the minority post category. However, only the two categories of super-majority and negative control entered with significant effects (coefficients of –22.311 and –15.819; $p < 0.05$ and < 0.10,

respectively). The similar pattern was observed for the dividend-to-sales ratio (coefficients of –5.849 and –6.586; $p < 0.05$ and < 0.01, respectively). With regard to the dividend-to-cash-flow ratio, all higher threshold levels of state control appeared with significant and negative effects (coefficients of –9.999, –13.386, –10.063; $p < 0.10$, <0.01, < 0.10, for the categories of state super-majority, simple majority, and negative control, respectively). The results thus contradict the prediction of a gradually less negative relationship between state voting threshold levels and the dividend payment ratio.[130]

Regarding the ownership characteristics of the largest co-investor, the results showed that both the categories of 5% control and less than 5% control are negatively associated with the dividend-to-earnings ratio, but only the former is significant (coefficient of –13.519; $p < 0.10$). While the negative control category is positively related to the dividend-to-earnings ratio, it showed up as insignificant.[131] As to the dividend-to-sales ratio, all three categories of co-investor concentration have a negative sign, but only the negative control category was found to be significant (coefficient of –5.034; $p < 0.05$). The fairly same pattern applied in the case of dividend-to-cash-flow, where all three categories of co-investor concentration have a negative sign, but only the categories of negative control and less than 5% control were found to be significant (coefficients of –14.666 and –9.834; $p < 0.05$ and < 0.10, respectively).[132] The findings thus provide mixed support for the prediction of an increasing negative relationship between co-investor threshold levels and the dividend payment ratio. Moreover, the results revealed that, when compared to firms under full state control, the dividend-to-earnings ratio is significantly lower among those firms where the largest co-investor is non-public (coefficient of –14.775; $p < 0.01$). Whereas also firms in which the largest co-investor is public were found to be negatively associated with this ratio, the effect was not significant. Interestingly, the very same pattern was observed for the dividend-to-sales and dividend-to-cash-flow ratios (for non-public co-investors there was a coefficient of –5.804 and –12.203; $p < 0.10$ and < 0.05, respectively). Finally, we note that none of the other variables under the re-election model are significantly

[130] The alternative measure of state equity fraction is not significantly related to any of the three dividend measures.

[131] Note that the negative control and simple majority categories were merged, due to very few (< 1%) observations in the category of simple majority.

[132] Using the equity fraction of the largest co-investor instead of threshold levels of co-investor concentration, I found that this alternative measure had a significant effect on the dividend-to-sales ratio (coefficient of –0.114; $p < 0.01$). As regards the other two dividend measures, the equity fraction had no significant effect.

influencing dividend payment ratios, which means that Hypothesis 4, 6 and 7 are not supported.[133]

Seeking to examine whether the impact of economic and other criteria differ according to the scope for political influence, the findings displayed in Tables 8.7 and 8.8 confirm that both state control and political representation on SOC boards are important moderating factors. As for the dividend-to-earnings ratio, the results provide some support for the re-election model. In fact, it appears that the significant and negative impact of growth opportunities on this ratio is mainly ascribed to those firms in which the scope for political influence is presumably the weakest. Specifically, the results show that, for partly state-owned firms, moving from the bottom to the top decile of the total assets growth rate is associated with a 24.8 percentage point lower dividend-to-earnings ratio ($p < 0.05$). In a similar manner, for firms being chaired by non-politicians, moving from the bottom to the top decile of the total assets growth rate is associated with a 13.1 percentage point lower dividend-to-earnings ratio ($p < 0.10$). However, as the interaction effects show that none of these subsample differences are significant, we are left with no solid statistical support for the idea of moderating influences. Nor when using the two other dividend measures, we might observe some significant subsample differences regarding the growth opportunities variable. These results are also more difficult to interpret, since the positive effect of growth opportunities on dividend-to-sales is mainly due to firms under full state control (coefficient of 0.621; $p < 0.05$) and to firms being chaired by non-politicians (coefficient of 0.680; $p < 0.05$). Moreover, while the growth opportunities variable has a negative impact on the dividend-to-cash-flow ratio in all four subgroups, this effect is only significant within the subgroup of fully state-owned firms (coefficient of –l.911; $p < 0.05$). Given the results pertaining to the growth opportunities variable, there is thus no clear evidence for any of the two governance models.

While not significant in the main effects regressions, debt ratio enters as a significant variable within the subsample of partly state-owned firms – but not with the expected sign. Specifically, for firms under partial state control, the debt ratio is positively related to both dividend-to-earnings and dividend-to-sales ($p < 0.10$ and < 0.05, respectively). Yet, the magnitude of the estimated effects is very small: A 1% percentage point higher debt ratio result in a 0.5% and 0.01% percentage point higher dividend-to-earnings and dividend-to-cash-flow ratios, respectively. Although we should

[133] Using the chairman's sector affiliation as an alternative proxy, this variable was not significantly related to the dividend-to-earnings and dividend-to-sales ratios. In comparison, and in contrast to the theoretical prediction, public sector affiliation was found to have a negative and significant impact on the dividend-to-cash-flow ratio (coefficient of –11.448; $p < 0.01$).

not put too much weight on these results (the subsample differences are not significant), they might possibly imply that (some) partly state-owned firms are older, more stable, and profitable, being able to pay dividends more easily (von Eije and Megginson, 2006). Among the economic criteria, we also find that the significant and positive effect of commercial orientation on the dividend-to-sales ratio is mainly ascribed to partly state-owned firms, albeit the subsample difference is not significant. Finally, we should note that although we do find some other significant subsample differences when using the dividend-to-earnings and dividend-to-cash-flow ratios, these coefficients are not statistically significant *per se*.

If we look at the variables under the re-election model, the income variable is significant within some of the subgroups. However, the results are inconclusive as the sign of the income variable on dividend-to-earnings is both positive and negative for firms subject to political control (coefficients of –10.309 and 17.664 for fully state-owned firms and firms being chaired by a political representative, respectively; $p < 0.05$ for both subgroups). While the only significant subsample difference concerns the chairman subsample, we note that the practical effect is fairly small: A 1% increase in income leads to about a 0.2% percentage point higher dividend-to-earnings ratio.[134] Based on these results, it thus seems that politicians are not paying particularly emphasis to the notion that greater income implies a greater capacity to distribute cash.[135] As regards the impact of political chairmen in the state control subsample, there is some evidence that political influences in partly state-owned firms work to negatively affect dividend-to-earnings and dividend-to-sales. Although this effect contradicts the theoretical prediction, it is possible that political representative prefer earnings being kept in the SOCs for (possible) welfare purposes instead of being paid to (private) co-investors. In statistical terms, however, these subsample differences are not significant. Nor in the parallel case, as regards the impact of state control in the SOC chairman subsamples, are there any significant subsample differences. Moreover, resembling the pattern from the main effects regressions, the sponsor ministry variable is not significant in any of the subsample analyses.[136]

[134] When the independent variable, but not the dependent variable, is logged, one percent change in the independent variable is associated with 1/100 times the coefficient change in the dependent variable.

[135] Also note that, using the dividend-to-sales ratio, the income variable appears with a significant and negative sign within the political chairman subsample, but the subsample difference is not significant.

[136] Although we note that there is a significant subsample difference concerning the dividend-to-cash-flow ratio.

Lastly, we find some significant time effects both in the main effects regression and in the subsample analyses. In the full sample, there is a positive time effect on the dividend-to-sales ratio (0.799; $p < 0.01$). Using a split sample approach, however, we see that this time effect is mainly due to those firms in which the scope for political influence is seemingly less effective. Noticeably, from one year to another, the dividend-to-sales ratio increases with 1.4 percentage point ($p < 0.01$) for the group of firms under partial state control (the subsample difference is significant). In addition, there is a significant difference between the state control subsamples: While the time trend variable is not significant within the group of firms under full state control, the dividend-to-earnings ratio is associated with an annual increase of 5.2 percentage point for partly state-owned firms.

8.3.2 National differences

Given the above results, we find no conclusive evidence on which governance model is the most relevant. Interestingly, however, a much more consistent pattern comes into view when examining nationality subsamples (Table 8.9). Generally, these findings reveal that the impact of independent variables differs widely across Norwegian and Swedish SOCs. Specifically, the results demonstrate that while the growth opportunities effect is mainly due to Swedish firms, the state control effect is entirely ascribed to Norwegian firms. In fact, it appears that, for Swedish firms, moving from the bottom to the top decile of the total assets growth rate is associated with a 23 percentage point lower dividend-to-earnings ratio ($p < 0.01$). Although the interaction effect is not significant, there is yet evidence that higher growth SOCs pay considerably lower dividend payment ratios in Sweden than in Norway. Moreover, the results strongly support the idea that the Norwegian government-owner will exploit its opportunity to extract high dividends from fully state-owned SOCs: Compared to the Swedish case, Norwegian firms under partial state control pay about a 20% percentage point lower dividend-to-earnings ratio than fully state-owned firms ($p < 0.01$). The accompanying interaction effect is also significant.

Whereas several other variables appear as significant predictors in the nationality subsamples, most of the interaction effects are not significant. Yet, we do note that there are strong negative dividend-to-earnings effects associated with political board chairmen and the ownership ministry in the Swedish subsample. More precisely, the findings suggest that firms being chaired by political representatives have about a 16% percentage point lower dividend-to-earnings ratio than firms being headed by non-politicians ($p < 0.01$). Thus, it seems that, in Sweden, political influences on SOC boards do not substitute for direct state ownership inferences on the dividend issue. By contrast, this result indicates that politicians have a preference for retained cash over high dividends, which means that Hypothesis 6 is not supported.

Moreover, firms which are administered by the ownership ministry have roughly an 18% percentage point lower dividend-to-earnings ratio than firms being managed by sectoral ministries ($p < 0.01$). Interestingly, this result supports the idea that the ownership ministry is more likely than sectoral ministries to defy political pressure to raise dividend payments (Hypothesis 7). As a final point, we note that there is a significant between-country effect related to the time trend variable. While there are no significant time effects in the Norwegian subsample, the dividend-to-sales and dividend-to-cash-flow ratios rise with about 2% and 3.5% percentage points for Swedish SOCs on an annual basis ($p < 0.01$ and < 0.05, respectively). The same pattern is valid for the dividend-to-earnings ratio, but the moderated regression displays no significant subgroup difference.

8.4 Summary and Conclusions

The main finding of this study is that nation-specific institutional systems matter to dividend payments. Generally, the results support the supposition that the legal right of the Norwegian government-owner to decide on dividend payments for firms under full state control will result in high payout ratios. Using our primary dividend measure, the dividend-to-earnings ratio, the findings confirm that partly state-owned firms are paying much lower dividend ratios than firms under full state control – a relationship which is associated with Norwegian firms only. Evidently, this result is consistent with the re-election model, and is further strengthened by the finding that none of the economic criteria apply to the dividend-setting of Norwegian SOCs. In sharp contrast to the Norwegian case, we find that Swedish dividend outcomes seem fairly consistent with the reputation model. In fact, we find that fast growth firms pay lower dividend-to-earnings and dividend-to-cash-flow ratios than slow growth firms, a result which supports the idea that SOCs which are shielded from political intervention are less at risk of loosing (presumably profitable) investment opportunities. In support of the latter argument, we also find a negative relationship between the ownership ministry and dividend payment ratios, which imply that there are strong mechanisms within the Swedish government offices to defy political pressure. Another noteworthy result relates to the time trend variable, for which there is evidence that annual increases in dividend payment ratios only apply to those firms in which the scope for political influence is presumably the weakest. Somewhat surprisingly, there is weak evidence of any substitute or complementary effects between dividends and debt. Nor do we find any consistent pattern of higher dividend payment ratios among commercially oriented SOCs, which indicates that corporate objective is not a very suitable proxy for firms' dividend-paying ability.

Also, there is little evidence that SOCs' income-generating capacity has any profound influence on dividend payments.

Although this study suggests that the growth opportunities variable is an important predictor of dividend payment ratios, the proxies used to capture firms' investment opportunities have some severe limitations. In particular, past growth rates have the disadvantage of relying on the past as a proxy for the future (La Porta et al., 2000). Additionally, due to the short time-span, I was forced to rely on annual growth rates, although it would have been more appropriate to consider firm's economic developments over a longer time-horizon (e.g., by computing average annual growth rates over a five-year period).[137] Moreover, we might ask if even better proxies could be obtained by way of assessing growth opportunities on qualitative grounds. This concern seems particularly justified with regard to firms operating in regulated sectors, in which there are possibly some politically defined restrictions on the scope for expanding activities.

Interestingly, the findings of this study are seemingly at odds with the widely held view in the literature that SOCs pay much higher dividends after they are partially privatised (see, for example, Megginson et al., 1994; D'Souza et al., 2000). However, as the present sample provides no direct evidence on the privatisation effect, the results from this study is not directly comparable to those of prior research. Moreover, whereas previous studies have mainly directed their attention to the effect of share issue privatisation, the present study also includes non-listed firms among those under partial state control. By and large, therefore, the results from this study shed some new light on the dividend issue rather than contesting the findings of prior work. Also, this study supplements the finding of previous research that state-controlled firms have larger dividend payment ratios than firms with other control structures (e.g., family-controlled firms) and are also most reluctant to cut dividends (Gugler, 2003).

As regards future research on the SOC dividend issue, there is clearly an opportunity to investigate some issues in more detail. For instance, it would be interesting to examine whether dividend payment ratios are substantially affected by the political environment in which firms operate (Bank et al. 2004). While, in Chapter 4, I made the case for theoretical ambiguity concerning the effect of political ideology on SOC dividend payments, the present sample does not allow direct testing of the ideology effect (due to lagging of variables, which leads to the exclusion of the sample year 2000). Thus, it seems that a particularly challenging approach for future research is to draw on dividend data that cover more election periods and government changes, preferably including in the analysis also

[137] We should note that any market-based growth measures, such as the Tobin's *q*, are generally less applicable in a state ownership context.

firms with other control structures so as to test whether SOCs are really 'special cases'.

Obviously, the results of this study have important implications for public policy and practice. In particular, the findings substantially contribute to the recurring discussion of whether the dividend payments for fully state-owned firms should be decided upon by the SOC boards rather than determined in the state budget. Although the Norwegian practice might be defended on welfare grounds, because politicians extract SOC earnings for use on welfare activities, the problem arises as the public might forego future capital gains. Thus, if we recognise that firms' investment policy cannot be taken as independent of their dividend payments (La Porta et al., 2000), paying out large dividends from high growth firms might severely affect their future profitability. Because this problem is accentuated by the long-term and unpredictable processes of state capital injections, it provides a weighty argument for the Parliament to change the current legal regime. From the view of practitioners, the current system places a special responsibility on both corporate directors and state bureaucrats to better inform politicians about the future wealth losses (lower investment quality) that follow from the apparent neglect of economic criteria.

Chapter 9

Summary and Conclusions

Despite the harsh critique that often goes with state ownership, this type of ownership continues to play a very important role in Western Europe. The reasons why politicians favour state ownership are multi-faceted, including national interest protection, distributional and social concerns, difficulties in contracting with private service providers, developments in public-private partnership, and government ideology. Interestingly, the very continuance of state involvement in the production of goods and services has led corporate governance activists to abandon privatisation as the only viable strategy to solve the alleged governance problems under state ownership. Instead, they have sought to improve the management of state ownership portfolios by raising political awareness towards corporate governance. Yet, even though corporate governance advocates have succeeded in bringing issues of owner monitoring and control to the forefront of the political agenda, we know little about what governance decisions are actually made and the factors which might explain these outcomes. In fact, existing research has generated few predictions about, let alone empirical tests of, how politicians and corporate directors exercise their governance function. Given this, the contributions of this thesis relate both to the development of a theoretical framework for understanding governance decision-making and the thorough empirical treatment of this topic.

The aim of this last chapter is to take stock of the empirical findings and suggest some possible routes for future research. Accordingly, Section 9.1 provides a summary of the main results from the three empirical studies, and discusses the feasibility of theoretical ideas. Thereafter, Section 9.2 outlines some directions for future research, which stem both from the puzzles and limitations of the present studies as well as some of the broader research challenges within the field of state ownership and corporate governance.

9.1 What Have we Learned from the Analyses?

The overarching perspective of this thesis is one where the research field of political economy meets corporate governance research. More specifically, I assume that all actors in the state-owned firm hierarchy are pursuing their private interests, which, despite the connotations of this term, embrace such different concerns as material wealth, power, self-esteem, and pride. Given the latter, I further make the assumption that both politicians and corporate directors might be motivated by quite different motivational concerns, which are all consistent with the notion of self-interest. To put theoretical ideas to empirical tests, the strategy employed in this thesis is rather straightforward: I specify and estimate three different governance functions, to which I have added independent variables (institutional features and firm characteristics) designed to capture the motivational concerns of decision-makers. Then again, the task of evaluating whether the empirical findings are more consistent with one type of motivational concern than another is challenging, since there are possibly some trade-offs which are not easily observed. Thus, although some results match up better with some governance models than others, I consider these results to reflect *empirical regularities* rather than the supremacy of particular models.

The thesis has provided a thorough empirical investigation of three basic governance mechanisms, which includes board appointments, CEO compensation contracts, and dividend payments. Beyond the fact that these are mechanisms which politicians are entitled to influence either directly or indirectly (via the board of the directors), they are held as among the most promising to align the interests of corporate managers with those of the shareholders. Though, as should be clear from the theoretical discussion, it is not necessarily so that politicians and corporate directors will look for those governance decisions that minimise agency costs (the reputation model). Instead, they might search for those governance decisions which strengthen their chances of being re-elected to current positions (re-election model). Besides, politicians might pursue those governance decisions which support their ideological view of the world (ideology model). Using data from the population of Norwegian and Swedish SOCs over the period 2000-2005, this study examines the merits of these governance models. The two countries are excellent test cases as they are characterised by extensive state ownership portfolios; increased political attention towards corporate governance issues; different legal regimes and policy practices on corporate governance; and highly comparable political and administrative structures regulating SOCs.

While, in the area of SOC board appointments, theoretical ideas and actual practice seem particularly disassociated, the empirical results suggest that the governance models framing the explanation of CEO compensation contracts and dividend payments captures important aspects of reality. More precisely, the key points from the study of SOC board appointments are:

1. *Who serves as chairmen of the SOC boards?* In both Norway and Sweden, the political representation on SOC boards is fairly strong. However, the fraction of political chairmen who are appointed by their own government is significantly lower in Sweden, which might indicate that politicians are more comfortable with recruiting rival political representatives who are also members of the Parliament. As regards the sector affiliation of SOC chairmen, the two countries display some very different board recruitment patterns. While, in Norway, the majority of chairmen are recruited among private sector employees, the exact opposite pattern is observed in Sweden. Thus, there is strong evidence that the Norwegian practice of excluding currently serving politicians and state bureaucrats from taking SOC board seats result in fewer public sector employees being recruited to the chairman position.

2. *Evidence of a gap between theory and practice.* Interestingly, theoretical ideas about board appointments are only weakly associated with actual practices. Moreover, nearly all significant results are traced to nation-specificity, which makes the governance models less applicable across national boundaries. However, because some of the very same variables are found to be strong predictors of the other two governance decisions, this indicates no severe misspecification of the governance models. Instead, the major reason why we observe such a great gap between theory and practice could simply be that SOC board appointments follow other logics than those suggested in this thesis. In addition, there is a possibility that the results of this study pertain to the specific sample period and that the outcomes would have been altered if more years were included.

In the area of CEO compensation contracts (pay levels, incentive use, and golden parachute adoption), the following serves to summarise the findings:

1. *How do the CEO compensation contracts look like?* CEO pay packages differ across both firms and countries, as well as over time. The level of total cash compensation is higher among Swedish SOCs than among their Norwegian counterparts, and in both countries there is a substantial skewness in CEO pay levels. If looking at the median level of pay, it yet seems that Norwegian CEOs are about to catch up with their Swedish counterparts. Moreover, in both countries, there is only a modest use of incentive schemes, and the power of such plans seems fairly moderate. Additionally, from the point of view of CEOs, there are mostly up-sides related to the use of incentive schemes: When incentive schemes are introduced, the bonus pay is normally added to the CEO's fixed salary. Conversely, when incentive schemes are removed, it seems that any

previous bonus payments are compensated by fixed salary increases. As regards golden parachute contracts, these are certainly more pervasive than incentive schemes. Not only are golden parachutes commonly employed among Swedish SOCs, but they are also gaining increased acceptance among Norwegian SOCs. Thus, we are left with the puzzling evidence that it seems more acceptable to compensate CEOs for bad results (as in the case of dismissal) than for good results (as in the case of bonus payments).

2. *The importance of economic criteria*. In line with the reputation model, the multivariate findings suggest that compensation packages largely reflect an economic rationale (even though some effects appear with an unexpected sign). In support of the hypotheses, the results show that, compared to non-commercial SOCs, commercial firms are offering higher pay levels and are more likely to provide incentive schemes. Although at odds with the hypothesis (but probably in line with the conventional view), commercial SOCs are also more likely to adopt golden parachutes. Moreover, stock market listing significantly outweighs the importance of state control in being positively related to pay levels, and is also a key predictor of the probability that SOCs are providing incentive schemes. While both firm size and CEO recruitment channel are significantly related to pay levels in ways suggested by theory, their economic effects are rather small. In terms of practical significance, therefore, the effects of economic criteria relate mainly to SOCs' degree of market exposure (i.e., corporate objective and listing).

3. *The politics of pay*. Although political forces do not directly influence the compensation elements, the findings provide support for the widely held belief that politics matters to compensation design. In support of the theoretical prediction, it seems that strong state control of firms somewhat suppress the impact of economic criteria. As regards the strategic role of SOC board appointments, however, the effects are rather mixed. In fact, the results indicate that chairmen who are political experienced and/or recruited from the public sector are associated with those kinds of compensation decisions by which they are familiar or from which they might personally benefit. By contrast, the pay strategies which are associated with non-politicians and private sector employees are consistent with both reputation and re-election concerns. As far as the very content of CEO compensation packages is concerned, it seems that the constraining forces of politics relate not to the pay level *per se*, but rather to *how* CEOs are paid.

4. *The impact of nationality*. The national context significantly matters to how the concept of 'market forces' market is interpreted. In Sweden, the

link between market exposure and pay levels works through the stock market, while, in Norway, higher pay levels are associated with the commercial orientation of SOCs.

Finally, the findings related to dividend payments are summarised along the following lines:

1. *Dividend payment characteristics*. The dividend data reveals that more than 50% of the SOCs in Norway and Sweden are candidates for paying dividends. Moreover, among the dividend candidates, a great majority are actual dividend-payers. However, while, in Norway, the fraction of potential dividend-paying SOCs is reduced over the sample period, the opposite pattern holds for Sweden. Additionally, there is tendency for Norway to reduce the gap between potential and actual dividend-paying SOCs. Using the dividend-to-earnings ratio as the primary measure of dividend payments, the mean of this ratio is somewhat higher among Norwegian SOCs than among their Swedish counterparts. In both countries, the mean and median ratios are fairly similar, which means there are no signs that the dividend-to-earning ratio is concentrating in the lower or upper percentiles. Though, it is naturally so that some SOCs pay much larger dividends (in absolute values) than others, and in both countries there is a considerable disparity between the mean and median dividend payment levels.

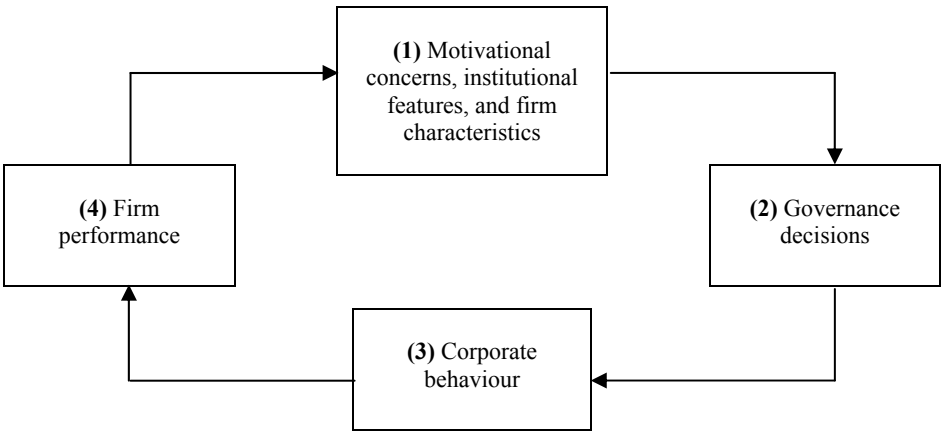
2. *The great importance of nation-specific institutional systems*. In line with the theoretical expectations, the results reveal that the legal regimes defining government-owners' right to intervene on the dividend issue have a significant impact on SOC dividend payments. In Norway, the legal right of the government-owner to decide on dividend payments for firms under full state control result in higher dividend-to-earnings ratios for these firms than for partly state-owned firms. In addition, none of the economic criteria apply to the dividend-to-earnings ratio of Norwegian SOCs. While the Norwegian case thus provides support for the re-election model, we find that Swedish dividend outcomes bear out the idea of the reputation model. In Sweden, fast growth firms pay both lower dividend-to-earnings and dividend-to-cash-flow ratios than slow growth firms. Additionally, there is a negative relationship between the ownership ministry and dividend payment ratios, which indicates that there are strong mechanisms within the Swedish government offices to resist political pressure towards higher dividend payments.

In general, the findings of this study seem to support the assertion of Vickers and Yarrow (1991) that most SOC studies focus almost exclusively upon the ownership variable and thereby fail to take proper account of other relevant factors. In fact, the analyses have shown that both CEO compensation contract design and dividend payments are responsive to a complex set of factors and are not easily explained by a single governance model. One particularly noteworthy result is that governance decisions are very sensitive to the institutional system and national context within which SOCs operate. Moreover, the results have important implications for public policy and practice insofar as the scope for political influence seems to produce governance decisions which are possibly not conducive to efficiency (e.g., in the area of dividend payments).

9.2 Directions for Future Research

While the empirical findings have provided strong support for some of the theoretical models and ideas which are put forward in this thesis, the statistical analysis can take the analysis only so far. We are not in a position to draw inferences about causality or the motivational trade-offs made by politicians and corporate directors. Moreover, we are not able to make any serious judgements about governance decisions being 'good' or 'bad'. Importantly, these are areas in which future research might contribute. The remainder of this thesis describes some possible routes to follow in examining issues of state ownership and corporate governance. As a means to organise the discussion, Figure 9.1 gives an illustration of the corporate governance process.

Figure 9.1. The corporate governance process.



9.2.1 Unravelling motivational concerns

In term of the above figure, the focus in this thesis has been directed towards the relationship between motivational concern, institutional features, and firm characteristics on the one hand and governance decisions on the other (boxes 1 and 2). While the empirical studies have provided some important insights on this subject, there remain several issues to explore. One basic issue relates to the very assumptions underlying the theoretical models. In particular, I made some important assumptions about voter preferences and voter information on the issue of corporate governance. Indeed, the re-election model rests on the assumption that voters will not reward politicians for (presumably) 'good' governance decisions, but are likely to punish them for unpopular decisions (e.g., excessive CEO salaries and downsizing of SOCs). Yet, I lack the empirical data needed to substantiate this proposition. One interesting route for future research would therefore be to collect survey (interview) data which might shed light on voters' attitude towards corporate governance issues (see, for example, Rattsø and Sørensen, 2004). In addition, such survey data might also help to unveil electoral preferences along the left-right dimension of corporate governance issues.

An alternative approach to test for the relevance of the re-election and the ideology models is to examine the effects of political cycles (see, for example, Alesina et al., 1999). From this perspective, it seems reasonable that politicians who are mainly concerned about being re-elected would care more about avoiding unpopular governance decisions in election years than when recently elected into office. For instance, we should be able to observe more political attention towards, say, lucrative compensation packages in election years (e.g., in terms of policy interventions). Moreover, conditional on loosing office, it seems likely that the very same type of politicians would seek to maximise their influence on governance decisions before elections. As such, they would like to replace rival political representatives or non-politicians on the SOC boards with political affiliates. Or, there is the case in which politicians would extract higher dividends in election years to stimulate growth and fulfil electoral promises. In a similar manner, we might empirically examine whether ideological considerations influence dividend payments in election years. For instance, one conjecture would be that only left-wing governments will extract higher dividends when facing a probability of electoral defeat, because they put more weight on government spending than business concerns. By contrast, right-wing governments would have the opposite preference. Thus, we should test whether left-wing and right-wing governments are acting strategically when deciding on dividend payments (see, for example, Pettersson-Lidbom, 2001).

More generally, it is possible to argue that further evidence about motivational trade-offs and strategic considerations can only be achieved by way of another type of research design. In fact, it seems that the case study

approach (relying on extensive interview data and documentary records) is the most salient for examining what sorts of trade-offs politicians and corporate directors face when making governance decisions (see, for example, Müller and Strøm, 1999). Particularly, the case study approach makes it possible to examine one important, but neglected, issue related to the ideology model; namely, the motivational trade-offs faced by minority governments and coalition governments (Budge and Keman, 1990; Laver and Schofield, 1990). Related to this, and resembling the above-mentioned concern of unveiling electoral preferences about corporate governance, one should attempt to corroborate the assumption of the ideology model by way of analysing election programmes and party-political platforms (see, for example, Budge and Laver, 1986).

9.2.2 Effects on corporate behaviour and firm performance

The thesis has asked the positive question of *why* governance decisions come to be the way they are in the first place, not how they *ought* to be designed. Although, under the reputation model, positive predictions are to some extent contrasted against a normative benchmark, it is not possible to draw any conclusions about the quality of governance decisions without looking at their effects on corporate behaviour and firm performance (boxes 3 and 4). In previous research only a few studies have examined the strategic activities undertaken by SOC corporate management. Based on the assumption that corporate managers in public enterprises have considerable discretion to pursue their private agendas, one key theoretical finding is that public enterprises may have both stronger incentives and greater ability than private enterprises to pursue anti-competitive activities (Sappington and Sidak, 2003). Apart from such reduced-form analysis (i.e., focus on the link between the boxes 1 and 3), however, little is known about how governance decisions affect corporate behaviour. One fruitful avenue for future research is therefore to provide empirical evidence on the relationship between, say, political representation on SOC boards and firms' investment decisions (e.g., investment in the home-market versus abroad, or investment in stakeholder versus shareholder welfare activities).

Moreover, future research should address the persistent claim in the literature on state ownership that one major source of SOC inefficiency is weak corporate governance on the part of the government-owner (which often appear in combination with weak capital market discipline and lack of product market competition) (Horn, 1995; Boycko et al., 1996; Shleifer, 1998; Parker, 2000). Importantly, this claim can only be corroborated by way of careful empirical investigation of the impact of governance decisions on firm performance. One viable empirical strategy is to compare the characteristics of state ownership to those of private ownership, because this approach will improve our insights into what is unique about the corporate

governance of private versus state owners. By considering certain governance mechanisms as intermediate variables between owner type and economic performance, we might thus explore (i) whether differences in governance decisions depend on whether the state or private owners control the firm, and (ii) whether differences in governance decisions actually manifests themselves in terms of performance differences (Ludvigsen and Bøhren, 2006). Because the criteria for judgment of SOC performance are controversial, it follows from this that researchers should not seek sweeping universal findings of success or failures of governance decisions, but should try to relate their findings to specific characteristics, like sector belonging or regulatory climate. Thus, it seems that empirical research on the relationships between institutional and firm characteristics, governance decisions, and firm performance (boxes 1, 2 and 4) would benefit from using industry-matched samples.

Literature

Agrawal, Anup and Charles R. Knoeber (1996):"Firm Performance and Mechanisms to Control Agency Problems between Managers and Shareholders". *Journal of Financial and Quantitative Analysis*, Vol. 31, No. 3 (September), pp. 377-397.

Aharoni, Yair (1986): *The Evolution and Management of State Owned Enterprises*. Cambridge, Mass.: Ballinger Publishing Company.

Alesina, Alberto and Guido Tabellini (2007): "Bureaucrats or Politicians? Part I: A Single Policy Task". *American Economic Review*, Vol. 97, No. 1 (March), pp. 169-179.

Alesina, Alberto and Guido Tabellini (2008): "Bureaucrats or Politicians? Part II: Multiple Policy Tasks". *Journal of Public Economics*, Vol. 92, No. 3/4 (April), pp. 426-447.

Alesina, Alberto, Nouriel Roubini and Gerald D. Cohen (1999): *Political Cycles and the Macroeconomy.* Cambridge, Mass.: MIT Press.

Ambarish, Ramasastry, John Kose and Joseph Williams (1987): "Efficient Signalling with Dividends and Investments". *Journal of Finance*, Vol. 42, No, 2 (June), pp. 321-343.

Baker, George, P., Michael C. Jensen and Kevin J. Murphy (1988): "Compensation and Incentives: Practice vs. Theory. *Journal of Finance*, Vol. 43, No. 3 (July), pp. 593-616.

Baltagi, Badi H. (2001): *Econometric Analysis of Panel Data* (2nd edition). New York: Wiley.

Bank, Steven A., Brian R. Cheffins and Marc Goergen (2004): "Dividend and Politics". ECGI Working Paper Series in Law, No. 24/2004.

Barkema, Harry G. and Luis R. Gomez-Mejia (1998): "Managerial Compensation and Firm Performance: A General Research Framework". *Academy of Management Journal*, Vol. 41, No. 2 (April), pp. 135-145.

Bebchuk, Lucian Arye and Jesse M. Fried (2003): "Executive Compensation as an Agency Problem". *Journal of Economic Perspectives*, Vol. 17, No. 3 (Summer), pp. 71-92.

Becht, Marco, Patrick Bolton and Ailsa Röell (2003): "Corporate Governance and Control". In George M. Constantinides, Milton Harris and René M. Stultz (eds.): *Handbook of the Economics of Finance, Volume 1A Corporate Finance*. Amsterdam: Elsevier (Chapter 1, pp. 4-109).

Berle, Adolf A. and Gardiner C. Means (1932): *The Modern Corporation and Private Property*. New York: Macmillan.

Besley, Timothy (2005): *Principled Agents? The Political Economy of Good Government*. Oxford: Oxford University Press.

Bhattacharya, Sudipto (1979): "Imperfect Information, Dividend Policy, and the "Bird in the Hand" Fallacy". *Bell Journal of Economics*, Vol. 10, No. 1 (Spring), pp. 259-270.

Blau, Peter M. (1970): "A Formal Theory of Differentiation in Organizations". *American Sociological Review*, Vol. 35 (April), pp. 201-218.

Boardman, Anthony E. and Aidan R. Vining (1989): "Ownership and Performance in Competitive Environments: A Comparison of the Performance of Private, Mixed, and State-Owned Enterprises". *Journal of Law and Economics*, Vol. 32, No. 1 (April), pp. 1-33.

Bortolotti, Bernardo, Juliet D'Souza, Marcella Fantini and William L. Megginson (2001): "Sources of Performance Improvement in Privatized Firms: A Clinical Study of the Global Telecommunications Industry". Working Paper No. 26/2001. University of Oklahoma, Department of Finance.

Boubakri, Narjess and Jean-Claude Cosset (1998): "The Financial and Operating Performance of Newly Privatized Firms: Evidence from Developing Countries". *Journal of Finance*, Vol. 53, No. 3 (June), pp. 1081-1110.

Boycko, Maxim, Andrei Schleifer and Robert W. Vishny (1996):"A Theory of Privatization". *Economic Journal*, Vol. 106, No. 435 (March), pp. 309-319.

Budge, Ian and Hans Keman (1990): *Parties and Democracy: Coalition Formation and Government Functioning in Twenty States*. Oxford: Oxford University Press.

Budge, Ian and Michael Laver (1986): "Policy, Ideology, and Party Distance: Analysis of Election Programmes in 19 Democracies". *Legislative Studies Quarterly*, Vol. 11, No. 4 (November), pp. 607-617.

Burgess, Simon and Marisa Ratto (2003): "The Role of Incentives in the Public Sector". *Oxford Review of Economic Policy*, Vol. 19, No. 2 (Summer), pp. 285-300.

Bøhren, Øyvind and R. Øystein Strøm (2005): "The Value-creating Board: Theory and Evidence". Research Report No. 8/2005. Norwegian School of Management BI.

Bøhren, Øyvind and Bernt Arne Ødegaard (2001): "Corporate Governance and Economic Performance in Norwegian Listed Firms". Research Report No. 11/2001. Norwegian School of Management BI.

Bøhren, Øyvind and Bernt Arne Ødegaard (2006): "Governance and Performance Revisited". In Paul U. Ali and Greg Gregoriou (eds.): *International Corporate Governance After Sarbanes-Oxley*. Hoboken, New Jersey: Wiley (Chapter 3, pp. 27-64).

Bös, Dieter (1991): *Privatization: A Theoretical Treatment*. Oxford: Oxford University Press.

Cadbury Report (Code) (1992): *The Financial Aspects of Corporate Governance*. London, UK: Gee.

Cochran, Philip L., Robert A. Wood and Thomas B. Jones (1985): "The Composition of Boards of Directors and Incidence of Golden Parachutes". *Academy of Management Journal*, Vol. 28. No. 3 (September), pp. 664-671.

Core, John E., Robert W. Holthausen and David F. Larcker (1999): "Corporate Governance, Chief Executive Officer Compensation, and Firm Performance". *Journal of Financial Economics*, Vol. 51, No. 3 (March), pp. 371-406.

Correia da Silva, Luis, Marc Goergen and Luc Renneboog (2004): *Dividend Policy and Corporate Governance*. Oxford: Oxford University Press.

Cragg, Michael I. and I. J. Alexander Dyck (2003): Privatization and Management Incentives: Evidence from the United Kingdom". *Journal of Law, Economics, and Organization*, Vol. 19, No. 1 (April), pp. 197-217.

Crespí, Rafel, Miguel A. García-Cestona and Vicente Salas (2004): "Governance Mechanisms in Spanish Banks. Does Ownership Matter?" *Journal of Banking and Finance*, Vol. 28, No. 10 (October), pp. 2311-2330.

Dalen, Dag Morten, Espen R. Moen and Christian Riis (2000): "Public Ownership as a Signalling Device". *Nordic Journal of Political Economy*, Vol. 27, pp. 3-12.

David, Parthiban, Rahul Kochhar and Edward Lewitas (1998): "The Effect of Institutional Investors on the Level and Mix of CEO Compensation". *Academy of Management Journal*, Vol. 41, No. 2 (April), pp. 200-208.

Davis, Gerald F. and Michael Useem (2002): "Top Management, Company Directors and Corporate Control". In Andrew Pettigrew, Howard Thomas and Richard Whittington (eds.): *Handbook of Strategic Management*. London: Sage (Chapter 11, pp. 233-258).

DeAngelo, Harry and Linda DeAngelo (1991): "Union Negotiations and Corporate Policy: A Study of Labour Concessions in the Domestic Steel Industry during the 1980s". *Journal of Financial Economics*, Vol. 30, No. 1 (November), pp. 3-43.

Dewatripont, Mathias, Ian Jewitt and Jean Tirole (1999a): "The Economics of Career Concerns, Part I: Comparing Information Structures". *Review of Economic Studies*, Vol. 66, No. 1 (January), pp. 183-198.

Dewatripont, Mathias, Ian Jewitt and Jean Tirole (1999b): "The Economics of Career Concerns, Part II: Application to Missions and Accountability of Government Agencies". *Review of Economic Studies*, Vol. 66, No. 1 (January), pp. 199-217.

Dial, Jay and Kevin J. Murphy (1995): "Incentives, Downsizing, and Value Creation at general Dynamics". *Journal of Financial Economics*, Vol. 37, No. 3 (March), pp. 261-314.

Dixit, Avinash (1997): "Power of Incentives in Private versus Public Organizations". *American Economic Review*, Vol. 87, No. 2 (May), pp. 378-382.

Dixit, Avinash (2002):"Incentives and Organizations in the Public Sector. An Interpretative Review". *Journal of Human Resources*, Vol. 37, No. 4 (Fall), pp. 696-727.

Downs, Anthony (1957): *An Economic theory of Democracy*. New York: Harper & Row.

D'Souza, Juliet, William Megginson and Robert Nash (2000): "Determinants of Performance Improvements in Privatized Firms: The Role of Restructuring and Corporate Governance". Working Paper.

Dunleavy, Patrick (1991): *Democracy, Bureaucracy and Public Choice*. Hemel Hempstead: Harvester Wheatsheaf.

Easterbrook, Frank H. (1984): "Two Agency-Cost Explanations of Dividends". *American Economic Review*, Vol.74, No. 4 (September), pp. 650-659.

Eije, Henk von and William Megginson (2006): "Dividend Policy in the European Union". Working Paper.

Fama, Eugene F. (1980): "Agency Problems and the Theory of the Firm". *Journal of Political Economy*, Vol. 88, No. 2 (April), pp. 289-307.

Fama, Eugene F. and Michael C. Jensen (1983a): Separation of Ownership and Control". *Journal of Law and Economics*, Vol. 26, No. 2 (June), pp. 301-325.

Fama, Eugene F. and Michael C. Jensen (1983b): "Agency Problems and Residual Claims". *Journal of Law and Economics*, Vol. 26, No. 2 (June), pp. 327-349.

Farrell, Catherine M. (2005): "Governance in the UK Public Sector: The Involvement of the Governing Board". *Public Administration*, Vol. 83, No. 1 (March), pp. 89-110.

Finkelstein, Sidney and Brian K. Boyd (1998): "How Much Does the CEO Matter? The Role of Managerial Discretion in the Setting of CEO Compensation". *Academy of Management Journal*, Vol. 41, No. 2 (April), pp. 179-199.

Finkelstein, Sidney and Donald C. Hambrick (1988): "Chief Executive Compensation: A Synthesis and Reconciliation". *Strategic Management Journal*, Vol. 9, No. 6 (November–December), pp. 543-558.

Finkelstein, Sidney and Donald C. Hambrick (1989): "Chief Executive Compensation: A Study of the Intersection of Markets and Political Forces". *Strategic Management Journal*, Vol. 10, No. 2 (March–April), pp. 121-134.

Fudenberg, Drew and Jean Tirole (1995): "A Theory of Income and Dividend Smoothing Based on Incumbency Rents". *Journal of Political Economy*, Vol. 103, No. 1 (February), pp. 75-93.

Gilson, Ronald J. and Reinier H. Kraakman (1991): "Reinventing the Outside Director: An Agenda for Institutional Investors". *Stanford Law Review*, Vol. 43, pp. 863-906.

Gomez-Mejia, Luis R., Henry Tosi and Timothy Hinkin (1987): "Managerial Control, Performance, and Executive Compensation". *Academy of Management Journal*, Vol. 30, No. 1 (March), pp. 51-70.

Gomez-Mejia, Luis, Martin Larraza-Kintana and Marianna Makri (2003): "The Determinants of Executive Compensation on Family-controlled Public Corporations". *Academy of Management Journal*, Vol. 46, No. 2, pp. 226-237.

Gomez-Mejia, Luis and Robert M. Wiseman (1997): "Reframing Executive Compensation: An Assessment and Outlook". *Journal of Management*, Vol. 23, No. 3 (May-June), pp. 291-374.

Gjesdal, Frøystein and Thore Johnsen (1995): "Utbyttepolitikk i offentlige foretak" [Dividend Policy in State-owned Enterprises]. SNF-rapport no. 50/95. Bergen: Foundation for Research in Economics and Business Administration.

Greene, William H. (2003): *Econometric Analysis* (5th edition). New Jersey: Prentice Hall.

Greve, Henrich R. (1997): "Hvem styrer styret? Styrets rolle i bedriftsledelsen" [Who Controls the Board of Directors? The Role of the Board in the Governance of Firms]. In Torger Reve (ed.): *SNF årbok 1996*. Bergen: Foundation for Research in Economics and Business Administration.

Grossman, Sanford J. and Oliver D. Hart (1986): "The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration". *Journal of Political Economy*, Vol. 94, No. 4 (August), pp. 691-719.

Grønnegård Christensen, Jørgen and Thomas Pallesen (2001): "The Political Benefits of Corporatization and Privatization". *Journal of Public Policy*, Vol. 21, No. 3 (June), pp. 283-309.

Gugler, Klaus (ed.) (2001): *Corporate Governance and Economic Performance*. Oxford: Oxford University Press.

Gugler, Klaus (2003): "Corporate Governance, Dividend Payout Policy, and the Interrelation between Dividends, R&D, and Capital Investment". *Journal of Banking and Finance*, Vol. 27, No. 7, pp. 1297-1321.

Gujarati, Damodar N. (2003): *Basic Econometrics* (4th edition). New York: McGraw-Hill.

Hallock, Kevin F. (1997): "Reciprocally Interlocking Boards of Directors and Executive Compensation". *Journal of Financial and Quantitative Analysis*, Vol. 32, No. 3 (September), pp. 331-344.

Hambrick, Donald C. and Sidney Finkelstein (1995): "The Effects of Ownership Structure on Conditions at the Top: The Case of CEO Pay Raises". *Strategic Management Journal*, Vol. 16, No. 3 (March), pp. 175-193.

Hanushek, Eric A. and John E. Jackson (1977): *Statistical Methods for Social Scientists*. New York: Academic Press.

Hart, Oliver (1995a): "Corporate Governance: Some Theory and Implications". *Economic Journal*, Vol. 105, No. 430 (May), pp. 678-689.

Hart, Oliver (1995b): *Firms, Contracts, and Financial Structure*. Oxford: Oxford University Press.

Hart, Oliver and John Moore (1990): "Property Rights and the Nature of the Firm". *Journal of Political Economy*, Vol. 98, No. 6 (December), pp. 1119-1157.

Hart, Oliver, Andrei Shleifer and Robert W. Vishny (1997): "The Proper Scope of Government: Theory and an Application to Prisons". *Quarterly Journal of Economics*, Vol. 112, No. 4 (November), pp. 1127-1161.

Hartzell, Jay C. and Laura T. Starks (2003): "Institutional Investors and Executive Compensation". *Journal of Finance*, Vol. 58, No. 6 (December), pp. 2351-2374.

Healy, Paul M. (1985): The Effect of Bonus Schemes on Accounting Decisions". *Journal of Accounting and Economics*, Vol. 7, No. 1-3 (April), pp. 85-107.

Hermalin, Benjamin E. and Michael S. Weisbach (1991): "The Effects of Board Composition and Direct Incentives on Firm Performance". *Financial Management*, Vol. 20, No. 4 (Winter), pp. 101-112.

Hermalin, Benjamin E. and Michael S. Weisbach (1998): "Endogenously Chosen Boards of Directors and Their Monitoring of the CEO". *American Economic Review*, Vol. 88, No. 1 (March), pp. 96-118.

Hermalin, Benjamin E. and Michael S. Weisbach (2003): "Boards of directors as an Endogenously Determined Institution: A Survey of the Economic Literature". *Economic Policy Review* (April), pp. 7-26.

Hibbs, Douglas A. (1977): "Political Parties and Macroeconomic Policy". *American Political Science Review*, Vol. 71 (December), pp. 1467-1487.

Hillman, Amy J. (2005): "Politicians on the Board of Directors: Do Connections Affect the Bottom Line?" *Journal of Management*, Vol. 3, No. 3 (June), pp. 464-481.

Holmström, Bengt (1982): "Moral Hazard in Teams". *Bell Journal of Economics*, Vol. 13, No. 2 (Autumn), pp. 324-340.

Holmström, Bengt and Paul Milgrom (1991): "Multitask Principal-Agent Analyses: Incentive Contracts, Asset Ownership, and Job Design". *Journal of Law, Economics and Organization*, Vol. 7 (January), pp. 24-52.

Horn, Murray J. (1995): *The Political Economy of Public Administration: Institutional Choice in the Public Sector*. Cambridge: Cambridge University Press.

Hsiao, Cheng (2002): *Analysis of Panel Data* (2nd edition). New York: Cambridge University Press.

Jensen, Michael C. (1986): "Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers". *American Economic Review*, Vol. 76, No. 2 (May), pp. 323-329.

Jensen, Michael C. (1993): "The Modern Industrial Revolution, Exit, and the Failure of Internal Control Systems". *Journal of Finance*, Vol. 48, No. 3 (July), pp. 831-880.

Jensen, Michael C. (1994): "Self-interest, Altruism, Incentives, and Agency Theory". *Journal of Applied Corporate Finance*, Vol. 7, No. 2 (Summer), pp. 40-45.

Jensen, Michael C. and William H. Meckling (1976): "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure". *Journal of Financial Economics*, Vol. 3, No. 4 (October), pp. 305-360.

Jensen, Michael C. and William H. Meckling (1994): "The Nature of Man". *Journal of Applied Corporate Finance*, Vol. 7, No. 2 (Summer), pp. 4-19.

Jensen, Michael C. and Kevin J. Murphy (1990a): "Performance Pay and Top-Management Incentives". *Journal of Political Economy*, Vol. 98, No. 2 (April), pp. 225-264.

Jensen, Michael C. and Kevin J. Murphy (1990b): "CEO Incentives: It's Not *How Much* You Pay, but *How*". *Harvard Business Review* (May-June), No. 3, pp. 138-153.

Jensen, Gerald R., Donald P. Solberg and Thomas S. Zorn (1992): "Simultaneous Determination of Insider Ownership, Debt, and Dividend Policies". *Journal of Financial and Quantitative Analysis*, Vol. 27, No. 2 (June), pp. 247-263.

Johnsen, Thore (2004): "Målformuleringen i Statseierskapsutvalgets mandat" [The goal specification in the directive of the Commission on State Ownership]. In NOU (2004): *Statens forretningsmessige eierskap* [State Commercial Ownership]. Norwegian Ministry of Trade and Industry, NOU 2004:7.

Joskow, Paul L., Nancy L. Rose and Andrea Shepard (1993): "Regulatory Constraints on CEO Compensation". *Brookings Papers on Economic Activity. Microeconomics*, Vol. 1993, No. 1, pp. 1-72.

Joskow, Paul L., Nancy L. Rose and Catherine D. Wolfram (1996): "Political Constraints on Executive Compensation: Evidence from the Electric Utility Industry". *RAND Journal of Economics*, Vol. 27, No. 1 (Spring), pp. 165-182.

Kennedy, Peter (2003): *A Guide to Econometrics* (5th edition). Cambridge, Mass.: The MIT Press.

Knoeber, Charles R. (1986): "Golden Parachutes, Shark Repellents, and Hostile Tender Offers". *American Economic Review*, Vol. 76, No. 1 (March), pp. 155-167.

Kose, John and Joseph Williams (1985): "Dividends, Dilution, and Taxes: A Signalling Equilibrium". *Journal of Finance*, Vol. 40, No. 4 (September), pp. 1053-1070.

Kosnik, Rita D. (1990): "Effects of Board Demography and Directors' Incentives on Corporate Greenmail Decisions". *Academy of Management Journal*, Vol. 33, No. 1 (March), pp. 129-150.

Kreps, David M. (1997): "Intrinsic Motivation and Extrinsic Incentives". *American Economic Review*, Vol. 87, No. 2 (May), pp. 359-364.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer and Robert W. Vishny (2000): "Agency Problems and Dividend Policies around the World". *Journal of Finance*, Vol. 55, No. 1 (February), pp. 1-33.

Larcker, David F. (1983): "The Association between Performance Plan Adoption and Corporate Capital Investment". *Journal of Accounting and Economics*, Vol. 5, No. 1 (April), pp. 3-30.

Laver, Michael and Norman Schofield (1990): *Multiparty Government: The Politics of Coalition in Europe*. Oxford: Oxford University Press, 1990.

Lijphart, Arend (1989): *Democracies*. *Patterns of Majoritarian and Consensus Government in Twenty-One Countries.* New Haven: Yale University Press.

Ludvigsen, Stine and Øyvind Bøhren (2006): "Corporate Governance and Firm Performance: Are State Owners Different from Private Owners?" Research proposal.

Maskin, Eric and Jean Tirole (2004): "The Politician and The Judge: Accountability in Government". *American Economic Review*, Vol. 94, No. 4 (September), pp. 1034-1054.

Mace, Myles L. (1971): *Directors: Myth and Reality*. Boston: Harvard Business School Press.

McCubbins, Mathew D. and Thomas Schwartz (1984): "Congressional Oversight Overlooked: Police Patrols versus Fire Alarms". *American Journal of Political Science,* Vol. 28, No. 1 (February), pp. 165–179.

McCubbins, Mathew D., Roger D. Noll and Barry R. Weingast (1987): "Administrative Procedures as Instruments of Political Control". *Journal of Law, Economics and Organization,* Vol. 3, No. 2 (Fall), pp. 243–277.

Megginson, William L. and Jeffrey M. Netter (2001): "From State to Market: A Survey of Empirical Studies on Privatization". *Journal of Economic Literature*, Vol. 39, No. 2 (June), pp. 321-389.

Megginson, William L., Robert C. Nash and Matthias Van Randenborgh (1994): "The Financial and Operating Performance of Newly Privatized Firms: An International Empirical Analysis". *Journal of Finance*, Vol. 49, No. 2 (June), pp. 403-452.

Menard, Scott W. (2002): *Applied Logistic Regression Analysis*. Thousand Oaks, CA: Sage.

Miller, Merton and Kevin Rock (1985): "Dividend Policy under Asymmetric Information". *Journal of Finance*, Vol. 40, No. 4 (September), pp. 1031-1051.

Murphy, Kevin J. (1996): "Reporting Choice and the 1992 Proxy Disclosure Rules". *Journal of Accounting, Auditing, and Finance*, Vol. 11, No. 3 (Summer), pp. 497-515.

Murphy, Kevin J. (1999): Executive Compensation". In Orley Ashenfelter and David Card (eds.): *Handbook of Labor Economics, Volume 3b*. Amsterdam: Elsevier (Chapter 38, pp. 2485-2563).

Murphy, Kevin J. (2001): "Performance Standards in Incentive Contracts". *Journal of Accounting and Economics*, Vol. 30, No. 3 (December), pp. 245-278.

Müller, Wolfgang C. and Kaare Strøm (1999): *Policy, Office, or Votes? How Political Parties in Western Europe Make Hard Decisions*. Cambridge: Cambridge University Press.

OECD (2003): "Regulatory Reform in Norway. Marketisation of Government Services – State-Owned Enterprises". Organisation for Economic Co-operation and Development.

OECD (2004): "OECD Principles of Corporate Governance". Organisation for Economic Co-operation and Development.

OECD (2005): "OECD Guidelines on Corporate Governance of State-Owned Enterprises". Organisation for Economic Co-operation and Development.

Oyer, Paul (2004): "Why Do Firms Use Incentives That Have No Incentive Effects?" *Journal of Finance*, Vol. 59, No. 4 (August), pp. 1619-1649.

O'Reilly, Charles A., Brian G. Main and Graef S. Crystal (1988): "CEO Compensation as Tournament and Social Comparison: A Tale of Two Theories". *Administrative Science Quarterly*, Vol. 33, no. 2 (June), pp. 257-274.

Oxelheim, Lars and Trond Randøy (2003): "The impact of Foreign Board Membership on Firm Value". *Journal of Banking and Finance*, Vol. 27, No. 12 (December), pp. 2369-2392.

Parker, David (ed.) (2000): *Privatisation and Corporate Performance*. Mass.: Edward Elgar Publishing.

Persson, Torsten and Lars Svensson (1989): "Why a Stubborn Conservative Would Run a Deficit: Policy with Time-Inconsistent Preferences". *Quarterly Journal of Economics*, Vol. 104, No. 2 (May), pp. 325-345.

Persson, Torsten and Guido Tabellini (2000): *Political Economics. Explaining Economic Policy.* Cambridge, Mass.: MIT Press.

Petersen, Trond (2004): "Analyzing Panel Data: Fixed- and Random Effects Models". In Melissa Hardy and Alan Bryman (eds.): *Handbook of Data Analysis*. Thousand Oaks, CA: Sage.

Pettersson-Lidbom, Per (2001): "An Empirical Investigation of the Strategic Use of Debt". *Journal of Political Economy*, Vol. 109, No. 3(June), pp. 570-583.

Pfeffer, Jeffrey (1972): "Size and Composition of Corporate Boards of Directors: The Organization and its Environment". *Administrative Science Quarterly*, Vol. 17, No. 2 (June), pp. 218-228.

Pfeffer, Jeffrey (1973): "Size, Composition and Function of Hospital Boards of Directors: A Study of Organization-Environment Linkage". *Administrative Science Quarterly*, Vol. 18, No. 3 (September), pp. 349-364.

Pfeffer, Jeffrey and Gerald R. Salancik (1978): *The External Control of Organizations: A Resource Dependence Perspective*. New York: Harper & Row.

Prendergast, Canice (1999): "The Provision of Incentives in Firms". *Journal of Economic Literature*, Vol. 37, No. 1 (March), pp. 7-63.

Randøy, Trond and Jan Inge Jenssen (2004): "Board Independence and Product Market Competition in Swedish Firms". *Corporate Governance*, Vol. 12, No. 3 (July), pp. 281-289.

Randøy, Trond and Jim Nielsen (2002): "Company Performance, Corporate Governance, and CEO Compensation in Norway and Sweden". *Journal of Management and Governance*, Vol. 6, No. 1 (March), pp. 57-81.

Rattsø, Jørn and Rune J. Sørensen (2004): "Public Employees as Swing Voters: Empirical Evidence on Opposition to Public Reform". *Public Choice*, Vol. 119, No. 3/4 (June), pp. 281-310.

Rediker, Kenneth J. and Anju Seth (1995): "Boards of Directors and Substitution Effects of Alternative Governance Mechanisms". *Strategic Management Journal*, Vol. 16, No. 2 (February), pp. 85-99.

Roe, Mark J. (2003): *Political Determinants of Corporate Governance. Political Context, Corporate Impact*. Oxford: Oxford University Press.

Rose, Nancy L. Rose and Catherine D., Wolfram (2002): "Regulating Executive Pay: Using the Tax Code to Influence Chief Executive Offer Compensation". *Journal of Labour Economics*, Vol. 20, No. 2 (April), pp. 138-175.

Rozeff, Michael S. (1982): "Growth, Beta and Agency Costs as Determinants of Dividend Payout Ratios". *Journal of Financial Research*, Vol. 5, No. 3 (Fall), pp. 249-259.

Sappington, David E.M. and J. Gregory Sidak (2003): "Incentives for Anticompetitive Behavior by Public Enterprises". *Review of Industrial Organization*, Vol. 22, No. 3 (May), pp. 183-206.

Sappington, David E.M. and Joseph E. Stiglitz (1987): "Privatization, Information and Incentives". *Journal of Policy Analysis and Management*, Vol. 6, No. 4 (Summer), pp. 567-582.

Selznick, Philip (1949): *TVA and the Grass Roots: A Study in the Sociology of Formal Organization*. Berkeley, CA: University of California Press.

Shivdasani, Anil and David Yermack (1999): CEO Involvement in the Selection of New Board Members: An Empirical Analysis". *Journal of Finance*, Vol. 54, No. 5 (October), pp. 1829-1853.

Shleifer, Andrei (1998): "State versus Private Ownership". *Journal of Economic Perspectives*, Vol. 12, No. 4 (Fall), pp. 133-150.

Shleifer, Andrei and Robert W. Vishny (1986): "Large shareholders and corporate control". *Journal of Political Economy*, Vol. 94, No. 3 (June), pp. 461-488.

Shleifer, Andrei and Robert W. Vishny (1994): "Politicians and Firms". *Quarterly Journal of Economics,* Vol. 109, No. 4 (November), pp. 995-1025.

Shleifer, Andrei and Robert W. Vishny (1997): "A Survey of Corporate Governance". *Journal of Finance*, Vol. 52, No. 2 (June), pp. 737-783.

Short, Helen (1994): "Ownership, Control, Financial Structure and the Performance of Firms". *Journal of Economic Surveys*, Vol. 8, No. 3 (September), pp. 203-249.

Singh, Harbir and Farid Harianto (1989): "Management-Board Relationships, Takeover Risk, and the Adoption of Golden Parachutes". *Academy of Management Journal*, Vol. 32, No.1 (March), pp. 7-24.

Statskonsult (1998): "State Involvement in Production of Goods and Services – Development and Company Formation. Report from Norway – October 1997". Report 1998:8. Statskonsult – Directorate of Public Management.

Thomsen, Steen and Torben Pedersen (2000): "Ownership Structure and Economic Performance in the Largest European Countries". *Strategic Management Journal*, Vol. 21, No. 6 (June), pp. 689-705.

Tirole, Jean (2001): "Corporate Governance". *Econometrica*, Vol. 69, No. 1 (January), pp. 1-35.

Tosi, Henry L. and Luis R. Gomez-Mejia (1991): "The Decoupling of CEO Pay and Performance: An Agency Theory Perspective". *Administrative Science Quarterly*, Vol. 34, No. 2 (June), pp. 169-189.

Vickers, John and George Yarrow (1991): *Privatization: An Economic Analysis* (4th edition). Cambridge, Mass.: MIT Press.

Wade, James, Charles A. O'Reilly III and Ike Chandratat (1990): "Golden Parachutes: CEOs and the Exercise of Social Influences". *Administrative Science Quarterly*, Vol. 35, No. 4 (December), pp. 587-603.

Weisbach, Michael S. (1988): "Outside Directors and CEO Turnover". *Journal of Financial Economics*, Vol. 20, No. 1-2, pp. 431-460.

Westphal, James D. and James W. Fredrickson (2001): "Who Directs Strategic Change? Director Experience, the Selection of New CEOs, and Change in Corporate Strategy". *Strategic Management Journal*, Vol. 22, No. 12 (December), pp. 1113-1137.

Williamson, Oliver E. (1985): *The Economic Institutions of Capitalism*. New York, Free Press.

Wittman, Donald (1995): *The Myth of Democratic Failure: Why Political Institutions are Efficient*. Chicago: University of Chicago Press.

Wolfram, Catherine D. (1998): "Increases in Executive Pay Following Privatization". *Journal of Economics and Management Strategy*, Vol. 7, No. 3 (Fall), pp. 327-361.

Wooldridge, Jeffrey M. (2006): *Introductory Econometrics. A Modern Approach* (3rd edition). Mason: Thomson South-Western.

Yermack, David L. (1996): "Higher Market Valuation of Companies with a Small Board of Directors". *Journal of Financial Economics*, Vol. 40, No. 2 (February), pp. 185-211.

Zajac, Edward J. and James D. Westphal (1995): "Accounting for the Explanations of CEO Compensation: Substance and Symbolism". *Administrative Science Quarterly*, Vol. 40, No. 2 (June), pp. 283-308.

Zajac, Edward J. and James D. Westphal (1996): "Director Reputation, CEO-Board Power, and the Dynamics of Board Interlocks". *Administrative Science Quarterly*, Vol. 41, No. 3 (September), pp. 507-529.

Zhang, Xiaomeng, Kathryn M. Bartol, Ken G. Smith, Michael D. Pfarrer and Dmitry Khanin (2008): "CEOs On The Edge: Earnings Manipulation and Stock-Based Incentive Misalignment". *Academy of Management Journal*, Vol. 51, No. 2 (April-May), pp. 241–258.

Public policy documents:

Aksjeloven *Lov om aksjeselskaper 13. juni 1997 nr. 44* [The Limited Liability Companies Act].

Aktiebolagslagen. *24. november 2005:551* [The Companies Act].

Allmennaksjeloven. *Lov om allmennaksjeselskaper 13. juni 1997 nr. 45* [The Public Limited Liability Companies Act].

Grunnloven. *Kongeriget Norges Grundlov, given i Rigsforsamlingen paa Eidsvold den 17de Mai 1814* [The Constitution].

Lag om revision av statlig verksamhet mm. *5. desember 2002:1022* [Auditing of State Activities, etc. Act].

Norsk anbefaling for eierstyring og selskapsledelse [Norwegian Code of Practice for Corporate Governance]. http://www.nues.no.

NOU 2004:7: *Statens forretningsmessige eierskap* [State Commercial Ownership].

Nærings- og handelsdepartementet [Norwegian Ministry of Trade and Industry] (2003): *Statens eierberetning 2003* [The State's Ownership Report 2003].

Nærings- og handelsdepartementet [Norwegian Ministry of Trade and Industry] (2004): *Statens eierberetning 2004* [The State's Ownership Report 2004].

Nærings- og handelsdepartementet [Norwegian Ministry of Trade and Industry] (2005): *Statens eierberetning 2005* [The State's Ownership Report 2005].

Regeringsformen. *Beslutad ny regeringsform 28. februar 1974:152* [The Constitution].

Reglementet for økonomistyring i staten. Bestemmelser om økonomistyring i staten. Regelverk fastsatt 12. desember 2003 med endringer, senest 14.november 2006. [Regulations on Financial Management within Central Government].

Riksrevisjonen [The Auditor General of Norway] (2001): *Riksrevisjonens kontroll med statsrådens (departementets) forvaltning av statens interesser i selskaper, banker mv. for 2000* [Financial Audit and Corporate Control]. Dokument nr. 3:2 (2001-2002).

Riksrevisjonen [The Auditor General of Norway] (2002): *Riksrevisjonens kontroll med statsrådens (departementets) forvaltning av statens interesser i selskaper, banker mv. for 2001* [Financial Audit and Corporate Control]. Dokument nr. 3:2 (2002-2003).

Riksrevisjonen [The Auditor General of Norway] (2003): *Riksrevisjonens kontroll med statsrådens (departementets) forvaltning av statens interesser i selskaper, banker mv. for 2002* [Financial Audit and Corporate Control]. Dokument nr. 3:2 (2003-2004).

Riksrevisjonen [The Auditor General of Norway] (2004): *Riksrevisjonens kontroll med statsrådens (departementets) forvaltning av statens interesser i selskaper, banker mv. for 2003* [Financial Audit and Corporate Control]. Dokument nr. 3:2 (2004-2005).

Riksrevisjonen [The Auditor General of Norway] (2005): *Riksrevisjonen legger fram: 1) Ekstrakt av Norges statsregnskap og regnskap for administrasjonen av Svalbard for budsjetterminen 2004, 2) Resultatet av den årlige revisjon og kontroll for budsjetterminen 2004* [Financial Audit and Corporate Control]. Dokument nr.1 (2005-2006).

Riksrevisjonen [The Auditor General of Norway] (2006): *Riksrevisjonens rapport om den årlige revisjon og kontroll for budsjetterminen 2005* [Financial Audit and Corporate Control]. Dokument nr.1 (2006-2007).

Riksrevisjonsloven. *Lov om Riksrevisjonen 7. mai 2004 nr. 21* [Act on Auditing of Government Accounts].

St.meld. nr. 22 (2001-2002): *Et mindre og bedre statlig eierskap*. Nærings- og handelsdepartementet [White Paper on Reduced and Improved State Ownership. Norwegian Ministry of Trade and Industry].

St.meld. nr. 13 (2006-2007): *Et aktivt og langsiktig eierskap*. Nærings- og handelsdepartementet [White Paper on Active and Long-term Ownership. Norwegian Ministry of Trade and Industry].

Svensk kod för bolagsstyrning [Swedish Code for Corporate Control]. In Regeringskansliet (2005): *Statens ägarpolitik 2005.*

Regeringskansliet [Swedish Government Offices] (2000): *Verksamhetsberättelse för företag med stagtligt ägande 2000* [Annual Report State-owned Companies 2000].

Regeringskansliet [Swedish Government Offices] (2001): *Verksamhetsberättelse för företag med stagtligt ägande 2001* [Annual Report State-owned Companies 2001].

Regeringskansliet [Swedish Government Offices] (2002): *Verksamhetsberättelse för företag med stagtligt ägande 2002* [Annual Report State-owned Companies 2002].

Regeringskansliet [Swedish Government Offices] (2003): *Verksamhetsberättelse för företag med stagtligt ägande 2003* [Annual Report State-owned Companies 2003].

Regeringskansliet [Swedish Government Offices] (2004): *Verksamhetsberättelse för företag med stagtligt ägande 2004* [Annual Report State-owned Companies 2004].

Regeringskansliet [Swedish Government Offices] (2005): *Verksamhetsberättelse för företag med stagtligt ägande 2005* [Annual Report State-owned Companies 2005].

Regeringskansliet [Swedish Government Offices] (2005): *Statens ägarpolitik 2005* [State Ownership Policy 2005].

Sarbanes-Oxley Act (2002). *An act to protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities laws, and for other purposes*, July, 30 2002, No. 107-204.

Appendix A

Definition of variables used in the empirical analysis[138]

VARIABLE	DEFINITION
Dependent variables	
The board chairman's professional background	
Political representative	Dummy variable which equals one if the chairman is a current or former Parliamentary and/or government representative, zero otherwise (benchmark category: the chairman has no political experience)
Party-political appointment *d*	Dummy variable which equals one if a chairman with political experience is appointed by his/her 'own' government, zero otherwise (benchmark category: the chairman is appointed by a rival government)
Sector affiliation	Dummy variable which equals one if the chairman is employed in the public sector at the time of appointment to the chairman position, zero otherwise (benchmark category: the chairman is employed in the private sector at the time of appointment)
Political representative * public sector affiliation *d*	Dummy variable which equals one if the chairman is a political representative employed in the public sector at the time of appointment to the chairman position, zero otherwise (benchmark category: the chairman is a non-politician employed in the private sector at the time of appointment)
Political representative * private sector affiliation *d*	Dummy variable which equals one if the chairman is a political representative employed in the private sector at the time of appointment to the chairman position, zero otherwise (benchmark category: the chairman is a non-politician employed in the private sector at the time of appointment)
Non-politician * public sector affiliation *d*	Dummy variable which equals one if the chairman is a non-politician employed in the public sector at the time of appointment to the chairman position, zero otherwise (benchmark category: the chairman is a non-politician employed in the private sector at the time of appointment)
Type of appointment *d*	Dummy variable which equals one if the elected chairman has not previously served in the position, zero otherwise (benchmark category: the chairman is re-elected to the position)

[138] Apart from the variables that are exposed to empirical testing, the table also describes those variables that are used for descriptive purposes only (marked with the letter *d*). Moreover, since some of the latter are merely classification variables, they need not be defined as dummy variables. Additionally, the table shows the background variables from which the final variables are constructed (marked with the letter *b*).

CEO compensation contracts[139]	
Total cash compensation	The sum of fixed salary, miscellaneous benefits, and annual bonuses for a given year
Fixed salary *d*	The CEO's base (non-contingent) annual salary, miscellaneous benefits included
Incentive scheme	Dummy variable which equals one if the compensation contract includes performance-based pay components, which are tied to short-term (annual bonuses) and/or long-term (stock options and shareholdings) goals, zero otherwise (benchmark category: no performance-based pay components included in the compensation contract)
Short-term incentive programme *d*	Dummy variable which equals one if the compensation contract includes an annual bonus component, zero otherwise (benchmark category: no annual bonus components included in the compensation contract)
Performance standard *d*	Dummy variable which equals one if the measure(s) used to evaluate managerial performance in the annual bonus plan are based on firm-specific goals, zero otherwise (benchmark category: the measure(s) used to evaluate managerial performance is measured relative to other firms in the industry or market)
Performance criteria *d*	Dummy variable which equals one if the annual bonus plan includes multiple performance criteria to evaluate managerial performance, zero otherwise (benchmark category: the annual bonus plan uses a single criterion to evaluate managerial performance)
Bonus cap *d*	The maximum amount of bonus pay which might be received by the CEO according to the short-term incentive contract expressed as a percentage of fixed salary
Bonus payment *d*	The value of the annual bonus paid to the CEO
Bonus share *d*	Bonus payment as a percentage of fixed salary
Long-term incentive programme *d*	Dummy variable which equals one if the CEO holds shares and/or stock options, zero otherwise (benchmark category: the CEO holds no shares and/or stock options)
Value of shareholdings *d*	The number of shares held by the CEO multiplied by the market value of the stock at year-end
CEO ownership share *d*	The percentage of the firm's outstanding shares held by the CEO
Notice period employee termination *b*	The notice period defines the number of months in which the CEO is obligated to retain his/her position if the employment contract is terminated by the employee
Notice period employer termination *b*	The notice period defines the number of months in which the CEO is entitled to retain his/her position if the employment contract is terminated by the employer

[139] All compensation amounts are expressed in 2005 NOK thousand and adjusted for Consumers' Price Indexes (CPI). Exchange rates are drawn from the Central Bank of Norway *(source*: http://www.norges-bank.no), whereas CPI numbers are drawn from Statistics Norway and Statistics Sweden (where the base year is set to 1998 (= 100) for Norway and to 1980 (=100) for Sweden) *(sources:* http://www.ssb.no and http://www.scb.se)

Net notice period *b*	The number of months of which the notice period in the event of employer termination exceeds that of employee termination
Severance pay *b*	The number of months of which compensation is paid to the CEO who has his or her employment 'severed' (which does not include the required notice of termination)
Golden parachute size *b, d*	Net notice period plus the number of months with severance pay
Golden parachute	Dummy variable which equals one if the golden parachute size > 0, zero otherwise (benchmark category: golden parachute size ≤ 0)
Dividend payments	
Potential dividend-payer *d*	Dummy variable which equals one if the firm is candidate for paying dividend, zero otherwise (benchmark category: the firm is not a dividend-paying candidate)
Actual dividend-payer *d*	Dummy variable which equals one if the firm is paying dividends, zero otherwise (benchmark category: the firm is not paying dividends)
Dividend payments *b, d*	The total cash dividends paid to shareholders
Dividend-to-earnings	Dividend payment as a percentage of net profit/earnings
Dividend-to-sales	Dividend payment as a percentage of net sales
Dividend-to-cash-flow	Dividend payment as a percentage of cash flow from operations
Share buybacks *d*	The value of share repurchases from shareholders
Total payments *d*	The sum of dividend payment and buybacks
Stock emissions *d*	The flow of capital to the firm derived from stock emissions
Net payments *d*	Total payments less stock emissions
Independent variables	
Time	
Year 2001 *d*	Dummy variable which equals one if the observation is in the year 2001, zero otherwise (benchmark category: year 2000)
Year 2002 *d*	Dummy variable which equals one if the observation is in the year 2002, zero otherwise (benchmark category: year 2000)
Year 2003 *d*	Dummy variable which equals one if the observation is in the year 2003, zero otherwise (benchmark category: year 2000)
Year 2004 *d*	Dummy variable which equals one if the observation is in the year 2004, zero otherwise (benchmark category: year 2000)
Year 2005 *d*	Dummy variable which equals one if the observation is in the year 2005, zero otherwise (benchmark category: year 2000)
Time trend	Continuous variable ranging from 1-6 (2000,…, 2005)

Nation-specificity	
Nationality	Dummy variable which equals one if the firm is Swedish, zero otherwise (benchmark category: the firm is Norwegian)
Political ideology	
Government party	Dummy variable which equals one if the government is right-wing, zero otherwise (benchmark category: the government is left-wing)
Type of firm activity	
Corporate objective	Dummy variable which equals one if the firm is commercial (i.e., the firm operates under market conditions and requirements), zero otherwise (benchmark category: the firm is non-commercial (i.e., the firm has special societal interests to fulfil))
Listing	Dummy variable which equals one if the partly state-owned firm is listed on the stock exchange (publicly traded), zero otherwise (benchmark category: the firm is 100% state-owned)
Non-listing	Dummy variable which equals one if the partly state-owned firm is not listed on the stock exchange (publicly traded), zero otherwise (benchmark category: the firm is 100% state-owned)
Sector classification *d*	Sector classification is made according to Global Industry Classification Standard (GICS), which differentiates between 10 sectors. Those sectors are 10 = energy; 15 = materials; 20 = industrials; 25 = consumer discretionary; 30 = consumer staples; 35 = health care; 40 = financials; 45 = information technology; 50 = telecommunications services; 55 = utilities
State control	
State control	Dummy variable which equals one if the state ownership stake is < 100%, zero otherwise (benchmark category: state ownership stake =100%)
State equity fraction	The fraction of a firm's equity held by the state
State super-majority	Dummy variable which equals one if the state ownership stake is < 100% and ≥ 66.67%, zero otherwise (benchmark category: state ownership stake = 100%)
State simple majority	Dummy variable which equals one if the state ownership stake is < 66.67% and > 50%, zero otherwise (benchmark category: state ownership stake = 100%)
State negative control	Dummy variable which equals one if the state ownership is ≤ 50% and > 33.33%, zero otherwise (benchmark category: state ownership stake = 100%)
State minority post	Dummy variable which equals one if the state ownership stake is ≤ 33.33%, zero otherwise (benchmark category: state ownership stake = 100%)
Co-investment characteristics	
Largest co-investor simple majority	Dummy variable which equals one if the largest co-investor's ownership stake is < 100% and > 50%, zero otherwise (benchmark category: state ownership stake = 100%)
Largest co-investor negative control	Dummy variable which equals one if the largest co-investor's ownership stake is ≤ 50% and > 33.33%, zero otherwise (benchmark category: state ownership stake = 100%)

Largest co-investor 5% control	Dummy variable which equals one if the largest co-investor's ownership stake is ≤ 33.33% and ≥ 5%, zero otherwise (benchmark category: state ownership stake = 100%)
Largest co-investor less than 5% control	Dummy variable which equals one if the largest co-investor's ownership stake is < 5%, zero otherwise (benchmark category: state ownership stake = 100%)
Largest co-investor equity fraction	The fraction of a firm's equity held by the largest co-investor
2nd largest co-investor equity fraction *d*	The fraction of a firm's equity held by the second largest co-investor
3rd largest co-investor equity fraction *d*	The fraction of a firm's equity held by the third largest co-investor
4th largest co-investor equity fraction *d*	The fraction of a firm's equity held by the fourth largest co-investor
5th largest co-investor equity fraction *d*	The fraction of a firm's equity held by the fifth largest co-investor
Number of co-investors *d*	Classification of the number of co-investors, distinguishing between cases in which the number of co-investors equal 1, 2-10, 11-100, or more than 100
Largest co-investor is non-public	Dummy variable which equals one if the largest co-investor is public (including governmental agencies, local and regional authorities, and SOCs), zero otherwise (benchmark category: state ownership stake = 100%)
Largest co-investor is public	Dummy variable which equals one if the largest co-investor is non-public, zero otherwise (benchmark category: state ownership stake = 100%)
Co-investor type *d*	Classification of co-investor type, distinguishing between cases in which the largest co-investor is financial, corporate, international, or public
Other control structures	
Sponsor ministry	Dummy variable which equals one if the firm is administered by the 'ownership ministry', zero otherwise (benchmark category: the firm is administered by a sectoral ministry)
Debt ratio	Debt to assets, defined as the firm's book value of total liabilities and commitments divided by book value of total assets
Societal and economic importance	
Regional presence	Dummy variable which equals one if the firm employs a regional workforce, zero otherwise (benchmark category: the firm does not employ any regional workforce)
Number of employees	The number of employees in the firm, measured as an annual average
Equity	The book value of equity held by the firm, measured at year-end
Total assets	Balance sheet total assets, defined as the sum of total fixed assets and current assets, measured at year-end

Board characteristics	
Board size	The total number of corporate directors on the board
Compensation committee	Dummy variable which equals one if the board has appointed a compensation committee, zero otherwise (benchmark category: the board has not appointed any compensation committee)
Chairman is CEO	Dummy variable which equals one if the chairman is a CEO, zero otherwise (benchmark category: the chairman is not a CEO)
CEO characteristics	
CEO recruitment	Dummy variable which equals one if the CEO is recruited from the private sector, zero otherwise (benchmark category: the CEO is recruited from the public sector or from within the firm)
CEO tenure	The CEO's number of years in position
Chair tenure 1 *b*	The chairman's number of years in position
Chair tenure 2 *b*	The chairman's number of years on the board, rank-and-file position included
CEO influences 1	The tenure of the board chairman (chair tenure 1) minus the tenure of the CEO
CEO influences 2	The tenure of the board chairman (chair tenure 2) minus the tenure of the CEO
Financial characteristics[140]	
Growth opportunities	Annual percentage growth in net sales, earnings, total cash flow, total assets, and fixed assets
Income level	Operating revenue (i.e., accounting income)
Operating profit *b*	Operating revenues less operating costs for the period
Net profit/earnings *b*	Profit after tax and minority interests, which is measured by the firm's operating profit less net financial items plus investment income (= profit before tax and minority interests) less tax and minority interests (= net profit/earnings)
Net sales *b*	Sales revenues
Cash flow from operational activities *b*	Net amount of cash in-/outflows relating to main revenue-producing activities of firm
Cash flow from investment activities *b*	Net amount of cash in-/outflows on investing activities
Cash flow from financing activities *b*	Net amount of cash in-/outflows on financing activities
Total cash flow *b*	Change in assets (the sum of operational, investment and financing activities)
Fixed assets *b*	Tangible assets used on a continuing basis to support firm's business

[140] All accounting figures are expressed in 2005 NOK million and adjusted for CPI (cf. also footnote 90).

Total fixed assets *b*	The sum of fixed (tangible) assets, intangible fixed assets and financial fixed assets
Current assets *b*	Cash or cash-equivalents or operating asset
Total liabilities and commitments *b*	The claims of creditors and others to a firm's assets

Appendix B

Board chairmen and political representation in Norwegian and Swedish SOCs over the years 2000-2005

Company	Chairman[141]	Political experience
Norwegian SOCs		
Akvaforsk AS	Kjell Aksnes (n/a) Jan Reid Hole (2002)	No No
Arcus AS	Bård Mikkelsen (2000)	No
Argentum Fondsinvesteringer AS	Tormod Hermansen (2001) Widar Salbuvik (2005)	Yes (Arbeiderpartiet) No
Avinor AS	Anders Talleraas (2002)	Yes (Høyre)
Bane Tele AS	Stein O. Nes (2003) Bjørg Kristiansen (2005)	No No
Carte Blanche AS	Hallvard Bakke (2000)	Yes (Arbeiderpartiet)
Cermaq ASA	Sigbjørn Johnsen (1997)	Yes (Arbeiderpartiet)
Den Norske Opera AS	Leif Terje Løddesøl (1996) Einar Solbu (2005)	No No
DNB NOR ASA	Olav Hytta (2004)	No
Eksportfinans AS	Øyvind Birkeland (2001) Erik Borgen (2003)	No No
Electronic Chart Centre AS	Knut Ole Flåthen (1999) Siri Norset Christiansen (2004)	No No
Enova SF	Ted Hanisch (2001-2004)	Yes (Arbeiderpartiet)
Entra Eiendom AS	Steinar Stokke (2000) Grace Reksten Skaugen (2004)	No No
Flytoget AS	Endre Skjørestad (2003)	Yes (Senterpartiet)
Gassco AS	Brit K. Sæbø Rugland (2001)	No
Grødegaard AS	Gunnar Bjørkavåg (n/a) Per Helge Nilsen (2003-2004)	No No
Helse Midt-Norge RHF	Ragnhild Berge (2001) Per Sævik (2003)	No Yes (Kristelig Folkeparti)

[141] The year elected into the chairman position in parentheses.

Helse Nord RHF	Olav Helge Førde (2001)	No
	Bjørn Kaldhol (2005)	No
Helse Sør RHF	Nils F. Wisløff (2001)	No
	Oluf Arntsen (2003)	Yes (Kristelig Folkeparti)
	Erling Valvik (2004)	No
Helse Vest RHF	Mai Vik (2002)	No
	Oddvar Nilsen (2005)	Yes (Høyre)
Helse Øst RHF	Siri B. Hatlen (2001)	No
Industritjeneste AS	Ingar Pettersen (1997)	No
	Sissel Ose Pedersen (2003)	No
Innovasjon Norge	Steinar Olsen (2004)	No
Kings Bay AS	Kari Gjesteby (2000)	Yes (Arbeiderpartiet)
	Knut M. Ore (2002)	No
KITH AS	Milian Myraunet (2000)	No
	Ivar Gammelmo (2003)	No
Kommunalbanken AS	Else Bugge Fougner (1999)	Yes (Høyre)
Kongsberg Gruppen ASA	Christian Brinch (1996)	No
	Finn Jebsen (2005)	No
Mesta AS	Frode Alhaug (2003)	No
Nammo AS	Karl Glad (2000)	No
Nationaltheatret AS	Jan V. Johannessen (2001)	No
NOAH Holding AS	Jostein Devold (1993)	No
NORFUND	Arve Johnsen (1997)	Yes (Arbeiderpartiet)
	Einar Stensnæs (2005)	Yes (Kristelig Folkeparti)
Norges Statsbaner AS (NSB)	Olav Fjell (2000)	No
	Ingeborg Moen Borgerud (2003)	Yes (Arbeiderpartiet)
Norsk Eiendomsinformasjon AS	Erik Keiserud (2000)	No
Norsk Hydro ASA	Einar Kloster (1997)	No
	Egil Myklebust (2001)	No
	Jan Reinås (2004)	No
Norsk institutt for fiskeri- og havbruksforskning AS (Fiskeriforskning)	Terje E. Martinussen (1999)	No
	Trygve Myrvang (2003)	No
Norsk Rikskringkasting AS (NRK)	Kåre Willoch (1998)	Yes (Høyre)
	Torger Reve (2000)	No
	Anne Carine Tanum (2001)	No
	Eldbjørg Løwer (2004)	Yes (Venstre)
Norsk Tipping AS	Sigmund Thue (1997)	No
	Harald Overvaag (n/a)	No

NORUT Gruppen AS	Arne Benjaminsen (2003) Jarle Aarbakke (2004)	No No
Petoro AS	Tore I. Sandvold (2001) Bente Rathe (2002)	No No
Posten Norge AS	Magnus Stangeland (2000) Arvid Moss (2002)	Yes (Senterpartiet) Yes (Høyre)
Rogaland Teater AS	Arne Norheim (n/a) Inger Østensjø (2003) Brit K. Sæbø Rugland (2005)	No No No
Simula Research Laboratory AS	Berit Svendsen (2001)	No
SIVA SF	Harald Ynnesdal (1996) Siri B. Hatlen (2004)	No No
Statkraft SF	Terje Vareberg (2000) Arvid Grundekjøn (2004)	No No
Statnett SF	Grete Faremo (2000) Svein Rennemo (2005)	Yes (Arbeiderpartiet) No
Statoil ASA	Ole Lund (1999) Leif Terje Løddesøl (2002) Jannik Lindbæk (2003)	No No No
Statskog SF	William Engseth (1997) Kirsti Kolle Grøndahl (2001)	Yes (Arbeiderpartiet) Yes (Arbeiderpartiet)
Store Norske Spitsbergen Kulkompani AS	Johan P. Barlindhaug (1999) Petter Thomassen (2002) Steinar Høgaas (2004)	No Yes (Høyre) Yes (Høyre)
Stor-Oslo Lokaltrafikk AS (SL)	Martin Killi (2000) Ragnar Kristoffersen (2004)	No No
Telenor ASA	Eivind Reiten (2000) Tom Vidar Rygh (2001) Torleif Enger (2003)	Yes (Senterpartiet) No No
UNINETT AS	Bjørn Henrichsen (1993)	No
Universitetssenteret på Svalbard AS (UNIS)	Kjell A. Sælen (n/a)	No
Veterinærmedisinsk oppdragssenter AS (VESO)	Helge Skinnemoen (n/a) Bjørn Kolltveit (2001)	No No
A/S Vinmonopolet	Harald Arnkværn (1996) Siri B. Hatlen (2005)	No No
Yara International ASA	Øyvind Lund (2004)	No
Swedish SOCs		
Akademiska Hus AB	Lennart Nilsson (1995) Claes Ljungh (2004)	No Yes (Socialdemokraterna)

ALMI Företagspartner AB	Per-Ola Eriksson (2000) Kai Hammerich (2003)	Yes (Centerpartiet) No
Apoteket AB	Jan Bergqvist (2000)	Yes (Socialdemokraterna)
Göta kanalbolag AB	Kaj Janérus (n/a) Björn Eriksson (2002)	No No
Green Cargo AB	Karl Gunnar Holmqvist (2001)	No
Imego AB	Mauritz Sahlin (1998) Christina Ullenius (2003)	No No
IRECO Holding AB	Gunnar Svedberg (1997) Anders Narvinger (2003)	No No
Kungliga Dramatiska Teatern AB (Dramaten)	Jan-Erik Wikström (1997) Sigbrit Franke (2003)	Yes (Folkpartiet) No
Kungliga Operan AB	Hans Dalborg (1997) Lars G Nordström (2005)	No No
Lernia AB	Bo Dockered (1996) Tomas Eneroth (2002)	No Yes (Socialdemokraterna)
Luossavaara Kirunavaara AB, LKAB	Björn Sprängare (1997)	No
Nordea Bank AB	Vesa Vainio (2000) Hans Dalborg (2002)	No No
OMX AB	Olof Stenhammar (1984)	No
Posten AB	Göte Bernhardsson (1998) Marianne Nivert (2003)	No No
Rymdbolaget	Lennart Lübeck (1998)	Yes (Folkpartiet)
Samhall AB	Håkan Tidlund (1998) Peter Lagerblad (2003)	No Yes (Socialdemokraterna)
SAS AB	Egil Mykebust (2001)	No
SIS Miljömärkning AB	Sven Thiberg (1998) Eva Smith (2002)	No No
SJ AB	Daniel Johannesson (2001) Ulf Adelsohn (2002)	No Yes (Moderaterna)
SOS Alarm Sverige AB	Curt Persson (1995) Ewa Back (2005)	No No
Specialfastigheter Sverige AB	Eva-Britt Gustafsson (1998)	No
Statens Väg- och Baninvest AB	Gösta Gunnarsson (1995)	Yes (Centerpartiet)
Sveriges Bostadsfinansieringsaktiebolag (SBAB)	Ingemar Eliasson (1996) Claes Kjellander (2003)	Yes (Folkpartiet) No
Sveaskog AB	Bo Dockered (1999)	No

Svensk Bilprovning AB	Olof Johansson (2000)	Yes (Centerpartiet)
Svenska Spel AB	Bengt-Åke Berg (1996)	No
	Anders Gustafzon (2003)	No
Svensk Exportkredit AB (SEK)	Björn Wolrath (1998)	No
Svenska Skeppshypotekskassan	Pehr G Gyllenhammar (1984)	No
Sveriges Provnings- och Forskningsinstitut AB (SP)	Jan-Crister Persson (n/a)	No
	Birgitta Böhlin (2002)	No
Sveriges Rese- och Turistråd AB	Lars Carmén (1999)	No
	Elizabeth Nyström (2004)	Yes (Moderaterna)
Swedesurvey AB	Joakim Ollén (1997)	Yes (Moderaterna)
	Stig Jönsson (2004)	No
Swedfund International AB	Jan Cedergren (1999)	No
	Lars Gårdö (2002)	No
Systembolaget AB	Gunnar Larsson (1999)	No
	Olof Johansson (2002)	Yes (Centerpartiet)
TeliaSonera AB	Lars-Eric Petersson (2000)	No
	Tapio Hintikka (2002)	No
	Tom von Weymarn (2004)	No
Teracom AB	Gösta Gunnarsson (1992)	Yes (Centerpartiet)
	Per-Ola Eriksson (2001)	Yes (Centerpartiet)
	Håkan Tidlund (2003)	No
Vasakronan AB	Egon Jacobsson (2000)	Yes (Socialdemokraterna)
Vasallen AB	Pär Nuder (2000)	Yes (Socialdemokraterna)
	Sten Olsson (2003)	Yes (Socialdemokraterna)
Vattenfall AB	Gerhard Larsson (2000)	Yes (Centerpartiet)
	Dag Klackenberg (2001)	No
Venantius AB	Curt Persson (1995)	No
Vin & Sprit AB (V&S)	Claes Dahlbäck (1993)	No

Appendix C

The basic components of annual bonus plans

The table shows, for every SOC that uses short-term incentive schemes, the basic components of CEO annual bonus plans. *Performance standards* are categorised as 'internal' if the measure(s) used to evaluate managerial performance are based on firm-specific goals. By contrast, performance standards are categorised as 'external' if based on performance measured relative to other firms in the industry or market. *Performance criteria* indicate whether the firm uses a single criterion or multiple criteria to evaluate managerial performance, whereas the *performance measures* column describe the criteria used. The *bonus cap* column states the maximum bonus paid if achieving the pre-determined performance criteria. *n/a* indicates that information is not applicable.

Company	Years granted	Performance standard	Performance criteria	Performance measure	Bonus cap
Norwegian SOCs					
Arcus AS	2001-2003	n/a	n/a	n/a	2001-2002: TNOK 200 (≈ 20-25% of fixed salary) 2003: TNOK 250 (≈ 30% of fixed salary)
Cermaq AS	2004-2005	Internal	Single	Bonus pay is based on Return on capital employed.	30% of fixed salary
DNB NOR AS	2004-2005	n/a	n/a	Bonus pay is set on a discretionary basis.	n/a
Eksportfinans AS	2001-2005	Internal	Single	The incentive scheme bases the total amount to be distributed on a formula relating to achieved return on equity compared to the risk free rate of interest. The bonus is distributed partly in relation to salaries and partly on discretionary basis.	n/a
Entra Eiendom AS	2004-2005	Internal	Multiple	Bonus pay is determined partly on the basis of Economic Value Added (EVA) and partly on the achievement of predetermined goals related to customer satisfaction and other key indicators. The bonus amount for each employee is allocated to an individual bonus bank. Each year, one third of the bonus bank balance is paid to the employee.	12% of fixed salary
Gassco AS	2002-2005	Internal	Multiple	The bonus scheme is linked to performance goals within several areas, including health, environment, safety and quality, costs, regularity, product quality, customer satisfaction and strategic goals.	15% of fixed salary
Kommunalbanken AS	2003-2005	n/a	n/a	n/a	n/a
Kongsberg Gruppen ASA	2000-2005	Internal	Multiple	The bonus scheme is linked to the value added for the shareholders or to the Group's performance trends over time.	2.5 times the monthly salary
Nammo AS	2003-2005	Internal	Single	Bonus pay is determined on the basis of Economic Value Added (EVA), defined as the operating result reduced by average capital employed multiplied by the weighted average cost of capital. Half of the bonus is paid the year after the year it was earned, together with half of the remaining net bonus from previous years.	n/a

Norsk Eiendoms-informasjon AS	2002-2005	n/a	n/a	n/a	n/a
Norsk Hydro ASA	2000-2005	Internal	Multiple	The bonus scheme is linked to performance goals in the business plan. The established performance goals eliminate effects of price variations of the company's main products and foreign exchange fluctuations. It is therefore the actual improvements of Hydro's activities that are measured and rewarded.	2000: n/a 2001: 3 months' fixed salary 2002-2005: 6 months' fixed salary
Posten Norge AS	2002-2005	Internal	Multiple	The primary condition for the payment of a bonus is that a profit is made before tax. If a bonus is payable according to the profit criterion, a bonus may also be paid based on individual goals.	25% of fixed salary
Statoil ASA	2002-2005	Internal	Multiple	Bonus pay depends on the goals achieved by the group in relation to the commercial targets determined by the board of directors.	30% of fixed salary
Telenor ASA	2004-2005	Internal	Single	50% of the bonus is paid if the budget reaches a pre-determined level. 100% of the bonus may only be paid as a result of exceptional financial performance exceeding budget.	6 months' fixed salary
VESO AS	2002-2005	n/a	n/a	n/a	n/a
Yara ASA	2004-2005	Internal	Multiple	Bonus pay is based on the achievement of financial goals, but with even stronger emphasis on individual performance.	50% of fixed salary. Also note that 20% of gross bonus payment must be used to buy Yara shares in the market with a one-year lock-up period.
Swedish SOCs					
Akademiska Hus AB	2000-2003	Internal	Multiple	The incentive programme 'Target' (*Måltavlan*) is based on performance criteria linked to profitability, a satisfied customer index, customer benefits, and energy savings.	1 month's fixed salary
Green Cargo AB	2001	Internal	Multiple	Bonus pay is based on the achievement of common goals (40%) and individual goals (60%).	1.5 month's fixed salary
Nordea AB	2000-2005	Internal* (2000-2005) * One external component was employed in the 2004 incentive programme	Multiple	2000: n/a. In the period 2001-2005, bonus pay is determined by a combination of Group performance in relation to a predetermined level of return on equity and the attainment of personal objectives approved at the outset of the year. In 2003, an additional executive incentive programme was	2000: n/a 2001: 15 % of fixed salary 2002: 35% of fixed salary 2003-2005: 47% of fixed salary (includes a variable pay that can amount to a maximum of 35% of fixed salary and an executive incentive pay which can give a maximum of 12% of fixed salary)

				introduced. The 2003-2004 performance criteria include economic profit compared to a predetermined level and Nordea's relative performance compared to the Nordic peer group as measured by return on equity. The 2005 performance criteria relate equally to economic profit, income growth and costs.	
OMX AB	2003-2005	Internal	Multiple	The incentive scheme comprises quantitative targets and qualitative targets, with quantitative goals accounting for 60% and qualitative goals for 40% in 2005 (in 2003-2004 these numbers were 70% and 30%, respectively). The quantitative target for 2003-2005 is linked to budgeted operating profit (no information given for the period 2000-2002).	2002: 12 months' fixed salary 2003-2005: 6 months' fixed salary
Posten AB	2000-2002	Internal	Multiple	The incentive scheme is based on financial results, performance quality and employees.	30% of fixed salary
Rymdbolaget AB	2003	Internal	Single	The incentive programme entails that if the company's income for the year exceeds a defined level which has been established by the board in advance, a share of the surplus income shall be reserved in a 'bonus bank' from which payment will be made in instalments over a long period of time.	n/a
SAS AB	2001-2005	Internal	Multiple	The incentive scheme includes a performance-based variable salary and an earnings-based salary. The target criteria for the variable salary cover budget and earnings targets as well as organisational and business targets that are accorded different weights.	50% of fixed salary (includes a performance-based pay that can amount to a maximum of 37.5% of fixed salary and an earnings-based salary which can give a maximum of 12.5% of fixed salary)
Svensk Exportkredit AB	2000-2004	Internal	Multiple	Bonus pay is related to targets in the company's business plan.	n/a
Svenska Skeppshypoteks-kassan AB	2001-2005	n/a	n/a	n/a	2001: 25% of fixed salary 2002-2005: 20% of fixed salary
Swedesurvey AB	2000-2003	Internal	Single	Bonus pay is based on the company's profit.	n/a
Swedfund AB	2003-2004	Internal	Multiple	Bonus pay is based on the company's performance and development goals.	2 months' fixed salary

TeliaSonera AB	2000-2005	Internal	Multiple	Bonus pay is based on the Group's financial performance and individual performance objectives.	2000-2001: 35% of fixed salary 2002-2005: 50% of fixed salary
Teracom AB	2000-2004	Internal	Multiple	Bonus pay is determined by a combination of company performance in relation to key accounting figures and the attainment of individual goals.	n/a
Vasakronan AB	2000-2003	Internal	Single	The incentive scheme is based on Economic Value Added (EVA).	1 month's fixed salary
Vasallen AB	2000-2003	Internal	Single	The incentive scheme is based on Economic Value Added (EVA). The bonus amount for each employee is allocated to an individual bonus bank. Each year, one third of the bonus bank balance is paid to the employee.	2 months' fixed salary
Vattenfall AB	2000-2004	Internal	2000-2001: Multiple 2002-2004: Single	In the period 2000-2001, the CEO is entitled to a special performance-related bonus based on financial targets, growth in cash flow and return on equity. In the period 2002-2004, bonus pay is directly linked to value creation (defined as the positive change in operating profit minus the required return on the average of net assets).	All years: 33 % of fixed salary
Vin & Sprit AB	2001-2003	Internal	Multiple	Bonus pay is based entirely on individual goals established by the board of directors.	15% of fixed salary

Appendix D

Interaction effects in multivariate regression models

The appendix supplements the subsample regression results in Chapters 6–8 by presenting the results of moderated regressions with interaction effects.

D.1.1. Results of random-effects moderated regression analysis for the two professional background measures with state control interactions.

Independent variables	Political experience		Sector affiliation	
Intercept	–2.084	(1.915)	4.237**	(1.914)
Main effects				
Commercial objective	–1.925*	(0.991)	–1.098	(0.967)
State control	–1.338	(3.414)	–3.115	(2.968)
Equity (log)	0.551	(0.561)	–0.699	(0.528)
Regional presence	0.472	(1.228)	–0.500	(1.148)
Ownership ministry	–0.472	(0.763)	–0.442	(0.803)
Debt ratio	–0.003	(0.017)	–0.015	(0.017)
Government party	–0.518	(0.859)	–2.587***	(0.905)
Time trend	–0.036	(0.140)	0.193	(0.143)
Interaction effects				
State control * commercial objective	2.063	(2.734)	–5.073*	(2.978)
State control * equity (log)	–0.747	(1.071)	1.433	(0.906)
State control * regional presence	–3.721*	(2.080)	0.269	(1.839)
State control * ownership ministry	2.705	(2.161)	3.872**	(1.922)
State control * debt ratio	–0.008	(0.034)	0.030	(0.029)
State control * government party	0.689	(1.673)	3.048**	(1.478)
State control * time trend	0.360	(0.360)	–0.729**	(0.356)
Number of firm/year observations	374		373	
Number of firms	96		96	
Rho	0.76		0.76	
LR chi2	19.47		23.24*	
Estimation method	Logistic		Logistic	

D.1.2. Results of random-effects moderated regression analysis for the two professional background measures with government party interactions.

Independent variables	Political experience		Sector affiliation	
Intercept	–1.722	(1.616)	3.007*	(1.648)
Main effects				
Commercial objective	–1.937*	(1.013)	–1.305	(0.989)
Non-listing			0.009	(1.154)
Listing			1.126	(1.714)
State control	–1.949*	(1.115)		
Equity (log)	0.447	(0.517)	–0.890*	(0.474)
Regional presence	–0.190	(1.135)	0.275	(1.097)
Ownership ministry	0.223	(0.779)	–0.063	(0.795)
Debt ratio	–0.005	(0.016)	0.004	(0.015)
Time trend	–0.005	(0.137)	0.220	(0.144)
Interaction effects				
Government party * commercial objective	2.473	(2.326)	–0.231	(2.034)
Government party * non-listing			1.756	(1.447)
Government party * listing			–0.443	(2.378)
Government party * state control	1.130	(1.682)		
Government party * equity (log)	0.761	(0.683)	1.060*	(0.570)
Government party * regional presence	–1.987	(1.753)	–1.888	(1.524)
Government party * ownership ministry	–4.254**	(2.091)	0.720	(1.753)
Government party * debt ratio	0.002	(0.022)	–0.031	(0.020)
Government party * time trend	–0.248	(0.333)	–0.636*	(0.310)
Number of firm/year observations	374		373	
Number of firms	96		96	
Rho	0.75		0.77	
LR chi2	18.13		23.14	
Estimation method	Logistic		Logistic	

D.1.3. Results of random-effects moderated regression analysis for the two professional background measures with nationality interactions.

Independent variables	Political experience		Sector affiliation	
Intercept	–2.311	(2.507)	3.145	(2.360)
Main effects				
Commercial objective	–0.580	(1.766)	–1.409	(1.657)
Non-listing			1.493	(1.169)
Listing			1.853	(1.829)
State control	–0.459	(1.242)		
Equity (log)	1.715**	(0.709)	0.087	(0.601)
Regional presence	–4.160**	(1.710)	–2.923**	(1.427)
Ownership ministry	–2.353	(1.527)	0.959	(1.410)
Debt ratio	–0.018	(0.026)	–0.034	(0.024)
Nationality	1.432	(3.323)	1.857	(3.393)
Time trend	–0.106	(0.222)	–0.342	(0.199)
Interaction effects				
Nationality * commercial objective	–1.513	(2.132)	–0.154	(2.067)
Nationality * non-listing			–1.824	(2.345)
Nationality * listing			–1.302	(2.900)
Nationality * state control	–2.974	(2.153)		
Nationality * equity (log)	–2.221**	(1.010)	–1.689*	(0.944)
Nationality * regional presence	6.558***	(2.339)	5.846***	(2.060)
Nationality * ownership ministry	2.155	(1.753)	–2.520	(1.707)
Nationality * debt ratio	0.026	(0.032)	0.049	(0.031)
Nationality * time trend	0.152	(0.267)	0.620**	(0.257)
Number of firm/year observations	374		373	
Number of firms	96		96	
Rho	0.75		0.77	
LR chi2	25.46**		44.90***	
Estimation method	Logistic		Logistic	

D.2.1. Results of random effects-moderated regression analysis for the three compensation measures with SOC chairman interaction effects.

Independent variables	Total cash compensation		Incentive scheme		Golden parachute	
Intercept	2.765***	(0.100)	–12.630***	(3.639)	–5.956	(4.243)
Main effects						
Chair political representative	–0.020	(0.067)	–4.552	(8.554)	–4.070	(7.392)
State control	0.064**	(0.027)	5.176***	(1.395)	–0.679	(1.425)
Commercial objective	0.080**	(0.033)	6.379***	(1.986)	3.422**	(1.668)
Equity (log)	0.099***	(0.020)	1.019	(0.714)	1.650**	(0.647)
CEO recruited private sector	0.034**	(0.016)	–2.112	(1.318)	–0.722	(1.261)
Board size	0.000	(0.008)	0.232	(0.365)	–0.125	(0.510)
Compensation committee	0.052***	(0.016)	–1.925	(1.191)	–2.956	(2.079)
CEO tenure	0.002	(0.002)	0.157	(0.151)	0.004	(0.127)
Chair is CEO	0.000	(0.017)	1.100	(1.238)	1.341	(1.115)
Nationality	0.057	(0.044)	–0.549	(1.438)	6.475***	(1.700)
Time trend	0.019***	(0.003)	–0.052	(0.275)	0.001	(0.293)
Interaction effects						
Chair political representative * state control	–0.085**	(0.035)	–2.240	(3.862)	1.816	(2.749)
Chair political representative * commercial objective	0.040	(0.026)	–0.896	(3.848)	–1.947	(2.646)
Chair political representative * equity (log)	–0.018*	(0.010)	3.146	(1.982)	–0.930	(1.121)
Chair political representative * CEO recruited private sector	–0.000	(0.018)	4.407*	(2.345)	–0.932	(2.191)
Chair political representative * board size	0.007	(0.009)	–0.449	(0.712)	0.269	(0.904)
Chair political representative * compensation committee	–0.025	(0.023)	1.162	(1.961)	3.466	(3.178)
Chair political representative * CEO tenure	0.012***	(0.004)	–0.169	(0.388)	–0.296	(0.333)
Chair political representative * chair is CEO	0.016	(0.022)	–2.896	(2.462)	–1.549	(2.284)
Chair political representative * nationality	–0.004	(0.026)	–1.425	(3.729)	0.028	(3.010)
Chair political representative * time trend	–0.010*	(0.006)	–0.214	(0.560)	2.091***	(0.161)
Number of firm/year observations	307		307		307	
Number of firms	77		77		77	
Rho	0.94		0.73		0.79	
Wald chi2/LR chi2	247.40***		84.29***		78.82***	
R^2 (overall)	0.66					
Estimation method	Linear		Logistic		Logistic	

D.2.2. Results of random-effects moderated regression analysis for the three compensation measures with state control interaction effects.

Independent variables	Total cash compensation		Incentive scheme		Golden parachute	
Intercept	2.872***	(0.106)	–4.453	(2.879)	–10.554**	(4.746)
Main effects						
Chair political representative	–0.001	(0.012)	0.220	(1.123)	0.301	(6.765)
State control	–0.327**	(0.130)	–6.660		2.807	(1.278)
Commercial objective	0.091***	(0.029)			2.326	(1.518)
Equity (log)	0.082***	(0.023)			2.204***	(0.734)
CEO recruited private sector	0.026	(0.018)	0.003	(1.147)	0.662	(1.454)
Board size	–0.003	(0.008)	0.244	(0.290)	–0.219	(0.535)
Compensation committee	0.037**	(0.014)			0.986	(1.720)
CEO tenure	0.004**	(0.002)	0.115	(1.139)	–0.221	(0.183)
Chair is CEO	0.010	(0.012)	–0.105	(1.089)	2.064	(1.363)
Nationality	0.032	(0.039)	0.091	(1.292)	7.667***	(1.812)
Time trend	0.013***	(0.003)	–0.675***	(0.223)	0.957***	(0.346)
Interaction effects						
State control * chair political	–0.063*	(0.036)	0.869	(2.399)	1.888	(2.722)
State control * commercial objective	0.174*	(0.096)			–0.054	(4.970)
State control * equity (log)	0.013	(0.027)			–1.749	(1.657)
State control * CEO recruited private sector	0.013	(0.031)	–1.317	(2.083)	–3.670	(2.479)
State control * board size	0.014	(0.010)	0.871	(0.632)	0.695	(0.747)
State control * compensation committee	0.047	(0.044)			–2.400	(3.186)
State control * CEO tenure	–0.002	(0.003)	0.195	(0.296)	0.590**	(0.296)
State control * chair is CEO	–0.016	(0.024)	–0.144	(1.837)	–2.100	(1.951)
State control * nationality	0.073	(0.059)	1.968	(2.252)	–3.371	(2.663)
State control * time trend	0.013**	(0.006)	0.978	(0.457)	–0.839	(0.528)
Number of firm/year observations	307		313		307	
Number of firms	77		77		77	
Rho	0.91		0.78		0.79	
Wald chi2/LR chi2	355.55***		42.20***		76.05***	
R^2 (overall)	0.73					
Estimation method	Linear		Logistic		Logistic	

D.2.3. Results of random-effects moderated regression analysis for the three compensation measures with nationality interaction effects.

Independent variables	Total cash compensation		Incentive scheme		Golden parachute	
Intercept	2.864***	(0.175)	–18.895***	(5.314)	–12.699***	(4.785)
Main effects						
Chair political representative	–0.015	(0.014)	0.356	(1.438)	0.213	(1.225)
State control			2.022	(1.531)	0.034	(1.358)
Commercial objective	0.191***	(0.049)	7.448***	(1.705)	3.687**	(1.718)
Non-listing	–0.028	(0.037)				
Listing	0.048	(0.039)				
Equity (log)	0.085***	(0.020)	0.420	(0.781)	0.885	(0.655)
CEO recruited private sector	0.023	(0.027)	0.474	(1.438)	0.043	(1.141)
Board size	–0.010	(0.018)	0.833	(0.602)	0.699	(0.582)
Compensation committee	0.040*	(0.024)	1.064	(2.823)	–1.371	(1.911)
CEO tenure	0.002	(0.002)	0.167	(0.191)	–0.214	(0.171)
Chair is CEO	–0.000	(0.016)	1.079	(1.302)	–0.175	(1.139)
Nationality	–0.055	(0.214)	3.807	(7.841)	19.135**	(8.467)
Time trend	0.021***	(0.003)	0.790	(0.364)	0.934***	(0.315)
Interaction effects						
Nationality * chair political	0.015	(0.022)	–0.066	(2.492)	–0.792	(.2.225)
Nationality * state control			8.001**	(4.039)	–3.921	(2.817)
Nationality * commercial objective	–0.144**	(0.056)			–3.795	(3.296)
Nationality * non-listing	0.016	(0.059)				
Nationality * listing	0.360***	(0.116)				
Nationality * equity (log)	0.012	(0.038)	3.266*	(1.740)	1.001	(1.333)
Nationality * CEO recruited private sector	0.008	(0.036)	–2.868	(2.394)		
Nationality * board size	0.012	(0.020)	–0.995	(0.757)	–1.561*	(0.946)
Nationality * compensation committee	–0.011	(0.030)	–1.830	(2.688)	3.527	(2.838)
Nationality * CEO tenure	0.001	(0.003)	–0.050	(0.308)	0.521	(0.343)
Nationality * chair is CEO	0.020	(0.028)	–1.133	(2.608)	1.906	(2.645)
Nationality * time trend	–0.006	(0.005)	–2.500***	(0.634)	–0.843	(0.545)
Number of firm/year observations	307		307		307	
Number of firms	77		77		77	

Rho	0.91	0.78	0.80
Wald chi2/LR chi2	364.87***	83.56***	70.85***
R^2 (overall)	0.72		
Estimation method	Linear	Logistic	Logistic

D.3.1. Results of random-effects and pooled OLS moderated regression analysis for the three dividend measures with state control interaction effects.

Independent variables	Dividend-to-earnings		Dividend-to-sales		Dividend-to-cash-flow	
Intercept	102.011***	(15.103)	10.658	(13.139)	56.422***	(10.919)
Main effects						
Growth opportunities (deciles)	–0.704	(0.781)	0.635**	(0.269)	–1.911**	(0.808)
Debt ratio	0.143	(0.180)	–0.048	(0.077)	–0.071	(0.123)
Commercial objective	–15.054	(9.181)	7.073	(6.818)	–12.137	(8.274)
Income level (log)	–10.136**	(4.869)	–2.329	(3.935)	–1.604	(2.746)
State control	–77.116***	(23.985)	–2.291	(15.544)	–45.128*	(24.326)
Chairman political representative	–0.524	(6.231)	0.491	(1.055)	–3.681	(4.958)
Ownership ministry	5.312	(5.037)	–1.991	(2.372)	8.110	(8.310)
Nationality	–9.418	(9.315)	2.066	(8.464)	–3.112	(6.205)
Time trend	–2.088	(1.436)	0.488*	(0.281)	0.542	(1.478)
Interaction effects						
State control * growth opportunities (deciles)	–2.088	(1.370)	–0.295	(0.342)	1.387	(1.314)
State control * debt ratio	0.269	(0.294)	–0.028	(0.162)	0.158	(0.235)
State control * commercial objective	25.196**	(12.641)	–2.868	(7.201)	34.568**	(16.153)
State control * income level (log)	6.686	(6.132)	–0.180	(4.107)	–0.370	(4.441)
State control * chairman political representative	–16.105	(10.720)	–2.771	(2.344)	3.980	(9.068)
State control * ownership ministry	–12.278	(8.891)	1.917	(3.549)	–20.751*	(11.236)
State control * nationality	14.585	(12.565)	3.327	(12.797)	13.663	(13.606)
State control * time trend	7.552***	(2.372)	0.901*	(0.472)	0.441	(2.358)
Number of firm/year observations	150		169		137	
Number of firms	47		48		43	
Rho	61		0.94			
Wald chi2/F	83.83***		40.98***		4.44***	
R^2 (overall)	0.29		0.10		0.21	
Model	RE		RE		OLS	

D.3.2. Results of random-effects and pooled OLS moderated regression analysis for the three dividend measures with SOC chairman interaction effects.

Independent variables	Dividend-to-earnings		Dividend-to-sales		Dividend-to-cash-flow	
Intercept	82.340***	(14.517)	18.134**	(9.082)	44.908***	(13.375)
Main effects						
Growth opportunities (deciles)	–1.441*	(0.812)	0.689**	(0.285)	–1.496	(0.988)
Debt ratio	0.133	(0.151)	–0.094	(0.086)	–0.059	(0.123)
Commercial objective	3.593	(7.364)	5.715**	(2.662)	1.371	(5.626)
Income level (log)	–10.004***	(3.444)	–4.049	(2.902)	–0.172	(2.019)
State control	–2.489	(6.903)	–4.494*	(2.486)	–11.599**	(5.335)
Chairman political representative	–45.156	(29.464)	–25.331	(16.091)	–24.301	(27.199)
Ownership ministry	–5.896	(5.295)	–2.301	(2.238)	–2.224	(4.945)
Nationality	–1.714	(6.405)	5.707	(6.541)	–5.666	(5.273)
Time trend	1.832	(1.431)	0.867**	(0.335)	0.764	(1.226)
Interaction effects						
Chair political representative * growth opportunities (deciles)	0.511	(1.445)	–0.266	(0.385)	0.379	(1.417)
Chair political representative * debt ratio	–0.158	(0.299)	0.117	(0.093)	–0.056	(0.235)
Chair political representative * commercial objective	–6.593	(10.481)	4.030	(5.347)	19.175	((11.970
Chair political representative * income level (log)	21.745**	(9.808)	5.669	(3.983)	4.391	(5.794)
Chair political representative * state control	–18.462	(13.698)	–1.504	(4.137)	9.064	(12.032)
Chair political representative * ownership ministry	9.561	(9.895)	0.854	(5.214)	–23.594	(16.964)
Chair political representative * nationality	–21.825*	(11.363)	–7.044*	(3.760)	8.671	(9.897)
Chair political representative * time trend	–4.390	(2.768)	0.251	(0.518)	1.245	(2.918)
Number of firm/year observations	150		169		137	
Number of firms	47		48		43	
Rho	0.48					
Wald chi2/F	52.50***		40.71***		2.50***	
R^2 (overall)	0.28		0.06		0.18	
Model	RE		RE		OLS	

D.3.3. Results of random-effects and pooled OLS moderated regression analysis for the three dividend measures with nationality interaction effects.

Independent variables	Dividend-to-earnings		Dividend-to-sales		Dividend-to-cash-flow	
Intercept	51.890***	(16.248)	3.876	(4.920)	48.861***	(15.148)
Main effects						
Growth opportunities (deciles)	–0.274	(0.930)	0.705***	(0.252)	–1.156	(0.999)
Debt ratio	0.302	(0.197)	–0.076	(0.075)	0.081	(0.154)
Commercial objective	1.572	(8.930)	5.668*	(2.904)	8.258	(12.024)
Income level (log)	–2.115	(3.909)	0.482	(1.658)	–2.161	(1.919)
State control	–23.496***	(7.376)	–5.035**	(2.431)	–13.485	(8.574)
Chairman political representative	1.363	(8.113)	0.553	(1.579)	0.238	(5.849)
Ownership ministry	2.046	(7.547)	–2.557	(5.044)	–7.266	(7.372)
Nationality	39.389	(25.211)	24.819	(22.840)	–25.447	(20.003)
Time trend	–0.266	(1.527)	0.236	(0.234)	–1.772	(1.543)
Interaction effects						
Nationality * growth opportunities (deciles)	–1.888	(1.278)	–0.285	(0.359)	–0.757	(1.348)
Nationality * debt ratio	–0.306	(0.264)	0.078	(0.128)	–0.190	(0.198)
Nationality * commercial objective	–6.834	(13.770)	0.402	(9.868)	–0.085	(14.387)
Nationality * income level (log)	–5.503	(6.508)	–8.076	(6.219)	5.168	(3.390)
Nationality * state control	21.656*	(11.865)	3.893	(10.114)	6.655	(12.497)
Nationality * chairman political representative	–11.396	(10.635)	–1.506	(2.119)	–0.209	(7.735)
Nationality * ownership ministry	–9.451	(9.941)	–0.497	(5.517)	–2.773	(10.705)
Nationality * time trend	2.062	(2.419)	1.384***	(0.447)	5.369**	(2.227)
Number of firm/year observations	150		169		137	
Number of firms	47		48		43	
Rho	0.52		0.93			
Wald chi2/F	31.67**		40.09***		2.74***	
R^2 (overall)	0.30		0.14		0.20	
Model	RE		RE		OLS	

Appendix E

Marginal effects for logistic regression models

The appendix supplements the logistic regression results in Chapters 6 and 7. In the tables below, dy/dx is the marginal effects (or elasticities) on the probabilities of each of the independent variables of the model. For dummy variables, dy/dx is for discrete change from 0 to 1. All marginal effects are calculated as the predicted probability at the sample means, as given by the X's in the table. Also reported is the standard error of marginal effects.

E.1.1. Results of random-effects logistic regression analysis with political experience as dependent variable. Marginal effects, full sample.

Independent variables	Model 1			Model 2			Model 3			Model 4			Model 5		
	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X
Reputation model															
Commercial objective	–0.137	(0.092)	0.50	–0.147	(0.098)	0.50	–0.138	(0.089)	0.50	–0.138	(0.091)	0.50	–0.140	(0.093)	0.50
Re-election model															
State control	–0.087	(0.057)	0.31	–0.086	(0.059)	0.31									
State ownership < 100% and ≥ 66.67%							0.079	(0.158)	0.07						
State ownership < 66.67% and > 50%							–0.056	(0.054)	0.07						
State ownership ≤ 50%							–0.117**	(0.050)	0.17						
Largest co-investor < 100% and > 33.33%										–0.081*	(0.046)	0.10			
Largest co-investor ≤ 33.33 %										–0.081	(0.050)	0.20			
Largest co-investor non-public													–0.076	(0.051)	0.18
Largest co-investor public													–0.057	(0.058)	0.12
Equity (log)	0.055	(0.039)	2.75	0.058	(0.041)	2.75	0.050	(0.036)	2.75	0.051	(0.039)	2.75	0.056	(0.040)	2.75
Regional presence	–0.059	(0.092)	0.60	–0.066	(0.098)	0.60	–0.030	(0.079)	0.60	–0.053	(0.089)	0.60	–0.057	(0.092)	0.60
Ownership ministry	–0.029	(0.057)	0.51	–0.036	(0.061)	0.51	–0.026	(0.052)	0.51	–0.030	(0.056)	0.51	–0.027	(0.057)	0.51
Debt ratio	–0.000	(0.001)	58.8	–0.000	(0.001)	58.8	–0.000	(0.001)	58.8	–0.000	(0.001)	58.8	–0.000	(0.001)	58.8
Ideology model															
Government party	–0.021	(0.050)	0.29				–0.040	(0.046)	0.29	–0.021	(0.050)	0.29	–0.021	(0.050)	0.29
Controls															
Nationality				0.052	(0.071)	0.62									
Time trend	–0.001	(0.010)	3.64	–0.002	(0.010)	3.64	–0.000	(0.009)	3.64	–0.001	(0.010)	3.64	–0.001	(0.010)	3.64

E.1.2. Results of random-effects logistic regression analysis with sector affiliation as dependent variable. Marginal effects, full sample.

Independent variables	Model 1			Model 2			Model 3			Model 4			Model 5		
	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X
Reputation model															
Commercial objective	–0.253	(0.196)	0.50	–0.249	(0.184)	0.50	–0.272	(0.195)	0.50	–0.256	(0.195)	0.50	–0.261	(0.195)	0.50
Non-listing	0.070	(0.204)	0.22												
Listing	0.178	(0.234)	0.08												
Re-election model															
State control				0.170	(0.139)	0.31									
State own. < 100% and ≥ 66.67%							0.044	(0.273)	0.07						
State own. < 66.67% and > 50%							–0.214	(0.335)	0.07						
State own. ≤ 50% and > 33.33%							0.253	(0.191)	0.09						
State own. ≤ 33.33%							0.341	(0.149)	0.08						
Largest co-inv. < 100% and > 50%										0.281	(0.220)	0.03			
Largest co-inv. ≤ 50% and > 33.33%										–0.105	(0.322)	0.07			
Largest co-inv. ≤ 33.33% and > 5%										0.250	(0.167)	0.15			
Largest co-inv. < 5%										–0.130	(0.362)	0.04			
Largest co-investor non-public													0.253	(0.167)	0.18
Largest co-investor public													0.013	(0.265)	0.12
Equity (log)	–0.124	(0.099)	2.75	–0.116	(0.084)	2.75	–0.121	(0.093)	2.75	–0.096	(0.095)	2.75	–0.122	(0.096)	2.75
Regional presence	–0.037	(0.219)	0.61	–0.026	(0.194)	0.61	–0.034	(0.226)	0.61	–0.050	(0.216)	0.61	–0.037	(0.219)	0.61
Ownership ministry	0.063	(0.166)	0.51	–0.014	(0.151)	0.51	0.085	(0.167)	0.51	0.076	(0.165)	0.51	0.035	(0.168)	0.51
Debt ratio	–0.001	(0.003)	58.9	–0.001	(0.003)	58.9	–0.002	(0.003)	58.9	–0.001	(0.003)	58.9	–0.002	(0.003)	58.9
Ideology model															
Government party	–0.383***	(0.137)	0.28				–0.378***	(0.140)	0.28	–0.394***	(0.137)	0.28	–0.398***	(0.137)	0.28
Controls															
Nationality				0.714***	(0.109)	0.62									
Time trend	0.017	(0.029)	3.63	–0..004	(0.024)	3.63	0.020	(0.029)	3.63	0.017	(0.029)	3.63	0.018	(0.029)	3.63

E.1.3. Results of random-effects logistic regression analysis with political experience and sector affiliation as dependent variables. Marginal effects, state control subsamples.

Independent variables	Political experience						Sector affiliation					
	Full state control			Partial state control			Full state control			Partial state control		
	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X
Reputation model												
Commercial objective	–0.232	(0.141)	0.50	–0.011	(0.040)	0.49	–0.222	(0.216)	0.50	–0.958***	(0.067)	0.49
Non-listing										0.102	(0.749)	0.71
Listing										–0.461	(0.661)	0.48
Re-election model												
Equity (log)	0.062	(0.069)	2.86	–0.001	(0.014)	2.48	–0.140	(0.124)	2.87	0.326	(0.227)	2.48
Regional presence	0.039	(0.137)	0.62	–0.080	(0.096)	0.56	–0.149	(0.252)	0.63	0.068	(0.391)	0.56
Ownership ministry	–0.050	(0.092)	0.50	0.040	(0.049)	0.53	–0.074	(0.187)	0.50	0.759	(0.199)	0.53
Debt ratio	–0.001	(0.002)	56.3	–0.000	(0.000)	64.2	–0.004	(0.004)	56.5	0.008	(0.006)	64.2
Ideology model												
Government party	–0.048	(0.089)	0.32	0.005	(0.022)	0.41	–0.541***	(0.151)	0.23	0.145	(0.273)	0.41
Controls												
Time trend	–0.004	(0.017)	3.61	0.005	(0.006)	3.68	0.040	(0.033)	3.61	–0.139*	(0.083)	3.68

E.1.4. Results of random-effects logistic regression analysis with political experience and sector affiliation as dependent variables. Marginal effects, government party subsamples.

Independent variables	Political experience						Sector affiliation					
	Left-wing government			Right-wing government			Left-wing government			Right-wing government		
	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X
Reputation model												
Commercial objective	–0.216	(0.141)	0.55	0.032	(0.121)	0.36	–0.271	(0.192)	0.55	–0.244	(0.285)	0.36
Non-listing							–0.020	(0.262)	0.16	0.313	(0.268)	0.37
Listing							0.086	(0.297)	0.09	0.215	(0.537)	0.09
Re-election model												
State control	–0.131*	(0.074)	0.25	–0.031	(0.068)	0.45						
Equity (log)	0.041	(0.049)	2.85	0.067	(0.047)	2.47	–0.137	(0.108)	2.85	0.014	(0.115)	2.49
Regional presence	0.003	(0.095)	0.63	–0.221	(0.179)	0.53	0.078	(0.236)	0.63	–0.469*	(0.245)	0.54
Ownership ministry	0.024	(0.065)	0.58	–0.138	(0.115)	0.35	–0.038	(0.160)	0.58	0.324	(0.361)	0.34
Debt ratio	–0.000	(0.001)	58.2	–0.001	(0.001)	60.3	0.002	(0.003)	58.2	–0.007	(0.005)	60.7
Controls												
Time trend	–0.002	(0.012)	3.32	–0.003	(0.015)	4.43	0.043	(0.029)	3.32	–0.079	(0.061)	4.24

E.1.5. Results of random-effects logistic regression analysis with political experience and sector affiliation as dependent variables. Marginal effects, nationality subsamples.

Independent variables	Political experience						Sector affiliation					
	Norway			Sweden			Norway			Sweden		
	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X
Reputation model												
Commercial objective	–0.024	(0.075)	0.38	–0.208	(0.171)	0.57	–0.238	(0.238)	0.37	–0.132	(0.129)	0.57
Non-listing							0.262	(0.223)	0.35	–0.034	(0.218)	0.14
Listing							0.340	(0.397)	0.08	0.043	(0.130)	0.09
Re-election model												
State control	–0.022	(0.057)	0.43	–0.168*	(0.096)	0.23						
Equity (log)	0.080*	(0.048)	2.49	–0.039	(0.058)	2.90	0.012	(0.102)	2.50	–0.140	(0.092)	2.90
Regional presence	–0.324	(0.205)	0.56	0.167	(0.125)	0.63	–0.485**	(0.223)	0.56	0.369	(0.285)	0.63
Ownership ministry	–0.090	(0.072)	0.33	–0.016	(0.072)	0.63	0.215	(0.275)	0.32	–0.122	(0.092)	0.63
Debt ratio	–0.001	(0.001)	60.0	0.001	(0.002)	58.0	–0.006	(0.004)	60.4	0.001	(0.001)	58.1
Ideology model												
Government party	0.020	(0.049)	0.75				0.136	(0.164)	0.75			
Controls												
Time trend	–0.010	(0.017)	3.76	0.004	(0.012)	3.56	–0.092	(0.059)	3.75	0.024	(0.018)	3.65

E.2.1. Results of random-effects logistic regression analysis with incentive schemes and golden parachutes as dependent variables. Marginal effects, full sample.

Independent variables	Incentive scheme			Golden parachute					
	Model 1			Model 1			Model 2		
	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X
Political influences									
Chairman political representative	0.008	(0.062)	0.31	0.044	(0.093)	0.31	0.047	(0.097)	0.31
State control	0.517**	(0.256)	0.32	–0.048	(0.123)	0.32			
Economic criteria									
Commercial objective	0.395**	(0.162)	0.52	0.308	(0.194)	0.52	0.309	(0.196)	0.52
Non-listing							–0.060	(0.180)	0.19
Listing							–0.033	(0.206)	0.12
Firm size (log equity)	0.097*	(0.057)	3.01	0.098	(0.068)	3.01	0.096	(0.070)	3.01
CEO recruited private sector	–0.035	(0.054)	0.37	–0.040	(0.130)	0.37	–0.039	(0.130)	0.37
Managerial influences									
Board size	0.003	(0.017)	8.65	0.022	(0.043)	8.65	0.021	(0.044)	8.65
Compensation committee	–0.051	(0.043)	0.23	0.016	(0.126)	0.23	0.012	(0.136)	0.23
CEO tenure	0.009	(0.008)	4.34	0.004	(0.012)	4.34	0.004	(0.012)	4.34
Chair is CEO	0.008	(0.059)	0.33	0.101	(0.084)	0.33	0.102	(0.085)	0.33
Controls									
Nationality	–0.059	(0.075)	0.46	0.581***	(0.176)	0.46	0.582***	(0.176)	0.46
Time trend	–0.014	(0.014)	3.23	0.062*	(0.034)	3.23	0.062*	(0.034)	3.23

E.2.2. Results of random-effects logistic regression analysis with incentive schemes and golden parachutes as dependent variables. Marginal effects, SOC chairman subsamples.

Independent variables	Incentive scheme						Golden parachute					
	Political chairmen			Non-political chairmen			Political chairmen			Non-political chairmen		
	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X
Political influences												
State control	0.050	(0.150)	0.19	0.636**	(0.264)	0.37	0.078	(0.168)	0.19	–0.090	(0.172)	0.37
Economic criteria												
Commercial objective	0.156	(0.162)	0.46	0.542***	(0.209)	0.55	0.151	(0.256)	0.46	0.367	(0.253)	0.55
Non-listing												
Listing												
Equity (log)	0.060	(0.063)	2.97	0.058	(0.062)	3.03	0.097	(0.123)	2.97	0.186	(0.118)	3.03
CEO recruited private sector	0.026	(0.046)	0.39	–0.114	(0.086)	0.36	–0.188	(0.309)	0.39	–0.059	(0.152)	0.36
Managerial influences												
Board size	–0.001	(0.008)	8.30	0.014	(0.022)	8.81	0.015	(0.081)	8.30	–0.018	(0.051)	8.81
Compensation committee	–0.008	(0.020)	0.20	–0.086	(0.067)	0.24	0.059	(0.185)	0.20	–0.453	(0.413)	0.24
CEO tenure	–0.000	(0.004)	4.40	0.008	(0.011)	4.31	–0.029	(0.042)	4.40	0.001	(0.013)	4.31
Chair is CEO	–0.016	(0.025)	0.16	0.054	(0.087)	0.40	–0.008	(0.216)	0.16	0.141	(0.124)	0.40
Control												
Nationality	–0.031	(0.050)	0.44	–0.037	(0.084)	0.47	0.650**	(0.309)	0.44	0.725***	(0.181)	0.47
Time trend	–0.005	(0.009)	3.27	–0.002	(0.016)	3.22	0.206	(0.152)	3.27	–0.004	(0.030)	3.22

E.2.3. Results of random-effects logistic regression analysis with incentive schemes and golden parachutes as dependent variables. Marginal effects, state control subsamples.

Independent variables	Incentive scheme						Golden parachute					
	Full state control			Partial state control			Full state control			Partial state control		
	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X
Political influences												
Chairman political representative	0.015	(0.026)	0.36	0.162	(0.266)	0.19	0.019	(0.067)	0.36	0.221	(0.244)	0.19
Economic criteria												
Commercial objective	0.220	(0.136)	0.43				0.152	(0.140)	0.43	0.674	(0.752)	0.71
Stock market listing												
Equity (log)	0.002	(0.011)	3.03				0.125	(0.088)	3.03	0.036	(0.258)	2.97
CEO recruited private sector	–0.002	(0.018)	0.37	–0.247	(0.377)	0.40	0.012	(0.077)	0.37	–0.519	(0.393)	0.37
Managerial influences												
Board size	0.003	(0.005)	8.80	0.182	(0.135)	8.26	–0.002	(0.031)	8.80	0.083	(0.119)	8.33
Compensation committee	–0.011	(0.014)	0.21				0.041	(0.066)	0.21	–0.593	(0.551)	0.27
CEO tenure	0.002	(0.003)	4.37	0.041	(0.049)	4.54	–0.008	(0.012)	4.37	0.056	(0.048)	4.29
Chair is CEO	0.004	(0.020)	0.35	0.057	(0.237)	0.25	0.092	(0.081)	0.35	0.006	(0.238)	0.27
Control												
Nationality	–0.035	(0.036)	0.53	0.259	(0.263)	0.28	0.705***	(0.198)	0.53	0.548*	(0.284)	0.30
Time trend	–0.008	(0.007)	3.23	0.065	(0.081)	3.20	0.045	(0.034)	3.23	0.037	(0.066)	3.24

E.2.4. Results of random-effects logistic regression analysis with incentive schemes and golden parachutes as dependent variables. Marginal effects, nationality subsamples.

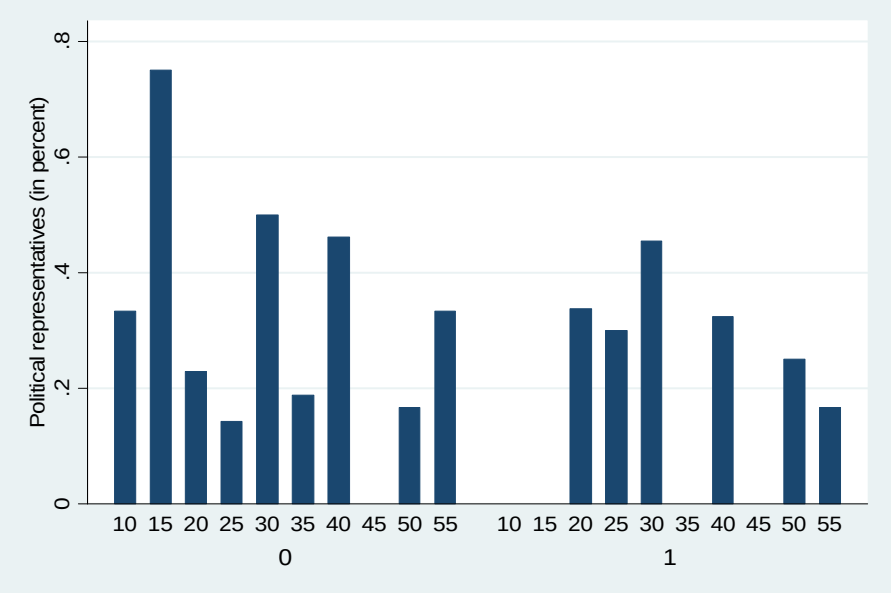
Independent variables	Incentive scheme						Golden parachute		
	Norway			Sweden			Norway		
	dy/dx	Std.err.	X	dy/dx	Std.err.	X	dy/dx	Std.err.	X
Political influences									
Chairman political representative	0.013	(0.069)	0.31	–0.015	(0.080)	0.29	0.062	(0.247)	0.31
State control	0.144	(0.180)	0.41	0.959***	(0.083)	0.21	0.036	(0.260)	0.41
Economic criteria									
Commercial objective	0.699***	(0.242)	0.40				0.666***	(0.252)	0.40
Non-listing									
Listing									
Firm size (log equity)	0.027	(0.043)	2.85	0.241	(0.202)	3.20	0.174	(0.138)	2.85
CEO recruited private sector	0.018	(0.068)	0.44	–0.075	(0.082)	0.29	–0.258	(0.237)	0.44
Managerial influences									
Board size	0.033	(0.032)	7.95	–0.005	(0.021	9.48	0.106	(0.111)	7.95
Compensation committee	0.080	(0.251)	0.07	–0.032	(0.072)	0.43	–0.190	(0.179)	0.07
CEO tenure	0.007	(0.010)	4.58	0.008	(0.013)	4.06	–0.041	(0.035)	4.58
Chair is CEO	0.064	(0.094)	0.30	–0.063	(0.087)	0.35	–0.040	(0.210)	0.30
Control									
Time trend	0.033	(0.026)	3.31	–0.074	(0.063)	3.14	0.175**	(0.079)	3.31

Appendix F

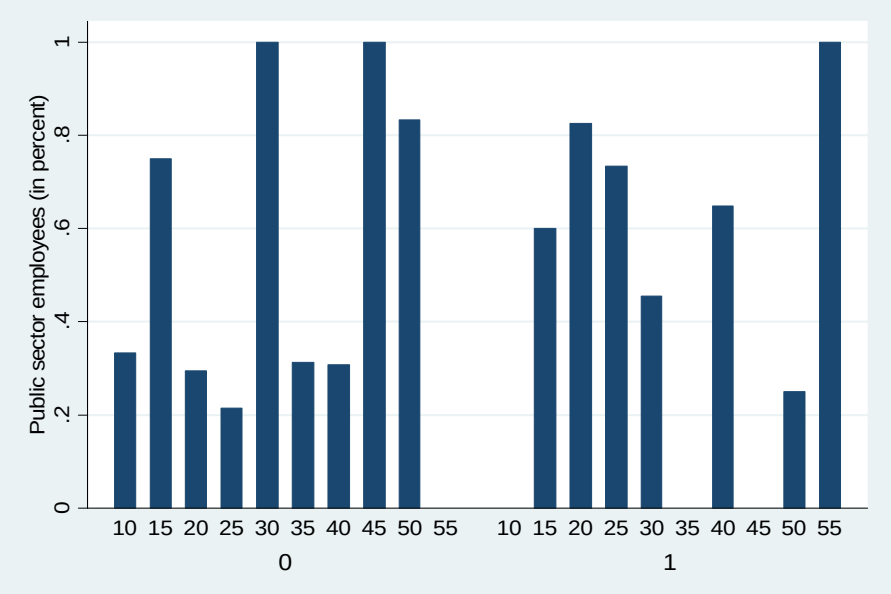
Governance decisions and sector breakdown

The appendix provides graphical illustrations of the governance outcomes described in Chapters 6–8, by sector and nationality. Figures F.1.1–F.1.2 show the professional background of SOC chairmen, as given by political experience and sector affiliation (n = 145 (144) and n = 232 for Norway and Sweden, respectively). Figures F.2.1–F.2.3 show the level and structure of CEO compensation contracts, including total cash compensation (in 2005-constant NOK thousand), incentive usage, and golden parachute adoption (n = 254 and n = 215 for Norway and Sweden, respectively). Figures F.3.1–F.3.3 shows the dividend payment ratio as measured by dividend-to-earnings, dividend-to-sales, and dividend-to-cash-flow (n = 77 (83, 66) and n = 73 (87, 71) for Norway and Sweden, respectively). In line with the dummy variable notation, Norwegian SOCs are assigned the value 0 and Swedish SOCs are assigned the value 1 (Norwegian and Swedish SOCs thus appear at the left-hand and right hand-side of the figures, respectively). Sector classification is made according to the Global Industry Classification Standard (GICS), which differentiates between 10 sectors, including 10 = energy; 15 = materials; 20 = industrials; 25 = consumer discretionary; 30 = consumer staples; 35 = health care; 40 = financials; 45 = information technology; 50 = telecommunications services; 55 = utilities.

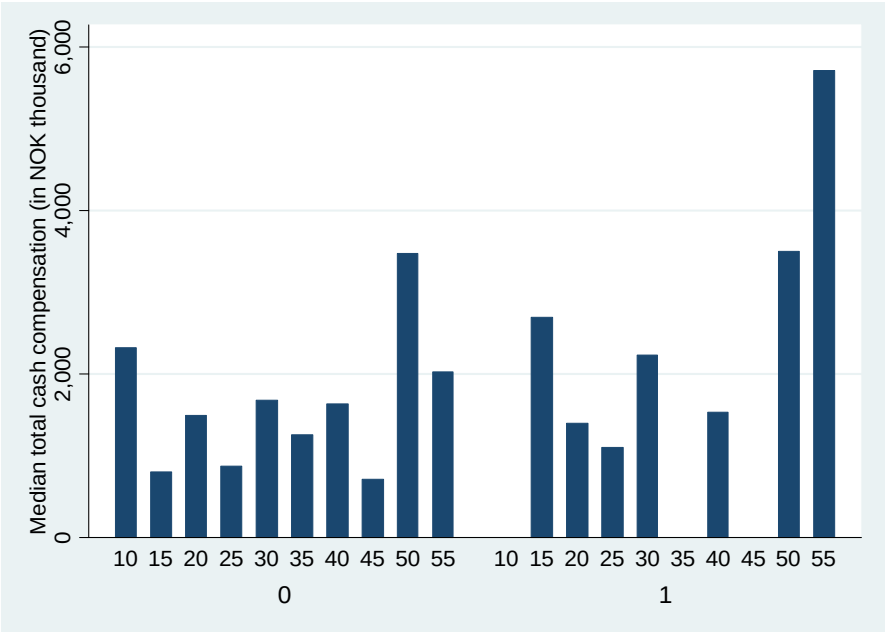
F.1.1. Percentage of SOCs being chaired by political representatives, by sector and nationality.



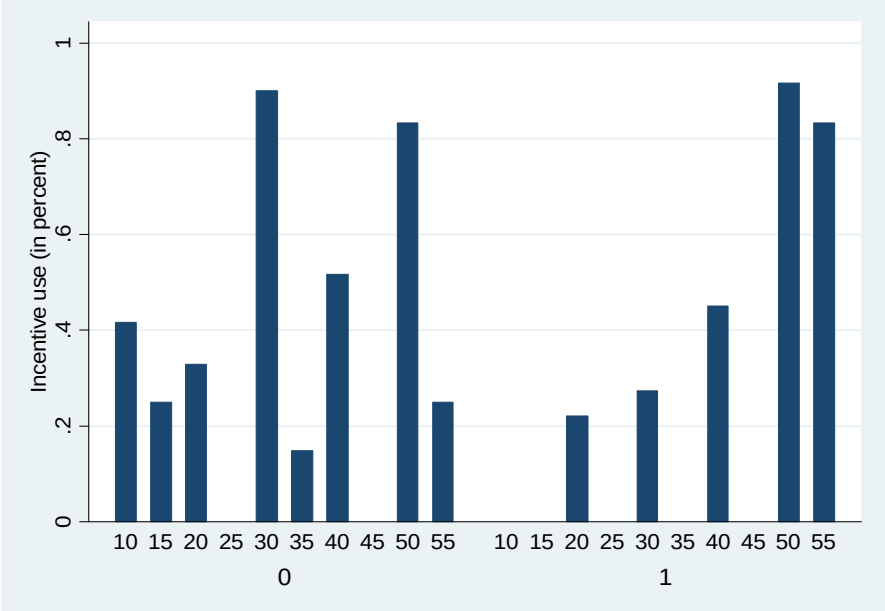
F.1.2. Percentage of SOCs being chaired by public sector employees, by sector and nationality.



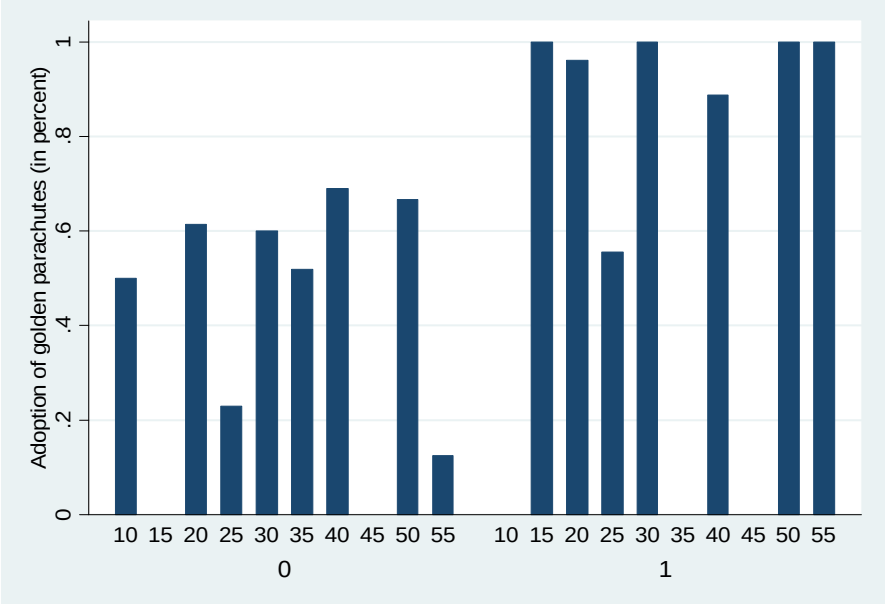
F.2.1. Median level of total CEO cash compensation, by sector and nationality.



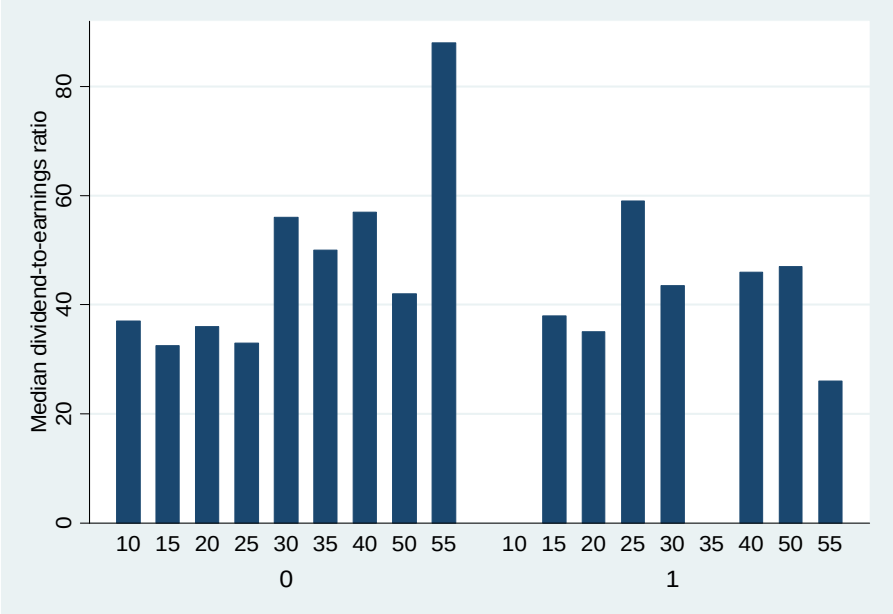
F.2.2. Percentage of SOCs using incentive schemes, by sector and nationality.



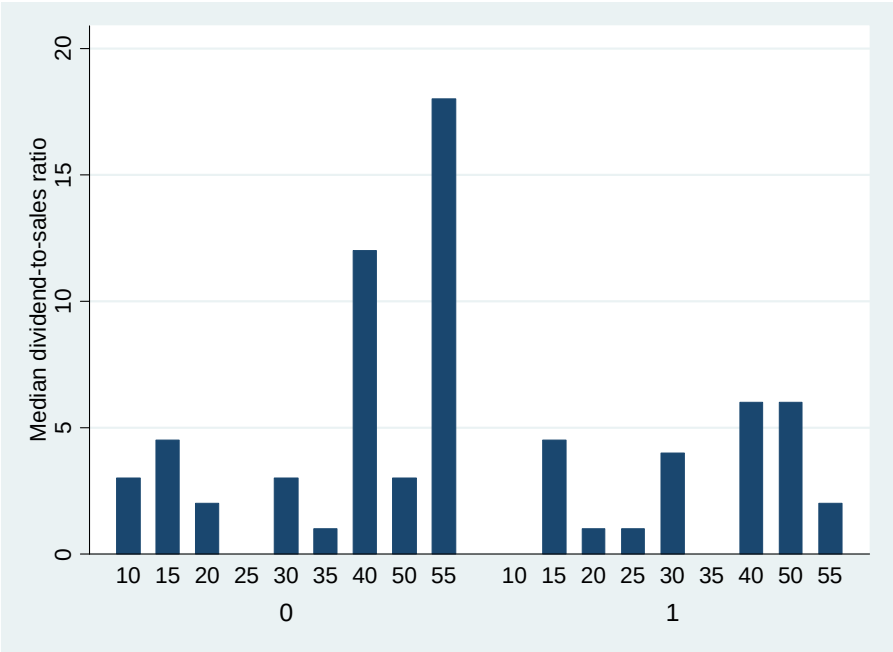
F.2.3. Percentage of SOCs adopting golden parachutes, by sector and nationality.



F.3.1. Dividend-to-earnings ratio, by sector and nationality.



F.3.2. Dividend-to-sales ratio, by sector and nationality.



F.3.3. Dividend-to-cash-flow ratio, by sector and nationality.